NJIT

COLLEGE OF ARCHITECTURE & DESIGN

NEW JERSEY INSTITUTE OF TECHNOLOGY

NEW JERSEY SCHOOL OF ARCHITECTURE

B.ARCH./M.ARCH.

Architecture Program Report

2013

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Table of Contents

Volume I

REMARKS FROM THE UNIVERSITY PRESIDENT

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Joel S. Bloom
President

September 4, 2013

The New Jersey School of Architecture embodies NJIT's commitment to excellence, in its 40-year existence. The School of Architecture has become a leader in pedagogical innovations and in student engagement providing a wonderful atmosphere in which to teach and learn for students and faculty alike. Architecture is one of the University's leading programs. One of its hallmarks is that it is always striving and never complacent.

It is also obvious that the faculty is totally committed to the students and their education as well-rounded, highly skilled professionals who are not only prepared to meet the needs of the profession but to lead it. There is an enviable *esprit de corps* that pervades the School of Architecture and there is unanimity of purpose which unites the School and propels it further.

Dr. Joel S. Bloom, President
New Jersey Institute of Technology

PREFACE

August 2013

A great deal has happened since the last accreditation. The professional architectural landscape has changed considerably: the economy has experienced the deepest recession in a generation; the advent of Building Information Modeling (BIM) and Integrated Practice has had a profound impact on the expectations of architecture school graduates; environmental stewardship and energy consciousness have become an integral part of practice; globalization has opened new markets and finally many firms have been restructured to become more competitive. Another important factor is the ever waning support for State Universities like NJIT. State support is becoming a smaller and smaller percentage of the budget. Therefore all changes and pedagogical aspirations have had to happen in a climate of extreme fiscal restraint.

In addition, the nature of students has changed. The present students have all grown up with a baby bottle in one hand and a computer in the other. As a result, traditional modes of teaching are, in many instances, no longer as effective as in the past. In this changing context, it is of particular importance that schools of architecture be positioned properly. Curricula need to respond to the changing nature of architectural practice and to the changing nature of today's students. This precipitates significant rethinking of not only what is being taught but also how it is being taught.

The complexion of our College has also changed. The addition of new programs in Digital Design, Interior Design and Industrial Design led to the creation of a School of Architecture and a School of Art + Design under the umbrella of the newly named College of Architecture and Design. Continuing our tradition of having a robust planning process, we pay special attention to academic plans. They are considered works in progress at the College of Architecture and Design. Long term objectives are translated into tactics and then carefully monitored. There are many feedback mechanisms which can gauge the relative success of changes quantitative and qualitative. Metrics are used in place of apocryphal anecdotal feedback.

The confluence of these factors has created a challenging environment in which to adjust, to adapt and to transform the program at NJIT. The positioning of the School within the regional and national context is also of paramount importance. This report addresses these issues in an introspective and comprehensive way. It is the result of planning, implementation and evaluation loops developed by my colleagues. Innumerable individual faculty efforts, committee deliberations and task forces have provided the impetus for change and growth. This report provides a window into the evolution of a School of Architecture which has had a significant impact over its 40 year existence on the profession in this region.

Considering all these challenges, the School of Architecture is fortunate to exist in a very supportive institutional context. The administration has always been receptive to our initiatives. In fact, despite severe fiscal restraints, I cannot think of any initiative that did not get the full and enthusiastic support of the administration. The School of Architecture is regarded as one of the leading programs at NJIT. Both President Bloom and Provost Deek have demonstrated an unflinching commitment to the School of Architecture and its success; they have provided not only the resources but also continual encouragement.

Urs P. Gauchat, Dean
College of Architecture and Design

PART ONE (I): INSTITUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

"Our value as a State depends upon the development of skilled labour."
New Jersey Centennial Commission

I.1 – IDENTITY & SELF-ASSESSMENT

I.1.1 History and Mission

History of the Institution

The New Jersey Institute of Technology that we know today has a rich history with its beginnings developing from the industrial age. Newark in the late 19th century was a thriving industrial center. Its factories churned out thread, metals, paints, and leather goods. In Newark, Thomas Edison set the stage at his Ward Street factory for his later astounding achievements, and Edison rival Edward Weston established the first factory in the United States for commercial production of dynamo electric machines.

On March 24, 1880, the Essex County assemblyman in the state legislature introduced "An Act to Provide for the Establishment of Schools of Industrial Education." The Newark Board of Trade sponsored the bill. The Act established three schools of industrial education: one in Newark, one in Trenton, and one in Hoboken. The first Board of Trustees met on July 1, 1884. The Newark Technical School opened on Monday, February 9, 1885 with 88 students who attended despite a terrible snowstorm. The first classes were held in a rented building at 21 West Park Street with a class that consisted of machinists, bookkeepers, clerks, draftsmen, carpenters, printers, electricians, plumbers, jewelers, harness makers, tinsmiths, and dyers. They ranged in age from 15 to 42. Soon the facility became inadequate to house an expanding student body. To meet the needs of the growing school, a fundraiser was launched to support the construction of a dedicated building for Newark Technical School. In 1886, under the leadership of the school's dynamic fir director, Dr. Charles A. Colton, the cornerstone was laid at the intersection of High Street and Summit Place for the three-story building later to be named Weston Hall in honor of the institution's early benefactor. A laboratory building, later to be called Colton Hall, was added to the campus in 1913. Daniel Hodgdon served as the director Newark Technical School from 1918 to 1920.

Under Dr. Allan R. Cullimore, who led the institution from 1920 to 1949, the modest Newark Technical School was transformed into the robust Newark College of Engineering (NCE). Campbell Hall was erected in 1925. During the lean years of the Depression and World War II, the sole new addition was the former Newark Orphan Asylum, now Eberhardt Hall.

The post-war period was one of enormous activity during which President Cullimore – like today's post-Cold War university presidents – challenged the college to turn "war-

time thinking into peace-time thinking." In 1946, about 75 percent of the freshman class had served in the armed forces. Robert W. Van Houten was acting president of NJIT from 1947 until 1950 when the board of trustees named him president. Among the developments of the Van Houten years were the establishment of the Research Foundation, the institution of the annual Science Fair, the expansion of the graduate school, the initiation of the Engineering Opportunity Program, and the physical development of the Newark campus. Cullimore Hall was built in 1958 and two years later the old Weston Hall was razed and replaced with the current seven-story structure. Doctoral level programs were introduced and six years later, in 1966, an 18-acre, four-building expansion was completed. William Hazell succeeded Dr. Van Houten as president of NJIT in 1970.

In 1973, with the addition of the New Jersey School of Architecture, the institution evolved into a technological university, emphasizing a broad range of graduate and undergraduate degrees and dedication to significant research and public service. A stronger-than-ever Newark College of Engineering remained intact, but a new university name—New Jersey Institute of Technology—signified the institution's expanded mission. The status of the University was confirmed when the State enacted the Higher Education Restructuring Act (1994) confirming NJIT as one of three State Research Universities. NJIT's status was with the NJIT Act of 1996.

NJIT prepares its graduates for positions of leadership as professionals and as citizens.

A broadened mission called for the creation of a residential campus. The opening of NJIT's first dormitory, Redwood Hall, in 1979, began a period of steady growth that continues today. Under the leadership of Saul K. Fenster, who served as president of NJIT from 1978 to 2002, four new schools were established at the university: The College of Science and Liberal Arts in 1982; the School of Management in 1988; Albert Dorman Honors College in 1994; and the College of Computing Sciences in 2001. During the administration of President Robert A. Altenkirch, New Jersey School of Architecture was reconstituted as the College of Architecture and Design in 2008.

In 2011, Joel S. Bloom was named eighth president of the University. The new administration continued the expansion of NJIT's Newark campus. Landscaping, improvements of facilities, enhancement of campus appearance and a new Campus Center have dramatically changed the face of the campus, resulting in higher student satisfaction and campus vitality. The Warren Street Village, an $80-million residential complex that includes the six-story Dorman Residential Honors College as well as five duplex houses that will be home to 10 or more Greek organizations was officially opened in the Fall of 2013.

Mission

NJIT is a mission-centered university. Informed by a well-defined and closely monitored strategic planning process, the university accomplishes mission depth and shareholder collaboration. In response to national, regional, state, and local forces of change, NJIT exemplifies a commitment to education, research, economic development, and service. NJIT is the state's Technological Research University, committed to the pursuit of excellence:

- In undergraduate, graduate, and continuing professional education, in an effort to prepare students for productive careers and amplifying their potential for lifelong personal and professional growth;

- In the conduct of research with emphasis on applied, interdisciplinary efforts encompassing architecture, the sciences, including the health science, engineering, mathematics transportation and infrastructure information and communications technologies:

- In contributing to economic development through the state's largest business incubator system, workforce development, joint ventures with government and the business community, and through the development of intellectual property.

- In service both to its urban environment and the broader society of the state and nation by conducting public policy studies, making educational opportunities widely available, and initiating community-building projects.

NJIT prepares its graduates for positions of leadership as professionals and as citizens; provides educational opportunities for a broadly diverse student body; responds to needs of state and local governmental agencies and civic organizations both large and small; partners with educational institutions at all levels to accomplish its mission; and advances the uses of technology as a means of improving life.

NJIT's Founding Principles

NJIT advances the uses of technology as a means of improving life.

A center of industrial innovation in the region during the last quarter of the nineteenth century, Newark saw the invention of malleable iron and patent leather. Newark's business leaders and other concerned citizens recognized that in addition to raw materials and manufacturing facilities, continued prosperity depended on another core element: education. The city was already at the forefront of a national urban trend toward providing free public education at the elementary and high school levels. With virtually all industries demanding greater technological knowledge and skills, Newark Technical School, NJIT's earliest predecessor institution, was founded to meet those needs. In the next 131 years, NJIT's fundamental focus on science and technology education would expand to include mission elements of research, the economic development of Newark and New Jersey, and public service.

The advancement of academic priorities is critical to the future of NJIT. The NJIT Academic Plan 2013-15, which can be found online and in the team room, is transitional in nature and has been strengthened through collaborative faculty committees. At the core of the plan is attention to fair, impartial and transparent processes that will lead to evidence based decisions supporting the academic programs we offer, the faculty and researchers who cultivate them and the students we serve.

Program History

The New Jersey School of Architecture celebrates its fortieth year playing a critical role in architectural education in New Jersey and the nation in 2013. As early as 1958, New Jersey Society of Architects (NJSA) recognized the need for a public college of architecture in the state and began actively lobbying for its creation. In 1972, the NJSA asked the AIA to appoint a National Advisory Committee to make recommendations for a public school of architecture in New Jersey. The Committee subsequently recommended establishing the school in Newark. In 1973, the Newark College of Engineering submitted a formal proposal to the State Board of Higher Education, and with the Board's approval, the New Jersey School of Architecture (NJSOA) was born. Concurrently, the host institution, the Newark College of Engineering changed its name to the one it uses today: the New Jersey Institute of Technology (NJIT).

Professionally ready, technologically savvy and socially responsible.

By September of 1973, the NJSOA had established temporary office space in Tiernan Hall. In its first year, the School consisted of founding Dean Harlyn Thompson, an administrative assistant, a secretary, and two work-study students. By the first full operating year (1974-75), the School had grown to include 240 full-time students and eight faculty members, some still active today. Those early faculty sowed seeds that grew into the strengths the school maintains today. With its genesis instigated by the NJSA, the school established a foundation for rigorous professional preparation. Leveraging its home in a technological university, it applied equal rigor to a technical emphasis, one that was soon expanded to include computing, with the addition of Professors Barry Jackson, Steven Zdepski and later Glenn Goldman to the faculty. Professors Leslie Weisman and Troy West joined the school to give it a community focus that soon expanded to encompass ecology. These early faculty members helped set the preconditions for today's pedagogical objective: to produce graduates in architecture who are: professionally ready, technologically savvy and socially responsible.

Following the graduation of its first class in 1977, the NJSOA received NAAB accreditation in 1978. Dean Thompson stepped down in 1979, after which Professor Barry Jackson served as acting Dean until January of 1981 when NJIT appointed Sanford Greenfield Dean. Greenfield served nearly ten years until the present Dean, Urs Gauchat, began his appointment in February of 1991. Immediately following his appointment, Dean Gauchat radically changed the curriculum, made the use of Computer-Aided Design mandatory and reinforced the School's commitment to the design of communities. Undergraduate and graduate degree programs were added to diversify the educational scope, particularly for those interested in pursuing study in related fields. These include:

- 1984/85: Master of Architecture (NAAB accredited program)
- 1984/85: Master of Science in Architecture
- 1996/97: Master of Infrastructure Planning
- 1998/99: Bachelor of Science in Architecture
- 2001/02: Doctorate in Urban Systems

The introduction of Dual Degree programs encouraged undergraduate students to link their studies in architecture with graduate programs in construction management and management in a compressed time frame.

Diversification continued with the creation of the School of Art + Design (A+D) in 2008 as the NJSOA was transformed into the College of Architecture and Design (CoAD). This change further broadened design education at NJIT with the introduction of additional degree programs in Industrial Design, Interior Design and Digital Design. Dean Gauchat is in charge of CoAD, Prof. Glenn Goldman became the founding Director of A+D in 2008, and Prof. Darius Sollohub became Director of the NJSOA in 2010.

Today, the CoAD serves over 1,000 students with over 800 in architecture and almost 700 in its NAAB-accredited programs. As part of a 10,000-student university in a cluster of higher education institutions whose collective population exceeds 40,000, the NJSOA benefits from a reciprocal relationship within its expanded academic community. In Section I.1.3 Response to the Five Perspectives, A. Architectural Education and the Academic Community, readers will find a description of the activities and initiatives that demonstrate the NJSOA's benefit to these institutions through discovery, teaching, engagement, and service as well as a description of the benefits derived from this extensive institutional setting.

Within this rich academic setting, the NJSOA's two accredited programs provide an ideal learning environment for the development of professionals. The school is complemented by courses offered in the non-NAAB accredited programs at the NJSOA and the School of Art + Design; general university requirements (GUR); and the rich elective offerings available at both NJIT and Rutgers University. Combined, these form a fertile environment for holistic learning, ensuring the preparation of well-rounded graduates equipped to lead the profession rather than simply take their place among the rank and file.

Program Mission

As identified in its 2012 strategic plan, the New Jersey School of Architecture shares a mission with the School of Art + Design, which is, simply put, to cultivate students who are professionally ready, technically savvy, and socially responsible. By meeting this triple bottom line, the NJSOA launches students who are confident, collaborative, and entrepreneurial into careers in architecture and related fields. Accordingly the NJSOA has organized and reorganized its curricula, hired highly qualified faculty and attracted a large cadre of adjunct practicing professionals (mostly from New York City). The NJSOA has grown to become one of the largest architecture schools in the US, taking advantage of being an integral part of the architecture, art, and design scene of the New York metropolitan region, the epicenter of the design fields worldwide. This metropolis's vast pool of talent enriches the NJSOA, allowing it to maintain a faculty with broadly diversified expertise. It is a school where students can find that one experienced mentor whose design outlook they identify with and who can help them start their career. NJSOA instructors continually bring state-of-the-practice knowledge from a wide range of settings to their studios and classrooms, and many NJSOA graduates join these firms first as interns and later as full-time employees. A dedicated core of full-time faculty--some as researchers, others as practitioners--administer a comprehensive curriculum that uses the metropolis and its institutions as an urban classroom. Finally, the NJSOA benefits from the pedagogical view held by the CoAD, that aspires to be a comprehensive school of design that considers design in its broadest terms, from that of large infrastructural systems to consumer products. These ranges of scale and scope transcend those of most traditional architecture programs. The locus of the School of Architecture within a comprehensive design school prepares future practitioners to seek collaboration and synergies that will characterize practice in the 21st century.

Prepares students to enter the profession fully equipped with the knowledge, skills and attitudes to succeed in today's professional climate.

Program Principles

Professionally ready means that we developed a curriculum which prepares students to enter the profession fully equipped with the knowledge, skills and attitudes to succeed in today's professional climate. The fact that the majority of our design faculty are practicing professionals provides not only role models for our students but also direct contact with the changing shape of professional practice. Another important aspect is our commitment to experiential education. Learning by doing includes the Masonry Competition, Solar Decathlons, Habitat for Humanity, the Center for Resilient Design and other opportunities to develop projects with "real" clients, developers, politicians, and end users.

Our students are fully versed to deal effectively with the digital environment of which architecture is a part.

Technologically savvy means that our students are fully versed to deal effectively with the digital environment of which architecture is a part. It is expected that our students

become totally proficient in the use of digital media, the use of information and the technological means available to today's architects.

The commitment to the use of technology has early roots. As part of a technological research university, the NJSOA benefits from its relationship with the many engineering disciplines, management, and computer science. Within its first few years, the school underwent a transformation from a mechanical emphasis on technology to a digital one. In the late '70's Prof. Zdepski experimented with the use of punch-card based computers to measure environmental performance. This was followed by many firsts: the NJSOA pioneered 3D modeling and color in 1985 in digital design studios taught by Profs. Goldman and Zdepski; it introduced computing in the first year as a mandatory studio; it was one of the first to use stereo lithography (an early form of 3-D printing); it was one of the first to apply Building Information Modeling to most studios; and was the first to establish a digital evidence archiving system accepted by the NAAB. The NJSOA continues to command respect in the digital computing arena with faculty on boards of several organizations including ACADIA (The Association for Computer-Aided Design in Architecture). NJSOA students regularly win national imaging competitions. The NJSOA's embrace of technology allowed Prof. Richard Garber to lead a team of collaborators and students to design a net-zero house for the Department of Energy's Solar Decathlon competition using the latest software and hardware, such as rapid prototyping and CNC routing for construction. Technology empowers the NJSOA's other strengths; our students are highly regarded by the profession for their broad range of digital skill and the ability to both analyze and visualize alternative proposals in real time.

Our students are highly regarded by the profession for their broad range of digital skill and the ability to both analyze and visualize alternative proposals in real time.

Socially responsible means that our graduates should be aware of their responsibilities as citizens as well as professionals. The NJSOA acts on the belief that architects should be committed to the common good and to making a better life for our fellow citizens by providing a plethora of opportunities for our students to become involved with communities, providing allowing them the best chance to experience a genuinely attractive real-world situation. This allows students to viscerally understand the difference between clients and users of the buildings we design; fostering the idea of architecture as a social art rather than more design for its own sake.

Our graduates should be aware of their responsibilities as citizens as well as professionals.

The NJSOA provides students with opportunities to engage with real stakeholders to solve so-called "wicked problems." These experiences hone a student's sense of social responsibility, which should also include a sense of environmental responsibility, and an appreciation of the architect's role as a steward of the natural world. The school has a longstanding reputation for deploying studios to take on real projects. These include core studios such as the Masonry Design/Build and the collaboration with India's Abellon Clean Energy, and advanced studios such as the 2010 Habitat for Humanity that won the NCARB Prize. The Infrastructure Planning Program, since its inception in 1996, has deployed over $2 million in research funding to support many advanced undergraduate and graduate studios to work on the design of communities with an emphasis on infrastructure. It was because of this record that HUD awarded a Pratt/NJSOA team a competitive contract to work in New Orleans after Hurricane Katrina; that the National Endowment for the Arts asked the NJSOA to host a Mayor's Institutes of Design; and the Regional Plan Association asked NJIT to co-host a vision planning conference to support then newly-elected Mayor Cory Booker. For a more complete description of community projects since the last accreditation, see Section I.1.3 Response to the Five Perspectives, E. Architectural Education and the Public Good.

Founding Principles in the 21st Century

Since its last accreditation, significant external events have affected the NJSOA, which while shocking the school, also allowed it to reappraise its mission. The most significant event has been the financial crisis that began in 2008. This global crisis has led to a belt-tightening among most public universities, including NJIT. Architectural education is not immune to the mega trends. The effect of the crisis on the pool of students has been significant. Reports of high unemployment have deterred many students from pursuing architectural education, with the NAAB reporting an 8% decline in enrollment between 2008 and 2012. A decline in the college-age population has only compounded the situation for architecture schools. Many families today also question the value of all higher education given ever-escalating costs; and both students and academics are studying the application of online learning in the design disciplines. The NJSOA had not witnessed a decline in enrollment as of Spring 2013. However there was a decline in both applicants and enrollment in Fall 2013.

The most significant event has been the financial crisis that began in 2008, leading to a belt-tightening among most public universities, including NJIT.

Reports of high unemployment have deterred many students from pursuing architectural education

The other event to profoundly affect the NJSOA was Hurricane Sandy, which struck the school and its region during midterms in the Fall 2012 semester. NJIT remained closed for one week, but the storm's repercussions lasted long afterward. Many students lost power at home for protracted periods with some becoming homeless. The storm shocked the region to its core, causing a complete reexamination of virtually every sector of the built environment. The NJSOA not only recovered from the storm, but reinvigorated its commitment to its public purpose, in the process expanding the scope of sustainability into the uncharted area of resiliency.

The other event to profoundly affect the NJSOA was Hurricane Sandy, which struck the school and its region during midterms in the Fall 2012 semester.

Post Sandy the NJSOA is a stronger institution. With the AIA projecting high demand for qualified professionals several years after the financial crisis abates, the NJSOA has revised its curriculum to ensure its students' competency in both design and technology. By frontloading technology courses and integrating them with both history and studio, the faculty seeks to ensure that NJSOA students graduate with the highest comprehensive design proficiency. The NJSOA has met each of these challenges, using them to refine its future mission in its 2012 Strategic Plan to render its founding principles relevant in the 21st century:

The NJSOA is advancing its technological mission with the leitmotif of Smart Design/ Smart Technology into what many call the digital revolution 2.0.

Adopting Smart Design/Smart Technology as a future leitmotif

The NJSOA has used the crisis as an opportunity to hone its practice and become more efficient in applying its rigorous standards. The crisis has also led to the restructuring of the architectural profession, as many firms have closed or merged with others. That this occurred largely because firms lagged behind in the efficiencies that digital applications provide only reaffirms the NJSOA's commitment to digital media. The NJSOA is advancing its technological mission with the leitmotif of Smart Design/Smart Technology into what many call the digital revolution 2.0. Smart Technology implies that digital technology has moved beyond communication to affect the major issues that impact us today in real time. The linkage of BIM with real time data will change the profession and architectural education. Data base integration will affect matters of sustainability, cost, materials, interactivity, social relevance, advanced methods and techniques, new materials, adaptive structures, etc. These advances leverage the NJSOA's legacy of digital instruction, including its commitment to building information technology (BIM) as well as pioneering work in animation and game design in the School of Art + Design. Smart design implies a constant concern that technology be harnessed in keeping with the role of the designer as an environmental steward.

Smart design implies a constant concern that technology be harnessed in keeping with the role of the designer as an environmental steward.

Rethinking commitment to public purpose in response to Hurricane Sandy and making "resilient design" a major thrust

Hurricane Sandy sharpened the focus of the NJSOA's already-expanding mission of designing for communities. The storm mobilized the faculty to dedicate more than half of the NJSOA Spring 2013 studios to focus at least some part of the course to design for critical areas in the region and develop resilient "prototypologies". These investigations have continued over the summer and into the fall. In a parallel effort, over 600 students from several universities (NJIT having the majority of student volunteers), faculty, and alumni donated their time and expertise during NJIT's March spring break to help communities recover in a variety of ways. The Center for Resilient Design at the CoAD formed after the storm as a clearinghouse for information regarding design and natural disasters, coordinated these activities. The Center plans to continue to do this for the foreseeable future.

Recalibrating curricular and teaching strategies to be more effective with the new millennial generation of students

The decline in numbers of students and its effects have caused CoAD to consider carefully the needs and conditions of the generation of students currently in higher education, the so-called Millenials. Surveys find them to be different and distinct from previous generations. They are the first generation to grow up in a digital environment. They are more deliberate in their choices and cost conscious about their education. They prefer experiential learning, especially when it maintains a sense of social relevance, and have problems in large lecture courses, preferring group learning in smaller numbers or online education. The NJSOA considers a better understanding of its Millennial students as critical to its educational mission. Recognizing the importance of Millenials, the faculty organized a series of colloquia in Spring 2012 to parse the literature on them and make recommendations. The faculty published its findings, which then were presented at ACSA and are advancing toward broader publication. While the faculty recognized an alignment between Millennial needs and the NJSOA's core values of professional readiness, digital acumen, and experiential learning, it also took seriously their aversion to lecture courses and is moving to develop blended coursework, a method that combines online and experiential learning. Understanding Millennials' tendency toward being consumer conscious and actively using community college education as a stepping-stone to universities, the NJSOA has coordinated with community colleges to facilitate transfers. This is one of the reasons the School has not seen a dramatic net drop in admitted students.

The NJSOA considers a better understanding of its Millennial students as critical to its educational mission.

Additionally, the NJSOA 2012 Strategic Plan puts forward the following pedagogical initiatives: providing more hands-on experiences; increasing the quality of research opportunities for undergraduates; expanding the experimental collaborative studios to include all CoAD students; and exploring a common first year for all undergraduate architecture and design programs.

Providing more hands-on experiences; increasing the quality of research opportunities for undergraduates; expanding the experimental collaborative studios to include all CoAD students; and exploring a common first year for all undergraduate architecture and design programs.

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The 164-credit Bachelor of Architecture degree is structured to encourage the holistic development of young professionals. Forty six credits are dedicated to satisfy the General University Requirements (GUR) in the liberal arts and sciences. These GUR courses are taught completely outside the College of Architecture and Design. The GUR is required of all New Jersey Institute of Technology undergraduate students and speaks to the University's commitment to produce graduates who are who are not only technically proficient professionals but broadly educated citizens. The B. Arch

devotes the remaining 118 credits to required and elective courses in the College of Architecture and Design. Beyond the 10 dedicated 5- credit design studio courses students take over five years, there are many practicum-based required and elective courses available to B Arch students. These courses are taught in digital labs and are extremely popular. The University recognizes the value of this teaching and learning mode and is currently considering building many more studio and lab spaces across campus in order to satisfy the increasing demand for practicum, project-based and studio learning by students in design, science, and engineering disciplines.

Commitment to produce graduates who are who are not only technically proficient professionals but broadly educated citizens.

Mutual Benefits for NJIT and CoAD

The NJSOA is enhanced by its being part of a technological, comprehensive, research-based university through the relationships with various engineering disciplines, management, and computer science. This interaction is in perfect concord with the School's emphasis on technology.

The NJSOA considers the broadly based liberal arts and science education delivered through NJIT's General University Requirements (GUR) as a prerequisite for professional success. A firm grounding in science and the liberal arts makes it more likely that ideas and the creation of proprietary design are relevant and actionable. NJSOA students benefit from taking the GUR from professors that are highly proficient in their fields.

Additionally, more specific collaborations between architecture and various other programs at NJIT occur through particular projects. One notable example is the design and construction of the 2011 and 2013 Solar Decathlon houses which brought engineering and architecture students and faculty together to form teams.

The School of Architecture interacts with a number of other University programs. The Albert Dorman Honors College offers both financial rewards and advanced learning opportunities to academically gifted undergraduate students. (See I.1.3) Additionally, the School participates in a variety of dual degree programs with other NJIT schools and colleges, as well as with other New Jersey universities, including NJIT Newark College of Engineering (NCE), NJIT School of Management (SOM), NJIT College of Computing Sciences (CCS), Rutgers University – Newark and New Brunswick campuses, University of Medicine and Dentistry of New Jersey (UMDNJ). The following are Dual Degree options for our students:

- Bachelor of Architecture / Master of Infrastructure Planning (MIP)
- Bachelor of Architecture / Master of Science in Civil Engineering
- Bachelor of Architecture / Master of Science in Management
- Bachelor of Architecture / MBA
- Bachelor of Architecture / Bachelor of Science in Information Technology
- Master of Architecture / Master in Infrastructure Planning
- Master of Architecture / Master of Science in Civil Engineering
- Master of Architecture / Master of Science in Management
- Master of Architecture / MBA in Technology Management

The College of Architecture and Design also contributes substantially to the governance of the University. As one of five colleges offering degree programs, it is represented by the Dean, who is an officer of the University and a member of the senior staff. The College of Architecture and Design and the School of Architecture are represented on

all important university bodies including, but not limited to Undergraduate Curriculum Review Committee, Administrative Affairs Council, Council on Academic Affairs, PSA Curriculum Representation, University Promotion and Tenure Committee, Budget Committee, Graduate Council, Long Range Planning Committee and many others.

The School of Architecture contributes substantially to the intellectual life of the University.

The School of Architecture contributes substantially to the intellectual life of the University in two ways:
The intellectual property produced by the NJSOA involves scholarly and applied research, and revenues derived from grant funds and industry partnerships. In recent years, the School has maintained the dollar amount brought in for research by our faculty and through our Center for Building Knowledge (CBK). The Idea Factory, an incubator of intellectual property supported by CoAD, could only happen in an environment like NJIT's.

CoAD brings nationally and internationally recognized architects, academics, and allied professionals to NJIT.

Another example of how the School contributes to the intellectual life of the institution is through organizing various events. The lecture series, organized every semester by CoAD, brings nationally and internationally recognized architects, academics, and allied professionals to NJIT to discuss their current work and developments in the professions of architecture and design. Lecturers bring a diversity of experience and viewpoints to our students, faculty as well as the greater university community. Annual symposia, Think Pieces and exhibitions are only a few of the other activities organized by the College that benefit the NJIT community at large.

The University creates an atmosphere that encourages experimentation and rewards initiative.

The University, in turn, contributes to the NJSOA in terms of both intellectual resources and personnel. It creates an atmosphere that encourages experimentation and rewards initiative. Due, in part, to our track record, the School of Architecture enjoys a most supportive administration. We are prominently featured on the website and in all publicity published by the University, and the NJSOA has become one of its two most widely recognized academic divisions. Through the University's Office of Institutional Research and Planning, the University provides ongoing data by which we gauge our successes and failures.

The University also provides assistance with Alumni Affairs and Fund Raising. Through the Office of University Advancement, our dedicated Director of Advancement, Jim Wellen, is able to access University fund raising software, alumni surveys and archives for the benefit the College and the School. He is fully knowledgeable about the School, maintains an office in Weston Hall, and participates in all of our fundraising events throughout the year, while at the same time maintaining a close and productive working relationship with NJIT's central Office of University Advancement.

Finally, the university-wide Van Houten Library system provides the CoAD Littman Library with a wide assortment of library services as well as excellent professional librarians. We share in the Van Houten network of resources while at the same time we have our own dedicated library in the center of Weston Hall. (See I.2.5 Information Resources).

I.1.2 Learning Culture and Social Equity

Learning Culture

Learning in Schools of Architecture, Art and Design, is influenced to a large extent by the studio culture. It influences how successful students are in completing a college degree in a design discipline. The design studio has been a unique feature of architectural education ever since the dispersed ateliers of the École des Beaux Arts were brought back under the roof of the academy in the first half of the 19th Century. Over that time, the studio has developed into a pedagogical model that is increasingly applied to other disciplines. At the same time, some aspects of studio culture have come under scrutiny and criticism. In December 2002, the American Institute of Architecture Students (AIAS) Studio Culture Task Force issued a report, The Redesign of Studio Culture, which was endorsed by the AIA and the ACSA.

The NAAB has required that each school adopt a studio culture policy as a condition of accreditation. Following the School of Architecture's lead, all design programs in the CoAD are in compliance with this requirement, seeing the studio culture policy statement as a vehicle for increasing communication among students and faculty. Our written studio policy was developed and adopted by the faculty, vetted by students and implemented in the spring of 2007. The CoAD studio culture policy espouses the principles of professionalism, collegiality, and solidarity. It provides the opportunity to clarify mutual expectations and it establishes the collaborative environment that underlies a successful educational effort. The policy also addresses the importance of time management. The studio policy is published in our student and faculty handbooks and on our Kepler website and emphasized by the faculty at the outset of each semester. It should be noted that the handbook is a living document and that it is updated to reflect feedback from representatives from the Student Senate and student leaders of the AIAS, each semester.

The CoAD studio culture policy espouses the principles of professionalism, collegiality, and solidarity.

Another aspect of the studio culture, unique to NJIT's School of Architecture is the Kepler system. Kepler is a curriculum management system which also serves to store and retrieve all student work. The Kepler system has provided an unprecedented degree of transparency. Neither students nor faculty can hide. The Kepler system has generally lifted student and faculty performance; it has also reduced the number of judgments based on hyperbole and anecdotal information and replaced it with fair and equitable metrics.

COLLEGE OF ARCHITECTURE AND DESIGN STUDIO CULTURE POLICY

Framework

"Creation," observed Le Corbusier, "is a patient search." It can also be lonely and at times painful. The studio experience is a time of intense individual effort and self-scrutiny. It introduces a pedagogy and language of expression that are radically different from conventional classroom settings. It requires a set of skills not always anticipated by beginning students, including time management, research, teamwork and clarity of written and verbal presentation.

The design studio offers a rich learning environment, a voyage of discovery and growth where discrete disciplines are synthesized in the design process. The NJSOA studio approach emphasizes student initiative and casts the instructors in the role of coaches and mentors. Because the pedagogy is based

on the notion of critique, it is fraught with the possibility of discouragement and misunderstanding.

For a studio to be a successful experience for student and teacher alike, an atmosphere of mutual trust must be established. The key to this, we believe, is the establishment of open communication at the outset of each studio and the recognition by all parties of a set of core principles that describe the studio experience: professionalism, collegiality, and solidarity.

Professionalism
An accredited professional degree in architecture must operate according to a clear set of standards. It is assumed that students and their professors attend studio regularly and on time; that any anticipated absences or delays be communicated in advance whenever possible; that the work environment be respectful in terms of noise level and cleanliness; that studio time be used for studio work; that posted materials relate to studio projects; and that spoken and written language is fully respectful of each individual's integrity. Students receive a written syllabus –which can also be accessed online through Kepler – for each studio setting forth a schedule, bibliography/resource list, explanation of grading criteria, and professor's office hours and contact information. Work shall be completed on time and meet established presentation requirements. Reviews are conducted in an atmosphere of civility.

Collegiality
The design studio is one component of the student's education. It draws on the contribution of colleagues teaching in other areas of the curriculum. While studio represents the dominant time commitment for student workloads, it is important that studio schedules not impinge on students' other classroom obligations. To the extent possible, studio review schedules should be correlated with due dates in other courses to avoid the kind of congestion that leads students to miss classes or hand work in late. Studio faculty schedule field trips and other special events during studio time. If the nature of the event requires a student to miss all or part of another class, the studio instructor should clear this with the other teacher so students are not placed in an awkward position.

Solidarity
It is essential that studio operate in an atmosphere of solidarity, of shared effort and mutual support in the task at hand. This entails meeting expectations for team projects, helping each other learn new skills, and sharing resources. It means recognizing that we all have other concerns in our lives – family, job, health, etc. – and being understanding and supportive of this reality. Workloads and due dates can be demanding, but should not be unrealistic. It is essential, for example, that students get the amount of sleep they need to function safely and productively. Primarily it means establishing a culture of generosity that will help ensure that our time at NJIT is one of personal growth and collective success.

In addition to Studio Culture, university policies related to student codes of conduct, student life, etc. may be found in the Student Guidebook that can be found here: http://architecture.njit.edu/docs/Student_Guidebook_2013.pdf

Social Equity

The University has a clear policy on diversity that is communicated to current and perspective faculty, students, and staff through its NJIT Strategic Plan 2010-2015. In its mission statement, the Plan states that we are committed to making educational opportunities widely available. The mission statement goes on to say that NJIT "provides educational opportunities for a broadly diverse student body". The subsequent vision statement lists diversity as one of its core values. The vision statement declares, "We celebrate the diversity of our university community and are sensitive to cultural and personal difference. We do not tolerate discrimination of any form." Finally, the Plan specifically lists as two of its Strategic Priorities and Objectives that we be recognized "for attracting high-achieving students, faculty, and staff from diverse populations" with a specific emphasis on increasing the percentage of female students and actively recruiting women and minority faculty and university lecturers. The complete NJIT Strategic Plan 2010-2015 is available online at http://www.njit.edu/president/planning/strategicplan-2010-2015/index.php.

We celebrate the diversity of our university community and are sensitive to cultural and personal difference. We do not tolerate discrimination of any form.

New Jersey Institute of Technology is committed to maintaining an employment and academic environment free from all forms of harassment or discrimination. The University also has a Sexual Harassment Policy & Procedures document accessible at http://www.njit.edu/policies/pdf/students-sexual-harassment-policy0001.pdf.

New Jersey Institute of Technology is committed to maintaining a high level of academic integrity.

Student rights and responsibilities are addressed in the Student Professional Conduct Code found at http://www.njit.edu/doss/policies/conductcode/article4.php.

New Jersey Institute of Technology is committed to maintaining a high level of academic integrity. This priority is expressed in the University Code on Academic Integrity found at http://www.njit.edu/academics/pdf/academic-integrity-code.pdf. With respect to research, NJIT's priority is described in the Policy on Integrity in Scholarship accessible at http://www.njit.edu/policies/pdf/integrity_in_scholarship.pdf.

NJIT's Affirmative Action Plan is available at http://www.njit.edu/policies/pdf/webaaplanfy08.pdf. The Plan is in effect for the entire University and states that the NJIT "will recruit, hire, train, and compensate persons in all applicable administrative, faculty, and student job titles without regard to age, ethnicity, creed, disability, atypical hereditary cellular or blood trait, genetic information, marital status, national origin, sex, race, religion, gender preference, gender, sexual orientation or veteran status otherwise prohibited by applicable law." The University has appointed a Title Nine Officer and an Ethics Liaison Officer, both of which positions are held by Jean Feeney, who is responsible for compliance with the Affirmative Action Plan and who serves on an active Affirmative Action Plan Committee.

The College advertises all faculty and staff positions for hire with an equal opportunity statement and has actively sought women and members of minorities.

The College, in compliance with the University Plan, advertises all faculty and staff positions for hire with an equal opportunity statement and has actively sought women and members of minorities for line faculty positions, most recently during the current academic year. Two of our four most recent hires have been women. Women faculty, staff, and students are also represented at all recruiting events in an effort to attract new female students. The College is nearly one third women, a much higher percentage than the university as a whole. Finally, one of a number of reasons for founding the School of Art + Design was, in fact, to attract more female students. In this we have been successful.

The NJSOA encourages the holistic and liberal arts-based education of its students through General University Requirements (GUR), which NJIT offers entirely outside the College of Architecture and Design. Going beyond our college broadens our student's outlook and methods of inquiry. For a discussion of the role of GUR's in the NJSOA's mission, see I.1 – Identity & Self-Assessment and for a complete description of the types of undergraduate GUR's, see I.2.1 Human Resources & Human Resource Development.

The NJSOA is at once its own learning community, yet at the same time, its members play a critical role in communities organized around other disciplines. As a professional school, it seeks ways to apply new knowledge culled from within our learning community and from beyond its boundaries through practice. The NJSOA's rallying around our post-Sandy focus on resiliency as a whole new way building, best exemplifies this interdisciplinary pursuit. For further discussion to our commitment to the pursuit of knowledge and the impact of our post-Sandy response in our mission, please see Section I.1 – Identity & Self-Assessment. For a list of opportunities offered our students as a resource in both research and practicum-oriented studios since the last accreditation, see Section I.2.1 Human Resources & Human Resource Development.

I.1.3 Response to the Five Perspectives

A. Architectural Education and the Academic Community

Scholarship

The School of Architecture is committed to fostering scholarship. Scholarship in the field of Architecture comes in many forms. Traditional scholarship which revolves around writing books and articles and making presentations; scholarship through creative work including experimental practice, competitions and systematic inquiry; development of intellectual property in the form of proprietary designs and patents; scholarship dealing with pedagogy and controlled educational experimentation. In short, the definition of scholarship in the design fields is intentionally much broader than in traditional liberal arts and STEM disciplines to include creative work as equal to other forms of scholarship.

Scholarship in the field of Architecture comes in many forms.

Since the last accreditation, the faculty has authored books, written articles and garnered awards at an unprecedented rate. We have a productive faculty who are actively pursuing opportunities to be at the table in national conversations of topical interest. Looking at the pipeline, there are no less than 8 books being worked on by the faculty as well as a slew of articles. Scholarship involving funded research tends to revolve around applied research. Much of this research is done by the Center for Building Knowledge (See Center for Building Knowledge). Scholarship based on creative work includes competitions such as P.S. 1 and design awards. Generally we look for outside recognition rather than self-proclaimed success. This category also includes Solar Decathlons and other competitive design endeavors. The university has included creative work in the criteria for promotion and tenure. The development of intellectual property and proprietary design is encouraged but to date is primarily the purview of design disciplines other than architecture.

Scholarship revolving around pedagogy is of increasing interest to the faculty. There are two major prongs to these endeavors: studies dealing with teaching modalities effective with Millenials and studies based on outcomes assessments. Kepler, our curriculum management system, stores all student work and therefore makes comparative and longitudinal studies possible. In all these areas (except the development of intellectual property), the faculty has not only been active but extremely successful. Every year the annual summaries by each faculty member provide an accurate accounting of scholarly pursuits which is then used to award merit based salary increases.

Community Engagement

The faculty, staff, and students in the architecture programs all make unique contributions to the institution in the area of community engagement in a number of ways. Ever since its inception, the School has focused its attention on local problems. We have relationships of long standing with many communities around Newark, the state, and the region, founded on studio-based problem solving. We have conducted a significant number of planning studies and other interventions which often give rise to informed political debates and decisions. We are creating projects for the profession by proffering ideas and concepts that can then give rise to professional work for architects and planners in the region. Involvement with local communities is an important facet of awakening in our students a sense of social responsibility.

We are creating projects for the profession by proffering ideas and concepts. Involvement with local communities is an important facet of awakening in our students a sense of social responsibility.

One example is the Alternative Spring Break that NJIT organized in response to Hurricane Sandy. From March 16th through the 24th 2013, the NJSOA mobilizing over 600 volunteers from across NJIT and other universities to help communities affected by the storm. Students, faculty, staff, and alumni worked to fulfill a mission to "(Re)Build New Jersey Strong" led by the newly-formed Center for Resilient Design in cooperation with NJIT's Career Development Services and Campus Center. For over a week, NJSOA-led teams conducted clean-ups, deconstruction, construction, finish work and surveys on two dozen projects in 20 communities from Newark to Beach Haven. In all participants volunteered over 3,500 hours in volunteer help.

Senior CoAD staff and faculty conceived of the NJIT Alternative Spring Break in a brainstorming session not long after Sandy struck and immediately took the proposal to the student body for refinement and mobilization. With guidance from Tulane University and others, the proposal's leaders soon laid out a plan for the whole university to help municipal, social service, community, and/or faith-based groups recover from the devastating hurricane. For all, the experience was both productive and cathartic, leaving an indelible mark on both the university and areas hard hit by Sandy.

Service

Faculty, staff, and students of the College of Architecture and Design make unique service contributions to NJIT in numerous ways, contributing substantially to its governance. As one of five colleges offering degree programs, it is represented by the Dean, who serves as an officer of the University and as a member of the senior staff.

Members of the College of Architecture and Design and the School of Architecture also participate on all important University committees and have a substantial voice in shaping its future. These include but are not limited to:

- Undergraduate Curriculum Review Committee
- Administrative Affairs Council
- Council on Academic Affairs
- PSA Representation
- University Promotion and Tenure Committee
- Budget Committee
- Graduate Council
- Long Range Planning Committee

Teaching

Our contribution to teaching at the University level takes a variety of forms. First, the studio teaching model has been implemented in bio medical engineering and is being considered by other disciplines. Second, CoAD's curriculum management system which stores all student work has enabled the School of Architecture to monitor the effects of curricular changes and pedagogical innovations. The Kepler System makes it possible to monitor outcomes assessments and evaluate the positive or negative impact of changes. The School of Architecture has been one of the leaders in pushing outcomes assessments and in creating effective feedback loops. It is clear that this form of evidence based decision making is far more effective than decisions made on anecdotal evidence. Third, the level of accountability for students and faculty has created an unprecedented transparency regarding teaching and learning efficacy. Thus the Kepler System has enabled those in charge (i.e. the year coordinators, the Director of the School and the administration) to drill down and evaluate teachers and students fairly based on work done not just grades. This system of transparency has helped

elevate the quality of student work and has introduced a competitive element among teachers.

A number of our faculty members have received university-wide teaching awards at various levels. Prof. Gabrielle Esperdy won the award for Excellence in Lower Division Undergraduate Instruction (2012/13); Prof. Steve Zdepski received the Excellence in Teaching Award for Upper Division Undergraduate Instruction (2011/12); adjunct instructor Lorenzina Laera for best Adjunct Instructor (2011-2012), Prof. Glenn Goldman for Lower Division Undergraduate Instruction (2009-10) and University Lecturer Tom Ogorzalek best University Lecturer (2008-09).

B. Architectural Education and Students

Architecture has always had dual aspects as an academic discipline and a design profession, each of which requires of its practitioners an ongoing immersion in intellectual, creative, and technical exploration. In crafting an educational curriculum and pedagogy, NJSOA is mindful that this duality offers a beneficial range of entry points and opportunities for growth to our students, who bring to the School a rich diversity in background and personal circumstances. Our goal is to nurture our students' loftiest ambitions while providing the knowledge and skill sets necessary to succeed in architecture and related fields. Students who enroll in the NJSOA have made a career choice. Our role is to help them find a career path by teaching habits of mind and skills that are useful to traditional architectural practice but are also transferable to a number of alternative career paths. The aim is to educate a complete professional – one who is competent in the field of architecture and who also plays a proactive professional role within a total social, economic, and technological context.

Our goal is to nurture our students' loftiest ambitions while providing the knowledge and skill sets necessary to succeed in architecture and related fields.

We have always tried to anticipate the forces that change the professional climate. In our curricular planning, we make every effort to foresee the needs these forces will create in our students' professional lives well beyond their graduation from NJIT. Such prognostications about future trends allow us to position the School so that our graduates are well-equipped to deal with the challenges that will face them. Furthermore, we try to anticipate the needs of the profession to ensure that our graduates can become active agents of change rather than passive office fodder.

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Leadership

There are several avenues through which the NJSIOA encourages and assists students to develop leadership skills - both within the school and outside - in preparation for their life as professionals. The NJSOA benefits from two very active student organizations:

- the NJIT chapter of Alpha Rho Chi (APX), the national professional-social fraternity for architecture students, comprised of honors students; and
- the American Institute of Architects Students (AIAS) the national organization of students affiliated with the American Institute of Architects.

In addition to these intramural involvements, NJSOA students have played leadership roles in NJIT student government, intercollegiate sports, and the campus newspaper. Architecture students represent the School of Architecture on the Student Senate and write for the university newspaper, The Vector. It is remarkable that architecture students with their very busy schedule manage to compete at NCAA Division One Levels. A number of architecture students participate in university sports, including

men's and women's volleyball, baseball, cross country, indoor and outdoor track, soccer, men's swimming and men's fencing. Our students also represent the NJSOA in the recruiting process serving as volunteers during Open House events. They are wonderful and highly credible ambassadors for the School and its programs.

Mentoring Program

Mentoring program matches an average of twelve students per year with particularly successful and accomplished business executives, educators, judges, architects, administrators, and entrepreneurs.

Since 1993, the School has run a mentoring program, currently directed by Prof. Georgeen Theodore, that matches an average of twelve students per year with particularly successful and accomplished business executives, educators, judges, architects, administrators, and entrepreneurs for a year-long interactive experience. The mentoring program is supported by release time for the faculty member in charge and by a limited amount of NJSOA discretionary funds. A formal ceremony marks the beginning of the mentoring program each year. There is keen competition by students to become participants.

Cultural Differences and Diversity

The School enjoys a particularly diverse student body, which boasts an astonishing mix of educational and socioeconomic backgrounds mirroring the diverse population of New Jersey. Some of our students are the first in their families to attend a tertiary institution, whereas others have parents with advanced degrees. Members of the student body also have a wide variety of ethnic, racial, and religious origins.

The School enjoys a particularly diverse student body, which boasts an astonishing mix of educational and socioeconomic backgrounds mirroring the diverse population of New Jersey.

Our location in the greater New York metropolitan area provides an unparalleled opportunity for cultural and social exploration. Our students routinely take advantage of the plethora of cultural opportunities that exist in Manhattan, Newark, Princeton, and Philadelphia. The New Jersey Performing Arts Center in Newark is only blocks away from NJIT and has also added immeasurably to the cultural opportunities, and a lively local arts community is rapidly developing. Similarly, the Newark Museum and its many programs are accessible to our students. Further, Red Bull Park (MLS soccer) in neighboring Harrison and the Prudential Center (NHL hockey) in downtown Newark have brought professional sports to the neighborhood. Many courses provide exposure to the cultural events in the area by organizing field trips, class assignments, and other interactions.

Meetings with the Dean

"Pizza with the Dean" also offers a regular open forum for students to express their concerns and stay informed about school matters.

"Pizza with the Dean" also offers a regular open forum for students to express their concerns and stay informed about school matters. Along with student evaluation forms for each course and studio, this forms a critical part of the ongoing self-assessment efforts of the School. The Dean apprises students of happenings within the administration, and students feel free to voice any concerns in an informal, friendly setting.

Studio Culture Policy

The adoption of a Studio Culture Policy (see I.1.2 Learning Culture and Social Equity) has also helped improve communication among students and faculty. The policy initiates a conversation at the start of each new studio.

Masonry Design/Build Competition

As an example of learning by doing, the annual Masonry Design/Build Competition, involving second year undergraduate students, offers a triple benefit: a chance to make a direct connection between the drawn line and the built artifact; an opportunity to vie for recognition (including cash prizes) and showcase their work to the public,

and an experience in collaborative effort. In this competition, students democratically select their studio's best project from among fifteen designs and then work together to develop a prototypical piece of the selected project. To build the structure, teams work with members of the local mason's union. The resulting structures remain on display in front of the main entrance of the College until the next year's competition as a testament to the collaboration between students and masonry professionals.

Access to the Information Needed to Shape Students' Futures
With ubiquitous internet access and the introduction of the Kepler digital archive system, students now have an open-ended opportunity to explore professional practice and to track their own progress through their academic career, both individually and with respect to other students in their class. The School also has an active Intern Development Program (IDP) in which students are urged to enroll. (See Section I.2.1 Human Resources & Human Resource Development for detailed information on IDP.)

Enrichment and Exposure to National and International Context of Practice
The faculty and staff coordinate a number of programs each year to enrich the curriculum. A regular lecture series is offered each semester; speakers include noted practitioners and related professionals discussing their work and the challenges students may face. (See Section I.2.1 Human Resources & Human Resource Development on Lecture Series.)

The Gallery has been home to a series of exhibitions featuring student and professional architectural work, as well as a series of events organized by and featuring work by local artists. These latter activities have raised the profile of the NJSOA Gallery among Newark's open studios tours. (See Section I.2.1 Human Resources & Human Resource Development on Gallery Exhibitions.)

The NJSOA's Siena Summer Program continues to be an invaluable experience for students and faculty alike. The program consists of six weeks in Italy, preceded by six weeks of study at NJIT. All courses are taught by our regular faculty. This program gave rise to a formalized exchange agreement between NJIT and the University of Siena. Encouraged by this precedent, students have taken the initiative to create other study abroad programs such as one with the University of Copenhagen in Denmark and in Barcelona.

The NJSOA's Siena Summer Program continues to be an invaluable experience for students and faculty alike.

In addition to Siena, beginning in the spring semester of 2012, the NJSOA entered into a unique cultural exchange with Abellon Clean Energy, a sustainable energy company based in Ahmedabad, India. For half the semester, all third year studios designed a campus-like project on an Abellon property in northern Gujarat. Over the winter break, Abellon sponsored four students and two faculty members to travel to India to visit the site and tour Ahmedabad, Delhi and Agra.

Other studios are based on Solar Decathlons in Washington 2011 and this year in China. The Solar Decathlon is an international competition hosted by the National Energy Administration and the U.S. Department of Energy (or the Chinese equivalent) which aims to challenge students to design, develop, and build solar powered homes that create fully functional, comfortable, and sustainable living spaces. Fifteen NJIT students are participating, all of whom travelled to China. The goal is to design a house that respects the customs of rural Chinese family life while providing the advantages of smart, contemporary design and smart technology.

The Solar Decathlon aims to challenge students to design, develop, and build solar powered homes that create fully functional, comfortable, and sustainable living spaces.

The Design Showcase offers an opportunity for participants to present their work and network with prospective employers

Finally, since 2006, NJSOA has organized an annual event, the Design Showcase, featuring work by current students, alumni of the School, and local architects who contribute funds for merit-based scholarships. This annual event draws several hundred visitors and offers an opportunity for participants to present their work and network with prospective employers/employees and industry professionals.

Nurturing Diversity, Distinctiveness, Self-worth, and Dignity

In addition to the many efforts outlined above the NJSOA also sponsors the Annual Awards Ceremony, which is a celebration of faculty and student achievements. Honorees are presented citations and cash awards. This popular event is well attended by students, faculty, staff and alumni. Our growing list of merit based scholarships will allow us to make additional funds available for even more student accomplishments.

C. Architectural Education and the Regulatory Environment

Most students enrolled in the College of Architecture and Design matriculate with the expressed goal of eventually becoming a licensed professional.

Most students enrolled in the College of Architecture and Design matriculate with the expressed goal of eventually becoming a licensed professional. The majority of undergraduate students enter directly into the five-year Bachelor of Architecture program in order to complete New Jersey's state licensing board's minimum education requirement. A smaller percentage of students choose to earn the four-year Bachelor of Science in Architecture degree to later pursue the accredited degree at the graduate level. In every case we provide students with the necessary information to begin their Intern Development Program at an appropriate time as they earn their degree.

The professional B. Arch and M. Arch programs provide a firm foundation to students whose goal is to become a licensed professional. Information in the chart below compares the results from ARE 4.0 tests taken since the last NAAB accreditation visit as reported by NCARB.

	Programming, Planning & Practice		Site Planning & Design		Building Design and Construction Systems		Schematic Design		Structural Systems		Building Systems		Construction Documents & Services	
2009 (4.0)	**#**	**Pass Rate (%)**	**#**	**Pass Rate (%)**	**#**	**Pass Rate (%)**	**#**	**Pass Rate (%)**	**#**	**Pass Rate (%)**	**#**	**Pass Rate (%)**	**#**	**Pass Rate (%)**
NJIT ARE Pass Rates	52	50	51	57	33	45	56	70	37	54	43	51	59	46
National Pass Rates		56		69		57		64		66		59		71
Difference		-6		-12		-12		6		-12		-8		-25
2010 (4.0)														
NJIT ARE Pass Rates	73	49	55	71	51	55	66	74	57	56	59	54	99	53
National Pass Rates		62		76		63		66		65		63		74
Difference		-13		-5		-8		8		-9		-9		-21
2011 (4.0)														
NJIT ARE Pass Rates	79	53	63	67	55	64	50	68	66	64	61	69	61	62
National Pass Rates		62		73		62		71		68		64		77
Difference		-9		-6		2		-3		-4		5		-15

At or above national average
Within 10% below national average
Within 20% below national average
Within 25% below national average

The School of Architecture, in collaboration with NJIT's Department of Career Services, invites all students interested in learning about NCARB's Intern Development Program to an evening presentation followed by a Question and Answer session. Students are encouraged to register and begin counting IDP hours during their 3rd year of study. Because there is only a three-year, no-fee period, students are advised to establish their initial record at the start of the third year or when they begin their first job in which they work enough hours performing professional duties to justify starting the IDP clock.

During this annual event, the NJSOA introduces students in architectural professional programs to Mark Bess, their IDP coordinator and mentor. As a University Lecturer, Bess is a full-time faculty member charged with providing a comprehensive internship overview to all professional students in order to answer specific questions they might have, but more importantly, to address issues they may have not yet considered. University Lecturer Bess has served in the role as IDP coordinator for five consecutive years and attends each annual NCARB/AIA-sponsored IDP Coordinator Conference. He has taught all undergraduate and graduate Professional Practice courses in the NJSOA, and in doing so, has made steady progress in improving the Construction Documents & Services pass rate for our students sitting for the Architect Registration Examination.

D. Architectural Education and the Profession

CoAD students enrolled in accredited degree programs benefit from our commitment to using advanced technology and digital media in the service of design throughout the College. This fundamental focus informs our pedagogical and curricular decisions in studio, technical building systems, and elective courses. We prepare our students to meet the demands of the market and play important roles in the rapid changes taking place in the profession and building industry.

Commitment to using advanced technology and digital media in the service of design...

The world's 7 billion people face unprecedented challenges and opportunities today. Political and corporate leaders on every continent understand that climate change is the greatest threat to the well-being, survival and prosperity of present and future generations. Well-prepared design professionals are recognized as important agents in the transformation of negative effects on the ecosphere by the technosphere.

Today's clients increasingly demand that architects demonstrate how their project will benefit a triple bottom line in terms of economic, ecological, and social success. From the first time that students develop design projects in studio, and technical ones in building system courses, NJSOA students use digital tools that provide critical information in real time to guide design decisions. The increasing number of urban dwellers will continue to test designers' abilities to provide for the multiple needs of a diversity of clients and diverse populations as they come together to make and remake communities. Data driven design solutions are increasingly used to optimize multiple and, at times, conflicting criteria at all scales, from individual building designs to urban design. Upper-level studios present an array of diverse design problems at various scales that require students to consider multiple technical, social, and environmental issues as critical drivers for their design solutions.

Today's clients increasingly demand that architects demonstrate how their project will benefit a triple bottom line in terms of economic, ecological, and social success.

Good design in all disciplines requires both qualitative and quantitative issues to be studied and addressed. Upper level students have the opportunity to take part in collaborative design studios that bring many of these disciplines together to work on a single project. One notable example is the collaboration between architects, interior

designers, engineers, and construction professionals in the design and construction of the 2011 and 2013 Solar Decathlon houses using Building Information Modeling to communicate between all team members from beginning to end.

All architecture students gain insight and respect for the challenges that clients face in bringing an architectural project to fruition by developing pro forma documents in the required Programming and Project Development class. Understanding client challenges builds a firm foundation for understanding and meeting client expectations. Through the combination of clearly comprehending these expectations and responding to them with the latest technologically supported design solutions, our graduates are poised to contribute to the growth and development of the profession and its continued relevance to an increasingly diverse and demanding clientele.

E. Architectural Education and the Public Good

One of the core principles of an education at the NJSOA is its engagement with communities through work on real projects.

One of the core principles of an education at the NJSOA is its engagement with communities through work on real projects. While this is most powerfully represented by the Master in Infrastructure Planning (MIP) program, studios of this type have become a staple of advanced studios in both the graduate and undergraduate curricula. Studio projects engage in current issues of communities in Newark, the state, and the entire metropolitan region through neighborhood associations, public agencies, and non-profit organizations. This approach provides many benefits to school and community alike: it gives students the opportunity to work on real sites with programs articulated by local residents and agencies; it enforces the disciplines of clarity in verbal and visual communication so that architectural concepts may be understood and discussed by lay audiences; it situates studio design projects in the context of all of the ever-changing "real world" complexities that architects experience in professional practice; and it offers to community and pubic clients an opportunity to explore possible solutions proposed by our students as a neutral third party without a vested interest in any particular outcome.

The genesis of the NJSOA's community engagement comes from a variety of sources: contact by individual faculty with local clients; requests for assistance coming into the school; research projects undertaken by the MIP program or the Center of Building Knowledge (CBK); response to RFPs issued by public agencies; programs at the school reflecting faculty expertise and initiative; and student initiative.

Hurricane Sandy catalyzed the NJSOA's sense of engagement, mobilizing the faculty to dedicate more than half of the Spring 2013 studios to focus at least some part of the course to design for critical areas in the region and develop resilient "proto-typologies." The Center for Resilient Design at the CoAD - formed after the storm as a clearinghouse of information regarding design and natural disasters - coordinated these "post-Sandy" studios. Please refer to the list in Section I.2.1 Human Resources & Human Resource Development a lsit of activities that have occurred since the last accreditation.

NJSOA's tripartite focus on professional readiness, technological prowess, and social responsibility allows students to address the pressing needs of our time

Addressing Environmental, Social and Economic Challenges through Design

Adherence to the NJSOA's tripartite focus on professional readiness, technological prowess, and social responsibility allows students to address the pressing needs of our time (please refer to Section I.1.1 History and Mission for a comprehensive description of the NJSOA's focus). These include environmental challenges associated with climate

change as well as issues of social and economic equity. The B.Arch program addresses these design challenges in a manner that anticipates professional deployment at the culmination of the undergraduate studio core in the third year, while the M.Arch program addresses these at the conclusion of its studio core in the second year.

The third year B.Arch studios develop buildings with increasingly complex programs, aggregating typologies in both urban and undeveloped environments for sites both near and far. The third year accompaniment of courses in construction, structures, and environmental systems allows for the increased understanding of technology as a system, anticipating both economic and ecologically sustainable professional practice. Through this battery of courses, students learn to augment the design process through research and critical analysis to develop a critical understanding of established conditions and conventions. The fall semester's focus on downtown Newark introduces students to the sociological and economic aspects of urbanism. The spring semester's first half focuses on a rural and impoverished environment in India. The studio programs focus on rural education on an intergenerational scale to teach environmentally sustainable agricultural practices. The second half returns to Newark to design a library in a working class immigrant neighborhood according to a sustainable and resilient program (for a detailed description of the B.Arch 3rd year curriculum, refer to Section II.2.2 Professional Degrees and Curriculum).

The M.Arch follows a similar urban emphasis in its second year by focusing on public architecture through the design of a civic building in a metropolitan setting in the first semester. An urban design scale studio follows this in the second semester, completing the graduate core. Throughout the year, studio coursework progressively challenges students to examine the social and economic aspects of the buildings they design with regard to sustainable and resilient development. And through a carefully calibrated coordination of building, infrastructure, and landscape, the curriculum asks them to consider seriously the social and ecological service their designs must provide (for a detailed description of both professional degree curriculum, refer to Section II.2.2 Professional Degrees and Curriculum).

Architect's Obligations and Ethical Implications

In the B.Arch 5th Year, Professional Architectural Practice (ARCH 558) serves as a capstone course that dwells on the relationship between architecture and the public good through an examination of the structure and practices of architecture as a profession. The course studies the formal and informal relationships between architects and clients, government officials, and consultants and the ethics and liabilities associated with each. By preparing students to recognize the responsibilities of leadership and ethical decision-making, the course upholds the unique station architecture maintains relative to other professions. At the graduate level, ARCH 579G plays a parallel role.

I.1.4 Long-Range Planning

The long range planning process at the College of Architecture and Design produces action plans that guide decision-making. Long range plans articulate a framework which specifies goals, specific measures for success, feedback mechanisms and action items. These plans delve into enrollment planning, resource allocation, pedagogical objectives, research agendas and outcomes assessments. In addition, long range plans by the College contribute to and have to be responsive to the NJIT's Academic Plan and the State plan.

The Office of the Dean is akin to the cockpit of an airplane. It is responsible for setting direction and for positioning the College and the academic units within it.

The Office of the Dean is akin to the cockpit of an airplane. It is responsible for setting direction and for positioning the College and the academic units within it. Also, to continue the analogy, the Office of the Dean is vigilantly observing a dashboard of key indicators which measure factual performance. Should any of the key dials veer from the expected projections, corrective action is instigated.

The Dean has the responsibility and is accountable for meeting targets set by the College or by the University. The Office of the Dean has the responsibility for isolating problems, identifying the issues and taking appropriate measures. Close collaborations with other parts of the University are essential. Unlike many other universities, NJIT considers Architecture one of its leading programs. As a result we have always received our fair share of resources and support.The long range planning process is instigated by the Office of the Dean in collaboration with the Director of the School and the faculty. Any change beyond a de minimus change is presented and discussed at faculty meetings. The data used for key measures are developed by institutional research, an independent arm of the Provost's office. The data are uniform across all disciplines at NJIT.

The College of Architecture and Design has set a leitmotif for all disciplines, including architecture, which guides the pedagogy of the School. As mentioned above, we expect our graduates to be:

- Professionally ready
- Technologically savvy
- Socially responsible

These are the three themes which inform our pedagogy and color our response to the five perspectives.

A. Architectural Education and the Academic Community

Long range planning by the University sets out specific areas of emphasis for NJIT. They are: Digital Everyware, Life Sciences, and Sustainability.

Long range planning by the University sets out specific areas of emphasis for NJIT. They are: Digital Everyware, Life Sciences, and Sustainability. These areas of emphasis have played an important role in the hiring of new faculty; they have also set the precondition for fruitful interdisciplinary collaboration across the University. Furthermore it is expected that these foci will create a critical mass in these areas and thereby provide general additional opportunities for external support and foster a creative ambiance conducive to innovation and discovery. In this way we can take full advantage of being a critical part of a technological university while at the same time making a significant contribution to the topic of sustainability and, to a lesser degree, Digital Everyware.

B. Architectural Education and Students

The three descriptors that inform our curriculum stipulate that our students should be

professionally ready, technologically savvy, and socially responsible. *Professionally ready* means that our students have a full understanding of the building process and the role of architects within this context. They are taught to create value and to align interests. Creating value through design is a credo that every student must understand; the aligning of interests means distancing from adversarial processes and embracing more collaborative and integrative approaches. Our students must be *technologically savvy*, be conversant with BIM and other critical softwares, and be able to take full advantage of the technological tools that are available to designers. And, finally students need to be *socially responsible*. This means that students in addition to being aware of their role as professionals also need to embrace their role as citizens. The involvement in building communities and participation in efforts that make a difference in the lives of residents provide a student with the wish to be a contributor, to be socially responsible and affect change. Apart from knowledge and a full tool set, a socially responsible attitude creates a whole new level of design relevance.

Students are taught to create value and to align interests.

C. Architectural Education and Regulatory Environment

Architects are licensed based on the premise that they maintain and enhance the health and safety of the public. Students need to be fully cognizant of this responsibility and be prepared to enter an Intern Development Program or to take licensing examinations. Even though many graduates may choose to pursue a career in a field other than architecture, it is still incumbent on us to provide an education that prepares every student to be ready for and licensure IDP.

It is still incumbent on us to provide an education that prepares every student to be ready for and licensure IDP.

D. Architectural Education and the Profession

We believe our curriculum prepares students not just to work in offices but, in addition, to have both the ambition and ability to eventually take over the firm or found their own practices. We look at the relationship with the profession as a partnership between education at the academy and training in offices. The knowledge and skills we impart to students need to be complimentary.

We believe our curriculum prepares students not just to work in offices but, in addition, to have both the ambition and ability to eventually take over the firm or found their own practices.

NJIT has a close working relationship with AIA New Jersey. In fact, NJAIA was responsible for the formation of a State School of Architecture (NJIT) in 1973. Many of our graduates become officers in the State AIA or one of the local chapters.

Above all it is important to have a continuing conversation with the profession about its needs and expectations so that we can make the requisite pedagogical adjustments.

E. Architectural Education and the Public Good

Since the very beginning of the School one of two foci has been involvement with local communities. The commitment to serve takes the form of studios involved in projects of interest to the community or of community planning. Because of our long tradition we have become a trusted partner for many municipalities. On the one hand, the design of communities fulfills the University's obligation as a State institution to use its expertise to help address problems of interest to the State; on the other hand, this commitment provides wonderful opportunities for our students to get to work with the real players in real situations.

The design of communities fulfills the University's obligation as a State institution to use its expertise.

We have a strongly held belief that a professional without a fully developed sense of civic responsibility is not a complete professional.

I.1.5 Self-Assessment Procedures

The primary aim of self-assessment is to insure that curricular goals and pedagogical approaches are properly calibrated.

The primary aim of self-assessment in the College of Architecture and Design is to insure that curricular goals and pedagogical approaches are properly calibrated to prepare students to be successful and productive members in the design professions as well as responsible citizens in an increasingly interconnected global community. The College of Architecture and Design follows NJIT's process for self-assessment in order to verify it is progressing toward achieving its articulated long-term goals as they relate to the five perspectives outlined above in the section on Long-Range Planning. This process includes continuously monitoring and assessing each program of study from multiple perspectives by external experts and professionals down to the School of Architecture student body.

The School of Architecture has a mandate from the State of New Jersey to educate professional architects. We recognize that in order to effectively respond to this mandate, we must maintain a close working relationship with the profession and respond to feedback we receive through our advisory board and Dean's Council. We meet with each of these groups at least once every year to elicit the thoughts and perspectives on the state of the profession and industry from professional architects, designers, builders and developers. Many of these volunteers are alumni with similar backgrounds as those of our current student body. They understand the challenges our students face as they work to earn their professional degrees. Through listening closely to industry leaders throughout the region, we are able to address the changing needs of the profession through our curriculum and make adjustments as required.

In order to properly implement necessary changes to the curriculum we rely on a set of internal assessment and executive processes. In addition to traditional student course evaluations, the School of Architecture has multiple processes in place to assess its academic program at various intervals. The assessment cycle at the College of Architecture and Design relies heavily on the "Kepler System," a curriculum management and digital information storage and retrieval system. Each semester, the Kepler System stores all the work of each student in the College and makes it available to all CoAD students, instructors, and administrators. Apart from allowing oversight, it also provides opportunities for longitudinal studies, individual tailoring of teaching, individual student portfolios, the evidence for NAAB Accreditation as well as monitoring of teaching efficacy. In force for seven years, this mandatory system has had a most positive effect on teaching and learning. It establishes standards and comparisons for students and faculty alike. Its transparent and persistent body of evidence is available to all members of the academic community including the School of Architecture Curriculum Committee.

The Curriculum Committee meets several times a semester and is concerned with ongoing curricular monitoring and development. This committee, informed by input from studio, history, technical building systems and professional practice coordinators, acts in an advisory role to the full faculty who then deliberate and vote on all curricular changes.

Architecture students are encouraged to participate in the continuous development of the curriculum through direct meetings with the School and College administration. Each semester, full student body feedback sessions are held during "Pizza with the Dean" and separate meetings are scheduled with student senators and members of

AIAS to discuss concerns and new initiatives. AIAS leaders are invited at appropriate times to provide student perspective at full faculty meetings.

In addition to internal monitoring and the six year NAAB accreditation period at the college level, a formal university-level program review is conducted once every five years – most recently in 2010 – as part of the ten year Middle States regional accreditation process. This process was developed with input from all academic programs in the University. NJIT is accredited by the Middle States Commission on Higher Education, a unit of the Middle States Association of Colleges and Schools. The University was awarded its most recent accreditation in 2012. NAAB accreditation standards and protocols are among those adopted as examples of best practices for monitoring student achievement. NJIT's broad Institutional Level Learning Goals reflect key concerns of the NAAB Five Perspectives. Results reported by all academic units are periodically collected and form a large and important part of formal institutional self-assessment procedures.

The NJIT Program Review currently establishes public accountability for six common review metrics across all academic programs in the University:

Review metric 1. How does the program incorporate the five Institutional Level Learning Goals (below) into the Program Level Learning Goals?

1. Research-based Inquiry
2. Ethical Conduct
3. Economic Literacy
4. Collaboration
5. Engagement

Review metric 2. How does the program incorporate the Program Level Learning Goals into the Course Level Goals?
Review metric 3. Describe the assessment design and how it has been implemented.
Review metric 4. What evidence is provided of student learning?
Review metric 5. How have assessment results been used to implement change?
Review metric 6. How do program administrators ensure a sustainability of the student learning assessment process?

I.2 – RESOURCES

I.2.1 Human Resources & Human Resource Development

Faculty and Staff

Matrices divided by semester identifying each faculty member, the courses he/she was assigned during that time and the specific credentials, experience, and research that supports these assignments is included in Part Four (IV) of this report.

"NJIT reaffirms its policy of equal employment opportunities. Our strong concern for our employees' dignity and wellbeing and our commitment to provide for a safe, productive and professional work environment."

The NJIT Equal Employment Opportunity Policy Statement states "NJIT reaffirms its policy of equal employment opportunities for all qualified individual's without discrimination because of race, color, religion, sex, age, national origin, handicap or veteran's status. Underscoring this policy is our strong concern for our employees' dignity and wellbeing and our commitment to provide for a safe, productive and professional work environment." The policy statement goes on to state "Every effort is made to assure that our policies regarding hiring, salary administration, promotion, and transfer are based solely on job requirements, job performance, and job related criteria. In addition, our personnel policies and practices including those relating to compensation, benefits, transfer, retention, termination, training, self-development opportunities, as well as social and recreation programs are administered without discrimination on the basis of race, color, religion, sex, age, national origin, or handicap.

"NJIT's continued success in affirmative action depends in large measure not only on the commitment and involvement of those directly responsible for the program's implementation but also on the dedication of all our employees. Assuring equal employment opportunity is a fundamental and direct responsibility of all levels of management. Managers and department heads are required to comply with government regulations and also the affirmative action goals of the university.

"The following practices and conditions will prevail to underscore our commitment:

- Each manager and department head specifically will be responsible for making sure that those in positions to influence employment and personnel decisions are aware of, and comply with, the policy and goals.
- In order to maintain a work environment which does not permit conduct that abuses the dignity of any individual through ethnic, sexual, racial, or other discriminatory forms of harassment, incidents of such will be dealt with promptly and disciplinary action will be taken as necessary.
- Various recruitment sources will be utilized to broaden the consideration of qualified applicants from all segments of the community.
- Reasonable accommodations will be made for handicapped employees or applicants and for an employee's religious observance as permitted by sound business practices.
- Formal action programs established to comply with applicable equal opportunity laws and regulations will be continued."

Additional information regarding the NJIT Affirmative Action Program is accessible on the website at http://www.njit.edu/policies

The criteria and procedures used to achieve equity and diversity in faculty appointments, reappointments, compensation, and promotions stem from the fact that the School of Architecture is an equal opportunity employer situated in a diverse community. For tenure track positions we advertise nationally and for adjunct positions we rely on local word-of-mouth in a metropolitan area with many qualified applicants. We are scrupulous in all faculty recruiting efforts to cast as broad a net as possible and to interview a diverse range of candidates. Because our roster of tenure-track positions is small and constrained by a very tight university budget, we rely heavily on full-time non-tenure track faculty (now formally designated by NJIT as university lecturers), working alongside adjunct instructors to staff many of our courses and studios. Of nine university lecturers on staff, two are women and two are minorities. two of the five most recent tenure-track hires are female.

In addition to maintaining diversity in faculty hiring, the school carefully considers faculty assignment within the program to ensure that students are exposed to a diverse array of faculty as mentors and role models. For example, the third year undergraduate studio coordinator and the director of the Master of Infrastructure Planning program are both women. And two of the 12 studio critics in the first year of the undergraduate program in Spring 2012 were women. The same commitment to diversity extends to the staff of the College where one of two associate deans is a woman, as well three out of three special assistants to the dean.

IDP

University Lecturer, Mark Bess, AIA, NCARB, serves as the IDP Education Coordinator for the School. Mark was appointed coordinator several years ago by Dean Gauchat. He is a licensed architect and an NCARB record holder. He also teaches the required professional practice course (Arch 558 for undergraduates and Arch 579G for graduate students), which has a section dedicated to professional development, the role of NCARB, and the Intern Development Program and process. Lecturer Bess has attended training sessions with NCARB IDP Staff at the annual IDP Coordinators Conference in Chicago as well as with Director of IDP, Martin Smith AIA, NCARB, by phone and in person at NJSOA. Also, every two years, NJIT Career Services hosts a Career Day which brings in local firms and IDP state representative Ashton Quinton. In 2010 Mark hosted IDP Information Day at the School with Mr. Smith.

As the IDP Coordinator, Lecturer Bess communicates regularly with the student body about the IDP process and the requirements for getting started with their NCARB record. He works with each student in both the B. Architecture and M. Architecture programs. He helps the students complete the Eligibility Date form and advises them on how to coordinate their work experience with NCARB. Prof. Bess also serves as the point person with the faculty regarding special academic projects that may be eligible for IDP credit.

Balanced Faculty Workloads

Faculty Loads are a composite of teaching, administration and scholarship (funded research) in conformity with national standards for architecture schools and by agreement with the University and the PSA union. The School of Architecture has arrived at a system that equates anomalous studio teaching assignments to credit hours. The expected load for tenure/tenure track faculty is at least 9 credit hours. University lecturers are expected to teach 12 credit hours whereas adjunct instructors are hired on a course by course basis.

Faculty loads are an important factor in sharing the responsibility for teaching and running the School in a fair and equitable way. Unlike other disciplines, the study of architecture relies heavily on studio teaching/learning. It is customary at the university to equate one credit hour to one contact hour. This equation needs to be modified for studio courses to account for an increase in contact hours over and above a typical course. Also, teaching a very large class is more work than teaching a more intimate class. We have therefore established the concept of a "load hour". In most cases the load hours and credit hours are the same for a given course. However, in other courses, such as studios and large lecture courses, the credit hours and contact hours are translated into load hours.

For studio course contact hours, contact hours are multiplied by .667 to arrive at load hours or credit hour equivalents.

For large classes, teaching load hours earned for a given course can be increased over and above the academic credit hours based on the size of the course. If a section consists of 50 or more students, then load hours are calculated as 1.5 times credit hours. Where a section is 100 or more students, then load hours are calculated as 2 times credit hours.

Service load hours are earned for service to the school or department over and above those expected of every faculty member. The following service positions are equivalent to 3 load hours: program director (per semester) and studio coordinator (per year).

All faculty and staff work loads are assigned by the Office of the Dean and are in accordance with applicable university union rules and generally held national standards for Schools of Architecture.

Teaching loads for full-time faculty (Tenured /Tenure Track and University Lecturers) take into consideration expected scholarly, research and service activities. Typical adjunct instructor teaching loads are assigned every semester working at all times with the realities of individual scheduling parameters for these engaged professionals. Adjunct instructors typically teach a maximum of two classes per semester. Administration staff members at the Director, Associate Dean and Dean level are provided release time from teaching duties commensurate with administrative responsibilities. See faculty matrix in Part Four (IV) of this report for specific information regarding actual teaching assignments and specific teaching loads.

TENURE / TENURE TRACK FACULTY LOADS - FALL 12

	Name	Course Number	Course Name	Acdmc Credit / Couse	Total Acdmc Credit	Contact Hour	Credit Hour Equiv	Service Credit Equiv	Large Class Equiv	Tot Load Equiv
1	Atwood	ID 363	Studio III	4	**7**	8	6			**9**
	Atwood	ID 216	Modeling and Prototyping	3		3	3			
2	Bales *	Arch 543G	Bldg Sys III: Intro Bldg Srv	3	**6**	3	3			**6**
	Bales *	Arch 663	Intro to Sustainable Design	3		3	3			
3	Burgermaster	Arch 463	Options I	5	**8**	12	8			**11**
	Burgermaster	Arch 423	Construction III	3		3	3			
4	Celik		Sabatical**							**0**
5	Decker	AD 463	Collaborative Design Studio	5	**5**	12	8			**8**
	Decker		Reduced faculty load for first year hire***							
6	Esperdy	Arch 381	History III	3	**6**	3			6	**9**
	Esperdy	USYS 702	Evol. Of American Metropolis	3		3	3			
	Esperdy		Interim PhD coordinator							
7	Franck		Sabatical**							**0**
8	Garber	Arch 583	Glass and the Chinese Landscape	3	**8**	3	3			**11**
	Garber ©	Arch 563	Comp I - Solar Decathlon	5		12	8			
9	Gauchat		Dean - College of Architecture and Design							**0**
10	Goldman	AD 150	Color & Comp	3	**6**	5	4			**11**
	Goldman	AD 150	Color & Comp	3		5	4			
	Goldman		Director - School of Art + Design			3		3		
11	Krumweide	Arch 505/506G	Grad Design V/VI	5	**5**	12	8			**8**
	Krumweide		Reduced faculty load for first year hire***							
12	LeCavalier	Arch 163	Intro to Design I	5	**5**	12	8			**8**
	LeCavalier		Reduced faculty load for first year hire***							
13	Moore	Arch 483	Many Faces of Arch	3	**9**	3	3			**9**
	Moore	Arch 583	Pop-Up Architecture - A Global Trend	3		3	3			
	Moore	Arch 583	Exploring Urban Gardening	3		3	3			
14	Mostoller	Arch 501G	Grad Design I	5	**8**	12	8			**11**
	Mostoller	Arch 662	Project Japan - China Rising	3		3	3			
15	Narahara	AD 150	Color & Comp	3	**6**	3	3			**9**
	Narahara	AD 150	Color & Comp	3		3	3			
	Narahara	DD 275	History of Games	3		3	3			
16	Papademitriou		Out on Medical Leave**							**0**
17	Russo	Arch 505/506G	Grad Design V/VI	5	**8**	12	8			**11**
	Russo	Arch 500G	Computer Applications to Design	3		3	3			
18	Santos, T	Arch 563	Comp I	5	**8**	12	8			**11**
	Santos, T	Arch 528G	Grad History I	3		3	3			
19	Schuman	Arch 363	Studio III	5	**8**	12	8			**11**
	Schuman	Arch 662	Envisioning Newark	3		3	3			
20	Sollohub	Arch 463	Options I	5	**5**	12	8			**11**
	Sollohub		Director - School of Architecture					3		
21	Theodore	MIP 601/Arch 463	Infrastructure Studio	5	**8**	12	8			**11**
	Theodore	MIP 631	Director - MIP	3		3		3		
22	Wall	Arch 463	Options I	5	**8**	12	8			**11**
	Wall	Arch 583	Ungluing the Self	3		3	3			
23	Zarzycki	AD 490	Character Modeling	3	**8**	3	3			**11**
	Zarzycki	Arch 263	Studio I	5		12	8			
24	Zdepski	Arch 564	Comp II	5	**8**	12	8			**11**
	Zdepski	Arch 332	5th year coordinator	3		3	3			
					Total teaching hours		183		6	**189**
					Total Service hours			9		

Total T/TT teaching capacity @ 20.5* instructors x 11 credit hours each = 225.5 hours - 9 hours***= 216.5 hours**

* Erv Bales receives 1/2 pay for 1/2 load

** Professors on sabatical or medical leave are not included in the total full time credit capacity calculation

*** Portions of reduced faculty load are not included in the total full time credit capacity calculation

FULL FACULTY LOAD FOR TENURE/TENURE TRACK AND UNIVERSITY LECTURER POSITIONS = 11 TOTAL CREDIT EQUIVALENTS

CREDIT HOUR EQUIVALENTS FOR LARGE ENROLLMENT COURSES

1 Large Class Faculty Load Equivalent = X 1.5 ACADEMIC CREDIT for sections of 50 or more

2 Large Class Faculty Load Equivalent = X 2.0 ACADEMIC CREDIT for sections of 100 or more

CREDIT HOUR EQUIVALENTS FOR STUDIO BASED COURSES

ACADMIC CREDIT	ACTUAL CONTACT HOURS	COURSE TYPE	CREDIT HOUR EQUIV
5	12	Design Studio	8
3	6	Modes of Communications Studio	4
1	6	Comprehensive Studio Lab	5
4	9	Art + Design Design Studio (200 level)	6
3	6	Art + Design Lab	4

1.5 Contact Hours = 1 Faculty Load Equivalent

Contact Hours / 1.5 = Faculty Load Equivalent

TENURE / TENURE TRACK FACULTY LOADS - SPRING 13

	Name	Course Number	Course Name	Acdmc Credit / Couse	Total Acdmc Credit	Contact Hour	Credit Hour Equiv	Service Credit Equiv	Large Class Equiv	Tot Load Equiv
1	Atwood	ID 264	Industrial Design Studio II	4	7	8	6			9
	Atwood	ID 301	Design Specialization -	3		3	3			
2	Bales *	Arch 543G	Bldg Sys III: Intro Bldg Srv	3	6	3	3			6
	Bales *	Arch 666	Sustainable Bldg Resouces	3		3	3			
3	Burgermaster	Arch 464	Options II	5	8	12	8			11
	Burgermaster	Arch 583	Tectonic Performance	3		3	3			
4	Celik		Sabatical**							0
5	Decker	Arch 464	Options II	5	5	12	8			8
	Decker		Reduced faculty load for first year hire***							
6	Esperdy	Arch 382	History IV	3	6	3			6	12
	Esperdy	Arch 662	Roadscape/Landscape	3		3	3			
	Esperdy		Interim PhD coordinator					3		
7	Franck		Sabatical**							0
8	Garber	Arch 483	Honors Seminar	3	8	3	3			11
	Garber ©	Arch 464/564	Options II	5		12	8			
9	Gauchat		Programing & Project Development shifitng to fall semster							0
	Gauchat		Dean - College of Architecture and Design							
10	Goldman	Arch 585	Imaginary Worlds	3	3	3	3			11
	Goldman		Director - School of Art + Design			12		8		
11	Krumweide	Arch 506/507G	Grad Design VI/VII	5	5	12	8			8
	Krumweide		Reduced faculty load for first year hire***							
12	LeCavalier	Arch 164	Intro to Design II	5	5	12	8			8
	LeCavalier		Reduced faculty load for first year hire***							
13	Moore	Arch 583	Prospecting for Urban Gems	3	9	3	3			9
	Moore	Arch 583	Case Studies in Community and Urban Design	3		3	3			
	Moore	Arch 312	Environmental Education	3		3	3			
14	Mostoller	Arch 506/507G	Grad Design VI/VII	5	8	12	8			11
	Mostoller	Arch 529G	Grad History II	3		3	3			
15	Narahara	AD 490	Extreme Fabication: Robotics for Architects and Designers	3	8	3	3			11
	Narahara	DD 364	Digital Design Studio	5		12	8			
16	Papademitriou		Out on Medical Leave**							0
17	Russo	Arch 502G	Grad Design II	5	8	12	8			11
	Russo	Arch 662	Elevational Strategies	3		3	3			
18	Santos, T	Arch 563/564	Comprehensive Studio II	5	5	12	8			11
	Santos, T		University P&T Committee					3		
19	Schuman	Arch 364	Studio IV	5	8	12	8			11
	Schuman	URB 788	The Good City	3		3	3			
20	Sollohub	Arch 483	B. Sci. Project Based Seminar I	3	3	3	3			11
	Sollohub		Director - School of Architecture					8		
21	Theodore	MIP 602	Infrastructure Studio	5	8	12	8			11
	Theodore	MIP 631	Hist & Thry Infrastructure	3		3	3			
22	Wall	Arch 464	Options II	5	8	12	8			11
	Wall	Arch 583	Honors Seminar	3		3	3			
23	Zarzycki	Arch 229	Structures I	3	8	3	3			11
	Zarzycki	DD 464	Digital Design Studio VI	5		12	8			
24	Zdepski	Arch 564	Comprehensive Studio i/II	5	8	12	8			11
	Zdepski	Arch 332	Image & Word II	3		3	3			
					Total teaching hours		175		6	181
					Total Service hours			22		

Total T/TT teaching capacity @ 20.5* instructors x 11 credit hours each = 225.5 hours - 9 hours***= 216.5 hours**

* Erv Bales receives 1/2 pay for 1/2 load

** Professors on sabatical or medical leave are not included in the total full time credit capacity calculation

*** Portions of reduced faculty load are not included in the total full time credit capacity calculation

FULL FACULTY LOAD FOR TENURE/TENURE TRACK AND UNIVERSITY LECTURER POSITIONS = 11 TOTAL CREDIT EQUIVALENTS

CREDIT HOUR EQUIVALENTS FOR LARGE ENROLLMENT COURSES

1 Large Class Faculty Load Equivalent = X 1.5 ACADEMIC CREDIT for sections of 50 or more

2 Large Class Faculty Load Equivalent = X 2.0 ACADEMIC CREDIT for sections of 100 or more

CREDIT HOUR EQUIVALENTS FOR STUDIO BASED COURSES

ACADMIC CREDIT	ACTUAL CONTACT HOURS	COURSE TYPE	CREDIT HOUR EQUIV
5	12	Design Studio	8
3	6	Modes of Communications Studio	4
1	6	Comprehensive Studio Lab	5
4	9	Art + Design Design Studio (200 level)	6
3	6	Art + Design Lab	4

1.5 Contact Hours = 1 Faculty Load Equivalent

Contact Hours / 1.5 = Faculty Load Equivalent

UNIVERSITY LECTURER FACULTY LOADS - FALL 12

	Name	Course Number	Course Name	Acdmc Credit / Couse	Total Acdmc Credit	Contact Hour	Credit Hour Equiv	Service Credit Equiv	Large Class Equiv	Tot Load Equiv
1	Alcala	AD 201	Human Factors/Ergonomics	3	**10**	3	3			**12**
	Alcala	ID 203	Innovations Past Present & Future	3		3	3			
	Alcala	ID 263	Studio I	4		8	6			
2	Bess	Arch 558	Professional Practice	3	**7**	3	3			**11**
	Bess	Arch 565	Comp Studio Lab	1		6	5			
	Bess	Arch 579G	Prof Arch Practice	3		3	3			
3	Brothers	INT 221	Bldg & Interior Systems I	3	**7**	3	3			**11**
	Brothers	INT 263	Interior Design Studio I	4		8	6			
	Brothers		CIDA accreditation coordinator					2		
4	Dart	Arch 583	Emergent Typologies	3	**8**	3	3			**11**
	Dart	Arch 363	Studio III	5		12	8			
5	Figueroa		2nd Year Studio Coordinator		**5**			3		**11**
	Figueroa	Arch 264	Studio II	5		12	8			
6	Harp	Arch 263	Studio I	5	**8**	12	8			**11**
	Harp	Arch 251	History I	3		3	3			
7	Navin	Arch 563/564	Comprehensive Studio II	5	**8**	12	8			**11**
	Navin	Arch 583	Building and Nature	3			3			
8	Ogorzalek	Arch 583	Material Matters for Design	3	**8**	12	8			**11**
	Ogorzalek	Arch 463	Options I	5			3			
9	Siegel		2nd Year Studio Coordinator	3	**8**			3		**11**
	Siegel	Arch 264	Studio II	5		12	8			
9	Taher	Arch 329	Structures II	3	**6**	3			6	**12**
	Taher	Arch 429	Structures III	3		3			6	
10	Wendell	Arch 434	Simulated Environments	3	**11**	6	4			**15**
	Wendell	AD 490	Advanced Architectural Rendering	3		3	3			
	Wendell	DD 363	Digital Design Studio I	5		12	8			
11	Wood	Arch 583	Fundamentals of Urban Design	3	**8**	3	3			**11**
	Wood	Arch 363	Studio III	5		12	8			
				Total teaching hours			118		12	**130**
				Total Service hours				8		

Total UL teaching capacity @ 11 instructors x 11 credit hours each = 121 hours

FULL FACULTY LOAD FOR TENURE/TENURE TRACK AND UNIVERSITY LECTURER POSITIONS = 11 TOTAL CREDIT EQUIVALENTS

CREDIT HOUR EQUIVALENTS FOR LARGE ENROLLMENT COURSES

1 Large Class Faculty Load Equivalent = X 1.5 ACADEMIC CREDIT for sections of 50 or more

2 Large Class Faculty Load Equivalent = X 2.0 ACADEMIC CREDIT for sections of 100 or more

CREDIT HOUR EQUIVALENTS FOR STUDIO BASED COURSES

ACADMIC CREDIT	ACTUAL CONTACT HOURS	COURSE TYPE	CREDIT HOUR EQUIV
5	12	Design Studio	**8**
3	6	Modes of Communications Studio	**4**
1	6	Comprehensive Studio Lab	**5**
4	9	Art + Design Design Studio (200 level)	**6**
3	6	Art + Design Lab	**4**

1.5 Contact Hours = 1 Faculty Load Equivalent

Contact Hours / 1.5 = Faculty Load Equivalent

UNIVERSITY LECTURER FACULTY LOADS - SPRING 13

	Name	Course Number	Course Name	Acdmc Credit / Couse	Total Acdmc Credit	Contact Hour	Credit Hour Equiv	Service Credit Equiv	Large Class Equiv	Tot Load Equiv
1	Alcala	AD 201	Human Factors/Ergonomics	3	8	3	3			11
	Alcala	ID 464	Industrial Design Comp Studio	5		12	8			
2	Bess	Arch 558	Professional Practice	3	7	3	3			12
	Bess	Arch 565	Comp Studio Lab	1		6	6			
	Bess	INT 322	Contract Documents	3		3	3			
3	Brothers	AD 111	Comm A+D Traditional Media	3	9	6	4			12
	Brothers	INT 222	Building and Interior Systems II	3		3	3			
	Brothers	INT 351	Furniture Design	3		3	3			
	Brothers		CIDA accreditation coordinator					2		
4	Dart	Arch 382	History IV (two sections of 15 in Thursday sessions)	3	8	3	3			11
	Dart	Arch 364	Studio IV	5		12	8			
5	Figueroa	Arch 156	MODC II	3	8	6	4			12
	Figueroa	Arch 264	Studio II	5		12	8			
6	Harp	Arch 563/564	Comprehensive Studio II	5	8	12	8			11
	Harp		Siena Coordinator	3				3		
7	Navin	Arch 563/564	Comprehensive Studio II	5	8	12	8			11
	Navin		5th year coordinator	3				3		
8	Ogorzalek	Arch 282	Structures I	3	8	12	8			11
	Ogorzalek	Arch 464	Options II	5			3			
9	Siegel	Arch 156	MODC II	3	8	6	4			12
	Siegel	Arch 364	Studio IV	5		12	8			
9	Taher	Arch 583	High Rise Structures	3	12	3	3			12
	Taher	Arch 548G	Structures III	3		3	3			
	Taher	Arch 583	Building for Hazard Prone Areas	3		3	3			
	Taher	Arch 583	B.I.M. and Structural Technologies	3		3	3			
10	Wendell	AD 112	Comm A+D Digital Media	3	9	6	4			12
	Wendell	DD 284	Video and Animation	3		3	3			
	Wendell	DD 284	Video and Animation	3		3	3			
	Wendell		NASAD accreditation coordinator					2		
11	Wood	Arch 156	MODC II	3	8	3	3			11
	Wood	Arch 364	Studio IV	5		12	8			
				Total teaching hours			128			128
				Total Service hours				10		

Total UL teaching capacity @ 11 instructors x 11 credit hours each = 121 hours

FULL FACULTY LOAD FOR TENURE/TENURE TRACK AND UNIVERSITY LECTURER POSITIONS = 11 TOTAL CREDIT EQUIVALENTS

CREDIT HOUR EQUIVALENTS FOR LARGE ENROLLMENT COURSES

1 Large Class Faculty Load Equivalent = X 1.5 ACADEMIC CREDIT for sections of 50 or more

2 Large Class Faculty Load Equivalent = X 2.0 ACADEMIC CREDIT for sections of 100 or more

CREDIT HOUR EQUIVALENTS FOR STUDIO BASED COURSES

ACADMIC CREDIT	ACTUAL CONTACT HOURS	COURSE TYPE	CREDIT HOUR EQUIV
5	12	Design Studio	8
3	6	Modes of Communications Studio	4
1	6	Comprehensive Studio Lab	5
4	9	Art + Design Design Studio (200 level)	6
3	6	Art + Design Lab	4

1.5 Contact Hours = 1 Faculty Load Equivalent

Contact Hours / 1.5 = Faculty Load Equivalent

Human Resource Development Opportunities

The ongoing development of our faculty is just as important as that of our students. We encourage and support our faculty's pursuit of scholarship and research activities, and provide opportunities for professional growth. At CoAD, faculty are encouraged to participate in various conferences and events throughout the year which are pertinent to their areas of specialization. Some examples of these over the last six years are faculty attendance at the following annual and one-of-a-kind events:

Association of Collegiate School of Architecture (ACSA) annual meetings
Association of Collegiate School of Architecture (ACSA) regional conferences
Association of Collegiate School of Architecture (ACSA) administrators' conferences
Library of Congress Symposium
Society of Architectural Historians annual meetings
Journal of Architectural Education (JEA) conference and board meetings
Design Inquiry annual conferences
Ecole des Hautes Etudes Sociales Conference
ACM/SIGGRAPH (Assoc. of Computer Machinery/Special Interest Group Graphics) annual meetings
National Conference of the Beginning Design Student
eCADDe Conference
AAG
Society of the American City Conference
International conference on Architecture and Urban Design
2010 Creating-Making Form Conference
Fondazione Querini Stampalia
ACADIA
Interior Design Educators Council annual meetings
Autodesk University annual conferences
Environmental Design Research Association (EDRA) annual conferences
Building Technology Educators' Society Conference
Middle Eastern Studies Association Conference

Easy access to opportunities for educational development is provided to faculty. Tuition reimbursement for courses benefitting an individual's level of education or job performance can be granted at the discretion of the Dean. In addition, there is a plethora of courses available for online and classroom training in a wide range of subjects. These courses, which are offered at no charge, can be taken during work hours. It is left to the initiative of each individual to take advantage of these many educational opportunities.

Sabbatical leaves are also available to qualified faculty for the following reasons: creative activity, study, writing and research. The Faculty Handbook states "The purpose of having a system of sabbatical leaves at New Jersey Institute of Technology is to increase the effectiveness of a faculty member's university service as well as to afford them an opportunity for professional development by relieving them of all normal campus activity. This philosophy is in consonance with the University Board of Trustees endorsement which was expressed as further evidence of the Board's continuing interest in the professional development of the faculty." To be eligible for sabbatical leave, an applicant must have served a minimum of six continuous years on the faculty of New Jersey Institute of Technology and must have tenure. No member can receive more than one sabbatical leave within any given six year period.

The following faculty have taken sabbatical leaves in the preceding six years.

Gabrielle Esperdy	AY2008-2009
Antonio DeSousa Santos	AY2008-2009
Zeynep Celik	AY2011-2012
Karen Franck	AY2012-2013

All full-time faculty, adjunct instructors and staff members are encouraged to attend several AIA\CEU lectures and symposia hosted by the College in its facilities offered at no cost each semester. The lecture series and symposia are scheduled in order to coincide with studio days in order to make it as convenient as possible for the largest number of both full-time and part-time members of the academic community to attend.

The College encourages and supports faculty members presenting papers and scholarly work.

The College encourages and supports faculty members presenting papers and scholarly work at both academic and professional discipline-specific conferences. Typically, 80% of all out-of-pocket expenses for registration fees, travel, lodging, and food are reimbursed for each event.

Information concerning faculty promotion and tenure are contained in the University Faculty Handbook a copy of which can be found at www.njit.edu/policies and in the Team Room. All academic promotions are conferred by the Board of Trustees on the recommendation of the President, after a series of rigorous reviews and evaluations by Department P&T Committees, Deans, the University Committee on Promotion and Tenure, and the Provost.

Hiring of faculty and teaching staff is the single most important factor in creating the intellectual underpinnings for future success.

Hiring of faculty and teaching staff is the single most important factor in creating the intellectual underpinnings for the future success and recognition of the School. It determines the quality of the teaching, the quality and quantity of research, and the School's reputation. The NJSOA faculty has a great deal of professional pride, unanimity of purpose, and a strong commitment to the School and its mission.

NJSOA faculty are appointed, promoted, and awarded tenure according to the criteria set forth by the University. The criteria used for tenure and promotion are teaching, scholarship, and service. Tenure and tenure-track appointments are recommended by a departmental search committee. The candidate is then selected by the Dean and appointed by the Provost. Promotions and tenure are addressed by the Departmental Promotion and Tenure (P+T) Committee and University P+T Committee, who provide recommendations. The final decision is made by the President and ratified by the Board of Trustees. University Lecturers are appointed by the Dean, usually after consultation with the Director of the School of Architecture and the School Promotion and Tenure Committee. Adjunct instructors, who comprise the bulk of the SoA teaching staff, are selected and appointed by the Dean or the Associate Dean for Academics.

While some staff positions can be filled internally, University search-and-screen procedures are required for nearly all positions. Exceptions may be requested through the Vice President, though all business, organizational, fiscal, and legal implications of the request must be vetted and justified.

Students

NJIT has a centralized Office of University Admissions which receives all applications. The university uses its own application forms, copies of which can be found online at http://www.njit.edu/admissions/apply-online. Applicants may apply online or by mail. First time freshman applicants must submit, along with the application form, a high school transcript and SAT or ACT test scores and may submit a personal essay. A portfolio may be included but is not required at this time but will be required in the future. The admissions office has a rolling admissions policy and students are notified of application results shortly after applications are received.

The application form contains Part IV Educational Opportunity Program (EOP) for students who meet certain financial and academic requirements and may be eligible for admission through EOP. These students receive extensive counseling, financial aid and other support services to ensure their success at NJIT. The College also participates in a number of off-campus college fairs in underprivileged areas throughout the fall recruiting season in an effort to recruit a diverse applicant pool.

Students are accepted into a specific program, architecture, and once accepted are reviewed for financial aid by the Student Financial Aid Services office. Accepted students are then informed of the financial aid available to them. At the time of application students may also complete Part VII of the form to apply to the Albert Dorman Honors College, acceptance into also includes financial aid. The application deadline for most students is March 1.

The application process for all undergraduate transfer students from both inside and outside the University is similar. Students are required to submit a completed application form, which is available online, a transcript from the school from which they are transferring, plus a portfolio. The Admissions Office reviews the transcript for admittance and then the College Associate Dean for Academic Affairs reviews the portfolio for placement and the transcript for credit transfer. The deadline for the fall semester is June 1 and for the spring semester is November 15.

Applicants to the Master of Architecture program must have completed a four-year undergraduate program accredited in the United States or its equivalent, and are required to submit a completed online application form, an official college transcript (and where applicable, proof of degree completion) from all institutions attended, GRE/TOEFL exam results, a portfolio, and three letters of recommendation. The CoAD Graduate Admissions Committee reviews the application and transcript for admittance and then the College Graduate Program Director and Graduate Program Manager jointly review the accepted applicant's portfolio for placement and the transcript for credit transfer.

Commitment to Student Achievement

The College of Architecture and Design is committed to student achievement both inside and outside the classroom through individual and collective learning opportunities. These opportunities are offered primarily through the regular studio curriculum but also in extracurricular activities. Studio classes provide formal one-on-one instruction time for 45 minutes to an hour each week for every student. Collaboration on team projects is required at several points in the studio sequence. This should be evident upon review of student work during the team visit. There are numerous University and College

The College of Architecture and Design is committed to student achievement both inside and outside the classroom through individual and collective learning opportunities

sanctioned/supported student organizations that offer opportunities for students to work together. These organizations promote significant initiatives and sustaining work in the service of multiple communities from the College to the national scale.
As one of New Jersey's three research universities, in conjunction with Rutgers University and UMDNJ, NJIT's mission encompasses the needs of an extremely diverse population in the nation's most urbanized and most densely populated state. This population includes notable concentrations of immigrants from around the world, with a recent influx from the Caribbean, Korea, and South America, and an African-American population dating from the Great Migration to the north in the first half of the 20th century. These communities present distinct opportunities for enrichment as well as challenges in terms of economic resources. There is only one public school of architecture in the State of New Jersey. As such, NJIT as a whole, as well as NJSOA in particular, strives to reflect the ethnic and socioeconomic make-up of the entire state rather than the immediate urban locale of the campus. In the words of University President Joel Bloom, "NJIT's goal for the next decade is to be recognized as a top ranked public research university, a national leader in the education of underrepresented groups for technological professions, and as a catalyst for a healthy New Jersey economy."

NJIT's goal is to be recognized as a national leader in the education of underrepresented groups for technological professions.

The criteria and procedures used to achieve equity and diversity in student admissions, advancement, retention, and graduation are the result of a clear commitment to diversity. This commitment is articulated in the policies and mission statement of the University, which has a well-earned reputation as one of the most diverse institutions of higher education in the nation.

General principles rely on specific strategies for implementation. Achieving social equity among students entails crafting an admissions process and a financial support system that opens the doors of opportunity and assists worthy students in economic need. The University has two specific undergraduate programs that serve to implement these principles.

Minority recruitment efforts are centered in the University's outstanding Educational Opportunity Program (EOP), which provides counseling and academic assistance to students whose records may in some respects fall short of the standard admission criteria. The State of New Jersey has mandated that institutions admit educationally and economically disadvantaged students in numbers equal to at least ten percent of the number of admitted New Jersey High School graduates. It has established an Equal Opportunity Fund to assist this effort.

The Albert Dorman Honors College was created to attract and challenge students with a record of outstanding academic accomplishment, often with diverse backgrounds. Some classes and sections within the NJSOA curriculum are specifically designed for Honors students. For the most part, however, they participate in classes and studios with the general student population, thereby raising the level of discourse throughout the curricula. The SAT profile of Honors students (composite scores in excess of 1300 on the critical reading and mathematics sections) falls within the range of students who often leave New Jersey for educational opportunities elsewhere. To counteract this, there are special financial incentives for students eligible for the Honors College; students can receive scholarship aid from 50-100% of tuition costs. The Honors program has been an unqualified success and a particularly great boost to the architecture program.

In addition to the University wide EOP program and the Albert Dorman Honors College, the NJSOA has also undertaken a vigorous fund-raising campaign to establish an endowment whose principle focus is undergraduate scholarship assistance. This enables the school to offer merit-based support to students in acknowledgment of their classroom and design studio performance. This financial assistance also enables more students to concentrate their efforts on their studies by reducing the need to support their tuition costs with outside employment. The School in turn benefits from a more diverse population.

Counseling and Advising

There are three tiers of advising available to our students. The bulk of formal advising with respect to the undergraduate student's progress through the curriculum is done by the Assistant to the Dean, Amada Belton, under the supervision of Dr. Frederick Little. Amada is the "go-to" person for these students, possessing a clear understanding of how things work and providing a sympathetic ear for student concerns. Dr. Little is also the Graduate Program and Admissions Coordinator and performs this same role for graduate students.

Dr. Little recently developed the "academic e-vising" system. In order to streamline the advising process for Spring 2013, reduce delays, improve student satisfaction, and concentrate advising resources on students with greater need for advising – whether for academic difficulty which may complicate progress toward degree or by reason of academic excellence, which opens additional opportunities of which students may be unaware – we offered select students the opportunity to receive "academic e-vising" in lieu of more traditional face-to-face meetings. In place of the hard-copy program of study forms used in the past, students were provided, via e-mail, with an Excel spreadsheet detailing all degree requirements in appropriate sequence. Rather than bringing a completed hard-copy of the sheet into the office, e-vising-eligible students were allowed to complete the form at their computers in studio and return the completed form to their advisor via e-mail, detailing all courses taken to date with semester and grade, along with all courses the student intended to take in Spring 2013. Continuing students making good academic progress with a current GPA of 3.0 or higher were eligible and were not required to meet with an advisor for their Spring 2013 courses. However, e-vising is merely an additional option for students who meet the 3.0 requirement: all students who wish to have a face-to-face meeting with an advisor were permitted to do so.

In order to streamline the advising process select students are offered the opportunity to receive "academic e-vising."

There were several intended outcomes of this initiative: 1) a significant and immediate reduction in waiting times for academic advisement, 2) improved concentration of resources on students at risk, 3) associated improvement in student satisfaction with the advising process, and 4) a longer term improvement in retention.

The second tier of advising and perhaps the most important is the informal advising that goes on almost daily in the design studio. Here students and critics share an intense work environment. In addition to general advice about career options, this contact is often a source of possible employment in the instructor's office or referral to other job opportunities. Additional advising is available outside the NJSOA. The University provides excellent counseling services at the Center for Counseling and Psychological Services (C-CAPS), offering training in areas such as stress management and test-taking, as well as more individual and confidential services such as psychological counseling services and referrals. Further, the Office of Career Development Services assists with

résumé writing and job search skills, provides referrals for internships, and actively encourages students to enroll in the National Council of Architectural Registration Boards (NCARB) Intern Development Program.

Career Guidance
In addition to creating overt modules in the professional practice courses at both the undergraduate and graduate levels, University Lecturer Mark Bess has been assigned to act as liaison between NCARB and the AIA and NJSOA students. In that regard, Mark functions as the School's IDP Education Coordinator and in addition to the enhanced coursework, Mark organizes seminars with AIANJ and NCARB New Jersey State IDP Coordinator, Ashton Quintin, to walk all students through the entire IDP process.

Internship and Mentorship
The NJSOA maintains a formal internship process and also encourages an informal one. The School's formal process includes merit-based internship and mentorships. At its Annual Awards Ceremony each fall, the NJSOA both gives citation scholarships and rewards high performing students with internships at metropolitan area firms. These internships often upgrade to full-time employment upon graduation. The NJSOA awards committee reviews metrics such as GPA and studio coordinator recommendations to distribute scholarships and internships. For certain cases, specific interests or residency are considered. Other academic based activities, such as the Habitat studio, offer internships to competition winners. NJSOA's merit-based Mentorship program described in Section I.1.3 B. Architectural Education and Students offers another route toward an internship.

The NJSOA also actively promotes an informal internship network consistent with its entrepreneurial mission. As elaborated on in its Program Mission in Section I.1.1 History and Mission, the NJSOA benefits equally from its centrality in the New York metropolitan region and by maintaining a sizable faculty of broadly diversified expertise. The school's size allows considerable opportunity for a student to find that experienced mentor, the one whose design outlook he or she identifies with and who can help a student start his or her career. Through this informal process, many NJSOA graduates join their instructor's firms first as interns, and later as full-time employees. The NJSOA's annual spring Design Showcase, also elaborated on in Section I.1.3 B. Architectural Education and Students also offers students an opportunity to showcase their designs to local professionals in search of interns and future employees.

The College provides a variety of opportunities for students to participate in field trips and other off-campus activities. Faculty members are encouraged to conduct field trips to various sites in New York and in the Newark metropolitan area. In the recent past, a group of students worked with Newark residents to construct a model of the entire city which is now on public display. For a number of years students have also taken part in the Habitat for Humanity studio, working with Newark residents, as well as a local Newark architect. In addition to the Siena summer program, for the past two years students have taken part in the Solar Decathlon, first traveling to Washington DC and then, in 2013, traveling to China. Students in the India studio also visited India to work with residents there on a local project. Students recently traveled to Italy to participate in the "Digital Stone Project," a summer workshop offered by an Italian stone-cutting company, where they learned about the latest innovations in digital stone fabrication. Finally, our students took part in a post-Sandy spring break volunteer project to help the Jersey Shore victims of Hurricane Sandy recover from the storm.

Students at the College have a variety of opportunities to participate in professional societies and organizations. The American Institute of Architecture Students (AIAS) is very active. The organization runs the College Print Shop, and celebrates with a ball every year complete with terrific decorations and live music. In 2012 they hosted the North East Quad Conference for all of the northeast AIAS chapters. We also have an active chapter of Alpha Rho Chi, the professional-social fraternity for architecture and the allied arts, which organizes lectures, workshops and field trips throughout the academic year as well as the first year discount supply package which gets entering freshman off to a good start. A number of our students are also part of the NJIT Albert Dorman Honors College, where top students from across the university come together to form a close knit, vibrant, collaborative community. Finally, many of our students participate in Division I university athletics including swimming, soccer, and fencing.

The College lends support to students attending meetings of AIAS and Alpha Rho Chi whenever possible. In 2012 we hosted the AIAS North East Quad Conference for all of the northeast AIAS chapters. This included workshops, a lecture, and a College wide ball attended by architecture students from throughout the northeast. Our Alpha Rho Chi chapter organized and hosted a leadership conference in 2009 with Robert Ivey as guest lecturer. The College makes facilities available for student organized meetings, workshops, film nights, portfolio reviews and similar events whenever possible.

Research, Scholarship, and Creative Activities

Since its founding, the NJSOA has maintained a strong emphasis on involving students in research, experiential learning and other creative pursuits. While these endeavors ultimately take students out of the classroom and studio, they often begin in an academic setting or directly align with experiential learning. Topics included community engagement, materials and sustainability research, urban and regional design, and resiliency. Several of these endeavors received direct research funding, others received in-kind support. The Center for Resilient Design supported those focused on post-Sandy resiliency projects. In 2009, The Bus Rapid Transit for Newark project received First Prize at NJIT's highly competitive Dana Knox Research Showcase. It is noteworthy that students made the case for the project to the jury without faculty involvement.

All projects listed below involved research or outreach that included students who left the confines of the academic environment to solicit stakeholder feedback and make public presentations, often long after the academic work was completed. For funded research, this included student support as research assistants to search background information in a discovery phase and to help complete the final reporting. Please refer to the list below for of faculty-led research that included opportunities for the acquisition of new skills and knowledge in settings outside the classroom or studio that have occurred since the last accreditation:

STUDIO-BASED RESEARCH PROJECTS

- Urban Age (MIP 601 Fall 2012) Prof. Georgeen Theodore with Karen Kubey
- Habitat for Humanity (Arch 463 Fall 2009-12) Prof. Darius Sollohub –Funded through NCARB Prize
- Hackensack Transit Oriented Development (MIP 602 Spring 2012) Adjunct Instructor Roger Smith with Martin Robins – Externally Funded
- The Im/material Worlds Studio (ARCH 463, Fall 2012) Prof. Matt Burgermaster – Externally Funded
- Six Flags Project (ARCH 463, Fall 2012) University Lecturer Thomas Ogorzalek

- SumCity (MIP 602 Spring 2012) Prof. Georgeen Theodore
- The Garden State Studio: Manville (Arch 505-7 Fall 2010) Adjunct Instructor Susan Pikaart Bristol
- MIM / Made in Midtown (MIP 601 Spring 2010) Prof. Georgeen Theodore
- Trilogy Repertory Company (Arch 563/Spring 2010) Prof. Stephen Zdepski
- In Case of Emergency (MIP 601 Fall 2010) Prof. Georgeen Theodore
- Plainfield Transit Oriented Development (MIP 602 Fall 2009) Prof. Darius Sollohub with Martin Robins – Externally Funded
- Detecting the Open City: An Exploration of New Jersey's Communities (MIP 601 Fall 2008) Prof. Georgeen Theodore
- Bus Rapid Transit for Newark (MIP 602 Spring 2009) Prof. Darius Sollohub with Martin Robins – Externally Funded
- A New Vision for Seaside Heights (MIP 602 Spring 2008) Adjunct Instructors Ira Smith and Erik Maran – Externally Funded

RESILIENCY-BASED STUDIO RESEARCH PROJECTS

- Resilience Matters, (Arch 463/4 Spring 2013) University Lecturer Thomas Ogorzalek
- Better Boroughs, Resilient Regions (MIP 602 Spring 2013) Prof. Georgeen Theodore
- Squan Island - Un-Building the Jersey Shore: a Barrier Island Borough Hall (Arch 563/4 Spring 2013) Adjunct Instructor Susan Pikaart Bristol
- PCI Architectural Design Studio: Plasticity and Resilience (Arch 563/4 Spring 2013) Prof. Matt Burgermaster – Externally Funded
- Emergent and Smart Materials/Reactive Environments (Arch 563/4 Spring 2013) Prof. Martina Decker

Student Organization Support

The College lends support to students attending meetings of AIAS and Alpha Rho Chi whenever possible. In 2012 we hosted the AIAS North East Quad Conference for all of the northeast AIAS chapters. This included workshops, a lecture, and a College wide ball attended by architecture students from throughout the northeast. Our Alpha Rho Chi chapter organized and hosted a leadership conference in 2009 with Robert Ivey as guest lecturer. The College makes facilities available for student organized meetings, workshops, film nights, portfolio reviews and similar events whenever possible.

Lecture Series

The NJSOA brings a diversity of experience and viewpoints to our curriculum through the Lecture Series. Visiting speakers provide unique perspectives to which students might not otherwise be exposed in studio. The School's Lecture Series invites prominent architects and related professionals from the state, region and nation to inform our students on topics of importance to the profession from their own unique perspectives. Past speakers have included William Sharples of SHoP Architects, Peter Gluck of Peter L. Gluck and Partners, Tom Mayne of Morphosis, and Bernard Tschumi of Bernard Tschumi Architects. A complete set of posters listing all lecturers from the Lecture Series since 2008 will be available in the team room. A list of the lecturers by year and term follows.

Spring 2013

Kathryn Dean, RA
Director and Joanne Stoloroff Cotsen Professor, Grad. School of Architecture and Urban Design
Washington University, St. Luis, MO
Partner, Dean/Wolf Architects, New York, NY

Jonathan Massey, Ph.D.
Laura J. and L. Douglas Meredith Professor for Teaching Excellence
Syracuse University School of Architecture, Syracuse, NY

Tony and Margaret Santos
Professor and Adjunct Faculty, NJSOA
New Jersey Institute of Technology

Ken Greenberg
Principal, Greenberg Consultants, Toronto, ON
Nataly Gattegno + Jason Johnson
Principals, Future Cities Lab, San Francisco, CA

Alan Organschi
Principal, Gray Organschi Architects
Vlock First Year Building Project Studio Coordinator + Building Technology Lecturer
Yale School of Architecture, New Haven, CT

Axel Schmitzberger, D.I.
Assistant Professor, College of Environmental Design
California State, Polytechnic University, Pomona, CA

Will Bruder, FAIA
Will Bruder Architects, LLC, Phoenix, AR
AIA Endowed Lecture/Design Showcase

Fall 2012

Neil Meredith
Gehry Technologies, New York, NY

Fred Kent
President + Founder, Project for Public Spaces, New York, NY
AIAS-sponsored lecture

Alissia Melka-Teichroew
Designer + Founder, byAMT Inc., New York, NY

Ted Krueger, PhD
Associate Professor of Architecture, School of Architecture
Rensselaer Polytechnic Institute, Troy, NY

Nataly Gattegno + Jason Johnson.
Principals, Future Cities Lab, San Francisco, CA.

AIA/NJ sponsored Fall Symposium
Distributed Intelligence

William Sharples, AIA
Partner, SHoP Architects, New York, NY

Nader Tehrani
Principal, NADAAA + Head, MIT School of Architecture, Boston, MA

Spring 2012

Kiel Moe
Assistant Professor, Harvard University GSD, Cambridge, MA

Robert Siegel, AIA
Principal, Robert Siegel Architects, New York, NY

Ted Ngai, atelier nGai
Lecturer, Rensselaer Polytechnic Institute, Troy, NY

Tina Manis, Principal
Tina Manis Associates, New York, NY

Peter Pelsinski, RA, LEED AP
Partner, SPaN – Stonely, Pelsinski and Neukomm LLC, New York, NY

Jason Rosenfeld, PhD.
Associate Professor of Art History
Marymount Manhattan College, New York, NY

Preston Scott Cohen, Principal
Preston Scott Cohen, Inc., Cambridge, MA
Chair and Gerald M. McCue Professor of Architecture
Harvard University GSD

Fall 2011

James Garrison
Garrison Architects, New York, NY

Kees Christiaanse
KCAP Architects and Planners
Rotterdam, NL + Zurich, CH + Shanghai, CO

Zoe Coombes + David Boira
Cmmnwlth , New York, NY

AIA/NJ Symposium
Energy

Chuck Hoberman
Hoberman Associates, New York, NY

Frederic Schwartz, FAIA
Frederic Schwartz Architects
New York, NY

Spring 2011

James Slade, AIA, LEED AP
Hayes Slade, AIA
Slade Architecture, New York, NY

Laura Starr, ASLA, LEED AP
Starr Whitehouse Landscape Architects and Planners PLLC, New York, NY

Daniel Libeskind, AIA
Studio Daniel Libeskind, New York, NY

Karen Franck, Ph.D.
Professor of Architecture, NJIT

Teresa von Sommaruga Howard, Dipl. Arch.
Group-Analytic Psychotherapist, London

Michael Speaks, Ph.D.
Dean, College of Design
University of Kentucky, Lexington, Kentucky

Michael Ryan, AIA
Michael Ryan Architects
Philadelphia, PA and Loveladies, NJ

Gregg Pasquarelli, AIA
SHoP Architects, New York, NY
The Design Showcase Lecture

Fall 2010

Bill Lazaroff
Senior Vice-President, Product Development & Design
Lifetime Brands, Garden City, NY

Lyn Rice, AIA, LEED AP
Principal, Lyn Rice Architects, New York, NY
Visiting Associate Professor, The Cooper Union

Leo Argiris, PE
Principal, Arup, New York, NY

Felicity Scott, Ph.D.
Assistant Professor of Architecture
Columbia Graduate School of Architecture, Planning, and Preservation, New York, NY
Founding Editor, Grey Room

Stephen Ayers, AIA, LEED AP
Acting Architect of the Capitol, Washington, DC

Spring 2010

Vishaan Chakrabarti, AIA
Director, Real Estate Development Program
Columbia GSAPP
Founding Principal, VCDC, ew York, NY
Skanska Endowed Lecture

Scott Marble, AIA
Partner, Marble Fairbanks, New York, NY
Director, Fabrication Research
Columbia Graduate School of Architecture, Planning, & Preservation; New York, NY

Christopher Payne
Photographer, New York, NY

Robert Cotter, AICP
Director, City of Jersey City Division of Planning

Jeffrey Wenger, ACIP
Principal Planner, City of Jersey City Division of Planning

David Leven, AIA and Stella Betts
Leven Betts Studio, New York, NY

Bernard Tschumi, FAIA
Bernard Tschumi Architects
New York, NY and Paris
2010 AIANJ Endowed Lecture

Fall 2009

Mario Carpo
Professor, College of Architecture
Georgia Institute of Technology, Atlanta, GA

Robert Ivy, FAIA
Editor-In-Chief, Architectural Record, New York, NY
Co-sponsored by Alpha Rho Chi Fraternity & Alpha Rho Chi Foundation

Martin Hammer
Architect, Berkeley, CA
Co-sponsored by the Campus Center & The Student Chapter of USGBC

David Ruy
Director, Ruy Klein, New York, NY
Associate Professor, The Pratt Institute

The AIANJ Fall Symposium
Organized by Matt Burgermaster & Richard Garber

Peter Gluck
Peter L. Gluck & Partners Architects
AR|CS Construction Services, New York, NY

Simon Sadler
Professor of Architectural and Urban History
University of California, Davis, CA

Deborah Berke, FAIA
Deborah Berke & Partners, Architects, New York, NY
Professor of Architectural Design, Yale University

Spring 2009

Nathan C. Hoyt, FAIA
Principal, Director of Interiors
Davis Brody Bond Aedas, New York, NY

Guy Nordenson
Partner, Guy Nordenson and Associates, Structural Engineers, New York, NY
Professor of Structural Engineering and Architecture, Princeton University
Co-sponsored by the Newark College of Engineering

Paul Seletsky
Senior Manager of Digital Design
Skidmore Owings & Merrill, New York, NY

Anna Dyson
Director, Center for Architecture, Science and Ecology
Rensselaer Polytechnic Institute, Troy, NY

Stephen Kieran, FAIA
Kieran Timberlake, Philadelphia, PA
The AIANJ Endowed Lecture

Fall 2008

William Mitchell
Professor, Architecture and Media Arts and Sciences
Massachusetts Institute of Technology, Cambridge, MA

Kenneth Huff
Artist, Savannah College of Art and Design, Savannah, GA

Aaron Schwartz, FAIA
Principal and Director; Perkins Eastman, New York, NY

Mario Corea
Architect; Corea & Moran Arquitectura, Barcelona, Spain

Nili Portugali
Architect, Faculty of Architecture and Town Planning
Israel Institute of Technology, Haifa, Isreal

Keith Kaseman and Julie Beckman
Architects, Kaseman Beckman Advanced Strategies, Philadelphia, PA


College of Architecture & Design New Jersey Institute of Technology
LECTURE SERIES
SPRING 2013
NJIT


College of Architecture & Design
LECTURE SERIES
SPRING 2012
NJIT

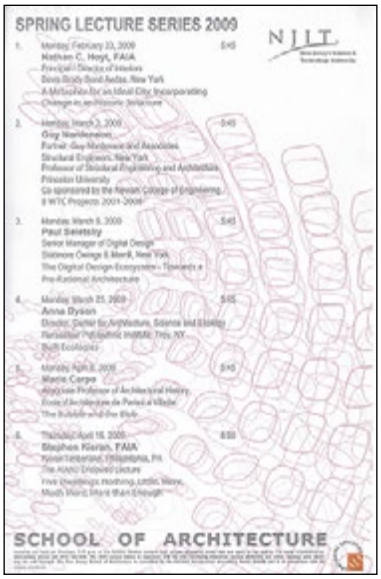

College of Architecture & Design New Jersey Institute of Technology
LECTURE SERIES
FALL 2012
NJIT


COLLEGE OF ARCHITECTURE & DESIGN
2011
SPRING LECTURE SERIES
SLADE
31 jan
STAHR
7 feb
LIEBSKIND
21 feb
SPEAKS
28 mar
RYAN
4 apr
PASQUARELLI
14 apr
RHEE/HOWARD
28 feb


College of Architecture & Design LECTURE SERIES
FALL 2011
10 James Garrison
17 Koos Christiaanse
24 Zoe Coumbos + David Bolea
26 ENERGY
07 Chuck Roberman
14 Frederic Schwartz, FAIA
21 Kiel Moe
NJIT


NJIT
SPRING 2010 LECTURE SERIES
SCHOOL OF ARCHITECTURE
Vishaan Chakrabarti, AIA
Scott Marble, AIA
Christopher Payne
Robert Cotter, AICP
Jeffrey Kroessler, AICP
David Leven, AIA & Stella Betts
Bernard Tschumi, FAIA


NJIT
Fall 2010
Lecture Series
School of Architecture
Bill Lazaroff
October 11
Lyn Rice
October 18
Felicity Scott
Users
October 25
Leo Argiris
October 27
Michael Speaks
November 01
November 08
Stephen Ayers
November 18

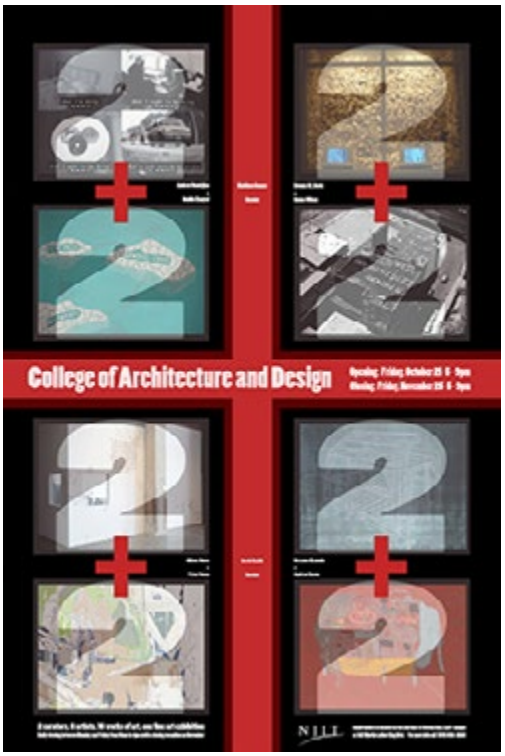

SPRING LECTURE SERIES 2009
NJIT
SCHOOL OF ARCHITECTURE


NJIT
FALL LECTURE SERIES 2009
SCHOOL OF ARCHITECTURE
Mario Carpo
Robert Ivy, FAIA
Martin Hammer
David Ruy
The AIANJ Fall Symposium
Peter Cook
Simon Sadler
Deborah Berke, FAIA

Exhibitions

The NJSOA sponsors public exhibitions in the Weston Hall Gallery every fall. These are curated by one of our teaching staff, Matt Gosser, and feature local artists. The exhibitions bring another layer of experience to our students, exposing them to the art and artists in the community. Many of them are organized in collaboration with Rutgers University. Some are a part of the Newark Open Doors event which features city-wide open studio tours during an annual arts week-end. Students are encouraged to participate in exhibition events and opening parties are held to promote this. The Gallery is open to the public during daytime hours. A list of public exhibitions brought to the School since the previous visit follows.

Theater Town
New Jersey's Best
Two + Two
Standing on the Corner
Details, Details, Details
Westinghouse Project
Functional Forms



Center for Building Knowledge

The mission of Center for Building Knowledge is to create new knowledge that will help individuals and communities make better-informed decisions concerning the built environment. The CBK has been in existence for over twenty years. It attracts over 1.5 million dollars a year in funding devoted to a variety of topics. The Center engages in a comprehensive program of applied research focused on the built environment and the institutions, policies, technologies and trends that shape it. Its key goal is to generate practical research results that provide tangible benefits to individuals and to society as a whole.

The mission of Center for Building Knowledge is to create new knowledge that will help individuals and communities make better-informed decisions concerning the built environment.

CBK predicts sustained levels of activity in all of its key divisions over the coming years. Some divisions will see substantial growth, some will contract, but it is expected that all will remain viable research areas. The present research areas are: Commercial and Institutional Facilities, Developmental Disabilities Planning Institute, Energy Efficiency and Removable Energy, Historic Preservation Housing and Community Development and Supportive Environments.

Commercial and Institutional Facilities

CBK will continue to support the development of new and innovative commercial and institutional facilities through research and by providing technical assistance for commercial buildings, schools and municipal buildings.

Developmental Disabilities Planning Institute (DDPI)

DDPI will continue to serve New Jersey's Office of Developmental Disabilities on specific research projects. It will prepare policy guidance so that state government can provide improved services to individuals with disabilities.

Energy Efficiency and Renewable Energy

CBK will continue to leverage its relationships with regional utilities and their energy efficiency programs to generate support. This will be for its ongoing research and for its technical assistance and training activities focused on optimizing energy efficiency and renewable energy use in buildings.

Historic Preservation

CBK will continue to promote the concept of incorporating a Preservation Arts and Technology curriculum – which the Center developed in previous years - in public high schools throughout the nation.

Housing and Community Development

The Center's activities in housing and community development are expected to expand over the coming years. New grant opportunities to expand the Affordable Housing Design Advisor (an online capacity-building tool developed and supported by the Center) will be explored, as will potential funding to support new online training activities focused on sustainable retrofits of existing housing.

Supportive Environment

CBK will continue to examine the role of the physical setting in supporting and enabling the full participation of people with disabilities. While funding has been substantially reduced over the past two years, the Center will continue to explore new funding opportunities – drawing on its substantial existing reputation and body of work in this area – for at least the remainder of 2012 and, perhaps, beyond.

I.2.2 Administrative Structure & Governance

NJIT Administrative Structure

The College of Architecture and Design is led by the Dean who reports directly to the Provost of the University. The Dean is supported by an Associate Dean for Administrative Affairs and an Associate Dean for Academic Affairs. The College is comprised of two Schools: the New Jersey School of Architecture and the School of Art + Design, each of which is led by a Director reporting directly to the Dean.

The Associate Dean for Administrative Affairs reports to the Dean and administers all routine business functions, manages the facilities, oversees the budget, recruitment plan, and special events. Along with the Dean, the Associate Dean for Administrative Affairs represents the College and the School of Architecture to rest of the University and to the Public. The Associate Dean for Academic Affairs assists the Dean on curriculum development and represents the College and the School to the rest of the University and to the Public. Both Associate Deans work with the Dean on overall strategic planning for the School.

The Director of the New Jersey School of Architecture and the Director of the School of Art + Design lead the respective Schools, help to develop curricula and act as liaison between the faculty and the Dean.

In addition, three Assistants to the Dean have special roles in the administration of the College. Two Undergraduate Advisors, one for the School of Architecture and one for the School of Art + Design, help manage the undergraduate curriculum and counsel the undergraduate student body. A third Assistant to the Dean is responsible for the College website, social media and accreditations coordination.

The Graduate Program and Admissions Coordinator assists the Graduate Program Director in all logistics of program management and advises the graduate architecture student body.

The Director of the Center for Building Knowledge, and the Imaging Lab and Idea Factory Directors also report to the Dean. Finally a Director of Development, from the University Development Office, works directly with the Dean and the two Associate Deans to formulate and implement fundraising strategies.

The accredited graduate program and the Infrastructure Planning program each have a Director. Finally, there are Architecture coordinators organized by year, and Art + Design coordinators for each discipline, who each support the program Directors.

The administrative staff consists of the Secretary to the Dean, and two office staff. The office staff personnel report to the Associate Dean for Administration and the Dean's secretary. The staff act as receptionists and carry out scheduling, filing, bookkeeping, mailing and general office responsibilities.

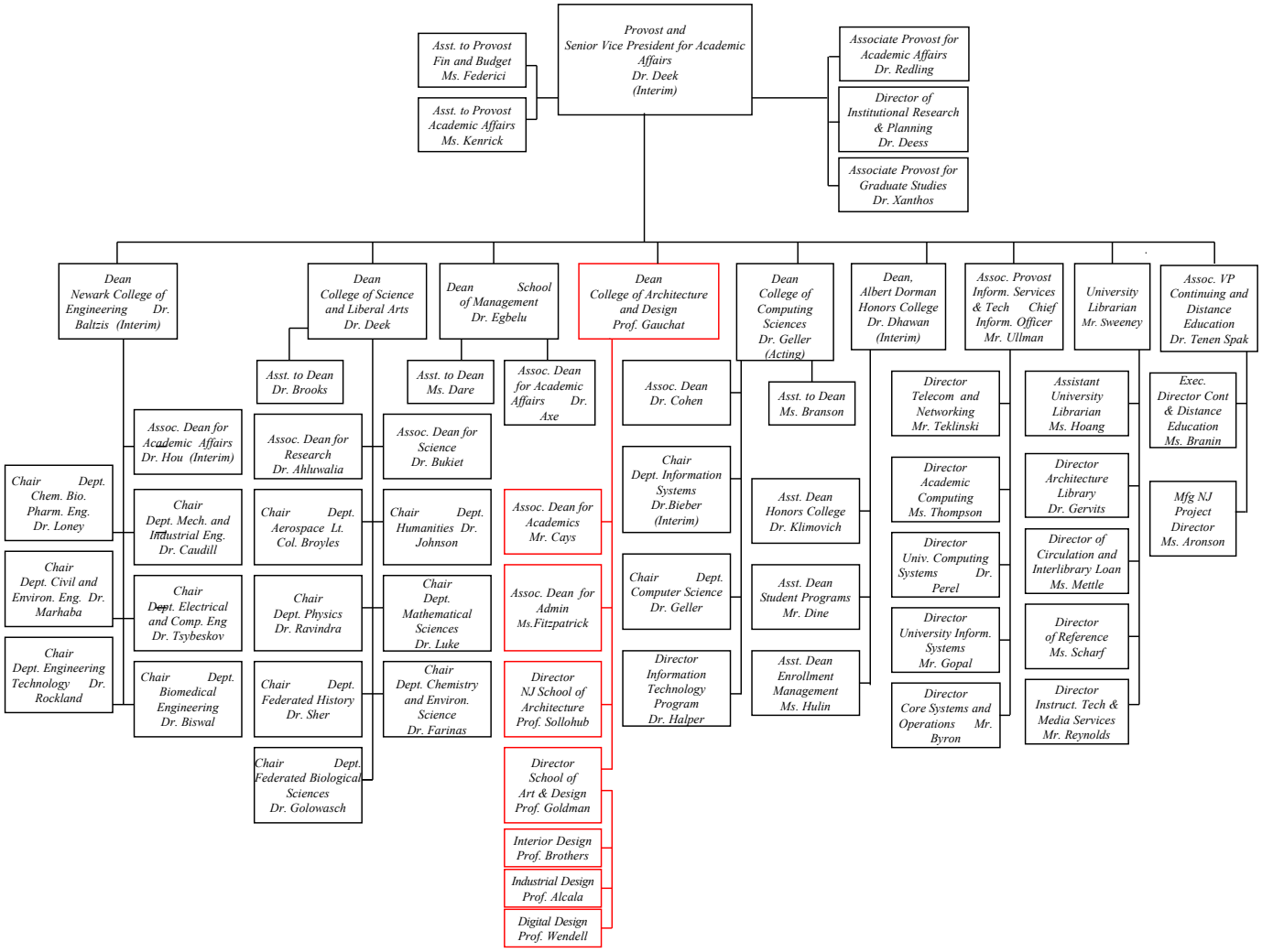
The following administrative and academic organization charts for NJIT and College of Architecture and Design demonstrates the structural hierarchy of the College.

The New Jersey Institute of Technology is comprised of six academic units. They are:

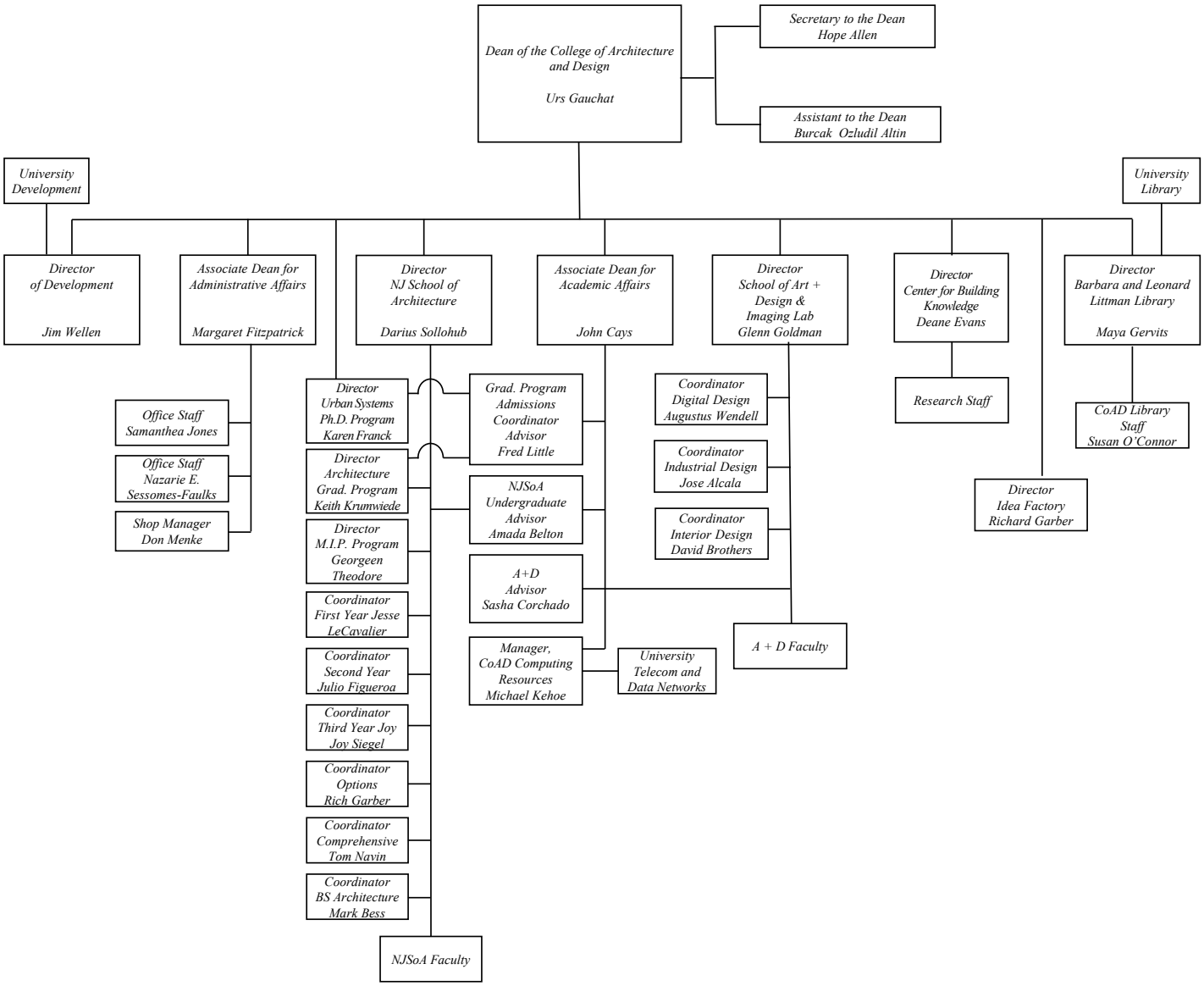
- Newark College of Engineering
- College of Architecture and Design
- College of Science and Liberal Arts
- School of Management
- College of Computing Sciences
- Albert Dorman Honors College

Detailed information about the administrative structure of NJIT can be found here: http://www.njit.edu/about/administration/. An organization chart depicting the administrative structure of the University departments is below.

NJIT Organization Chart



The College of Architecture and Design Organization Chart



Opportunities for faculty, staff, and students to participate in program governance are informal but definitely present. Administrative staff, including the two Associate Deans, the Director of the School of Architecture and the Director of the School of Art and Design meet weekly with the Dean to discuss matters of consequence to the College. Upcoming events are coordinated, any outstanding issues are resolved, and College wide policies are discussed. In addition, the faculty meets with the Dean at least twice a semester to discuss matters relating to the School and to the faculty. Finally, the Dean maintains an open door policy for students and holds a "Pizza with the Dean" get-together each semester to help students air concerns and discuss any issues in which they are interested.

The faculty, staff, and students all have opportunities to participate in institutional governance. The College of Architecture as a whole contributes substantially to the governance of the University. As one of five colleges offering degree programs, it is represented by the Dean, who is an officer of the University and a member of the senior staff. This gives the College of Architecture and Design, and the School of Architecture in particular, significant status and involvement in the management of the institution as a whole.

No basic decisions are made at the university level without an opportunity for the NJSOA to be heard and understood vis-à-vis the issues that affect the School.

CoAD students participate in the Student Senate, the only elected body recognized by the University representing the full-time and part-time undergraduate students of the University. The senate acts as a liaison between the undergraduate students and the faculty, and between the undergraduate students and the administration, and in doing so, is protector and defender of student rights, liberties, and interests. A graduate student from NJSOA represents the School at GSA (Graduate Student Association) a student government organization, which is a member of National Association of Graduate and Professional Students (NAGPS). GSA's mission is to represent the interests of all graduate students in university affairs and gives graduate students a voice at the institutional level.

Finally, the University is also completing details now for a system of shared governance. With encouragement from the Middle States Commission on Higher Education, the University is finalizing a shared governance structure consisting of a faculty senate and a university senate, each with defined constituencies, jurisdictions, and procedures. The policy on shared governance will include all university stakeholders including, but not limited to, faculty, instructional staff, administrators, staff, undergraduate and graduate students, alumni, and senior staff. Please find additional descriptions regarding governance and curriculum development by faculty, staff, and students for NAAB accredited degree program in Section II.2.3 Curriculum Review and Development.

In addition to the accredited Bachelor of Architecture and Master of Architecture degree programs, four additional degree programs are offered within the School of Architecture. They are listed below.

- Bachelor of Science in Architecture
- Master of Infrastructure Planning
- Master of Science in Architecture
- Doctor of Philosophy in Urban Systems (NJIT/Rutgers-Newark/UMDNJ)

The School also offers the following non-accredited dual degree programs in conjunction with other programs within NJSOA and other Schools within NJIT and Rutgers University. Dual degree programs allow both undergraduate and graduate students to take a limited number of courses applicable to a second graduate degree within their first degree program and thereby significantly shorten the time needed for the second degree.

- Bachelor of Architecture / Master of Science in Management
- Bachelor of Architecture / Master of Science in Civil Engineering
- Bachelor of Architecture / MBA in Technology Management
- Bachelor of Architecture / Master in Infrastructure Planning
- Master of Architecture / Master of Science in Management
- Master of Architecture / Master of Science in Civil Engineering
- Master of Architecture / MBA in Technology Management
- Master of Architecture / Master of Infrastructure Planning (MIP)
- MIP / Master of City and Regional Planning (NJIT/Rutgers University)

In addition to the programs listed for the New Jersey School of Architecture, three additional degree programs are offered in the School of Art + Design. They are listed below:

- Bachelor of Arts in Digital Design
- Bachelor of Science in Industrial Design
- Bachelor of Arts in Interior Design

I.2.3 Physical Resources

General Description of Weston Hall

Weston Hall provides a distinct identity for the College of Architecture and Design.

Weston Hall was first occupied by the New Jersey School of Architecture in February, 1998. The building not only forms an important anchor to the south side of the NJIT campus, but it also provides a distinct identity for the College of Architecture and Design. Conceived of as a "lantern on the hill," the glassy structure reveals to the public all its principal functions. One can see architecture and design students at work at all times of the day and night. There is an atmosphere of urgency about the building, a rich and creative ambience, ideal for teaching and learning architecture. The building has helped create a unique school spirit. It boosts the morale of faculty, staff, and students alike.

The building is the only one on campus, aside from the residence halls and Campus Center, that is used 24 hours a day. It is also the only building dedicated to a single set of disciplines. The attractive nature of Weston's public spaces and gallery attracts a never-ending stream of university-wide functions. Approximately 3,500 net square feet (NSF) of non-exclusive space (Weston Lecture Hall 1, Weston Lecture Hall 2) is available for use by other university programs.

CoAD has 93,300 (NSF of space excluding non-exclusive space which is also used by other university programs. Of the total net, 59,500 NSF is devoted to studio and teaching labs, 9,300 NSF is devoted to seminar and lab support space, and 22,000 NSF is devoted to faculty and staff office and office support space. Every tenure track faculty member has his or her own office and every university lecturer shares one office. Finally, 2,500 NSF is given over to central computer and computer support space. This space is distributed primarily in Weston Hall but also in the contiguous Colton Annex and Campbell Annex, as well as studio space in the ground floor of Cypress Hall, the third floor of the Guttenberg Information Technologies building, and the ground floor of the Parking Deck adjacent to the Student Mall. Plans, showing the physical plant and accessibility of all CoAD spaces can be seen on the following pages.

Changes to Physical Facilities

Weston has had four major renovations/additions since its opening in 1998. Since then, we have expanded into the adjacent Campbell Hall to provide for the Center for Building Knowledge (CBK). This work produced 3,500 net square feet of office and reception space and houses all of the CBK staff and facilities.

In the summer of 2006, a top floor gallery space in the adjacent Campbell Hall was renovated to provide six new studios and two new review spaces. These studios now reside in a two-story space with clerestory windows and a vaulted ceiling with exposed trusses.

During the summer of 2007, another renovation added 4,500 NSF of five new studios and a new review space on the ground floor of Campbell Hall. These studios also have clerestory windows, and a high ceiling.

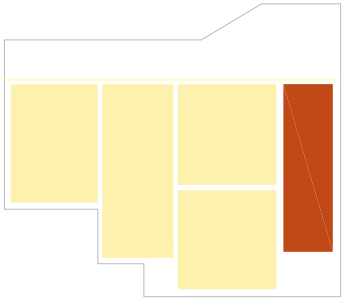
During 2010, another renovation of 5,300 NSF added additional computer labs and review spaces in Campbell Hall for the School of Art + Design.

And finally, in the summer of 2013, 420 NSF of office space was renovated in Weston to accommodate a library expansion for the new materials library.

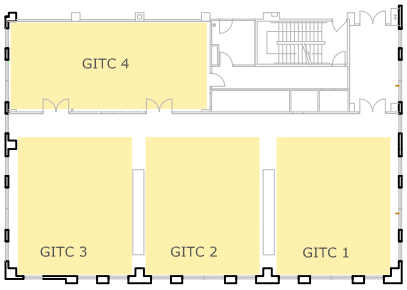
All of these new or renovated spaces are either in Weston or connected to Weston via interior corridors, which are evident on the plans included in this section. Additional satellite studio space is also a part of the College including 4,900 NSF of studio space in the Guttenberg Information Technologies Center, 2,300 NSF in Cypress Hall, and 4,400 NSF in the Parking Deck.

FALL 2013 CONDITIONS - WESTON HALL, + ANNEXES
COLLEGE OF ARCHITECTURE AND DESIGN

1ST FLOOR



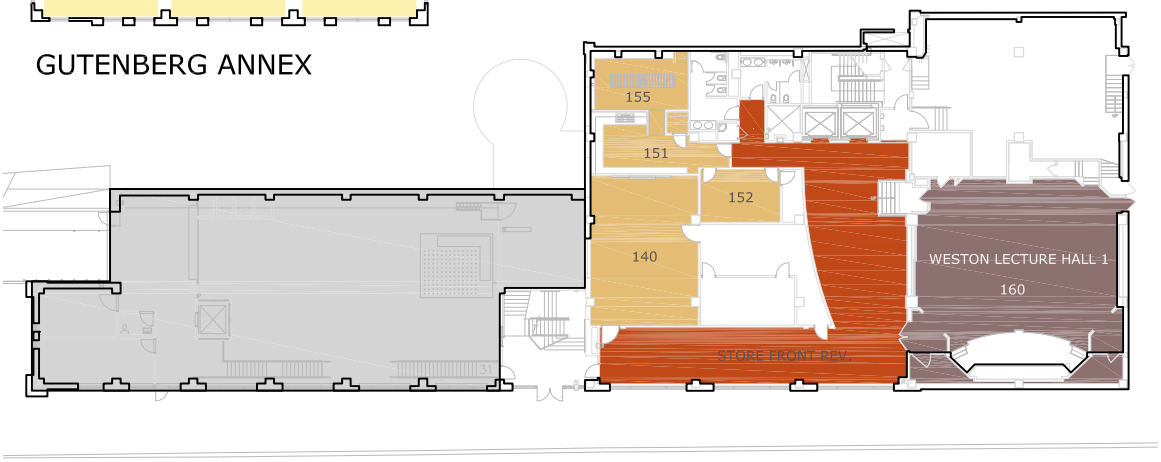
STUDENT MALL ANNEX



GUTENBERG ANNEX

LEGEND

- 60 STUDIOS
- 2 SHOPS (1 PRINTING)
- 10 LABS
- 2 LECTURE HALLS
- 7 SEMINAR ROOMS
- 49 OFFICES
- 14 REVIEW / EXHIBITION
- 1 RESEARCH
- 1 LIBRARY
- OCCUPIED BY OTHERS

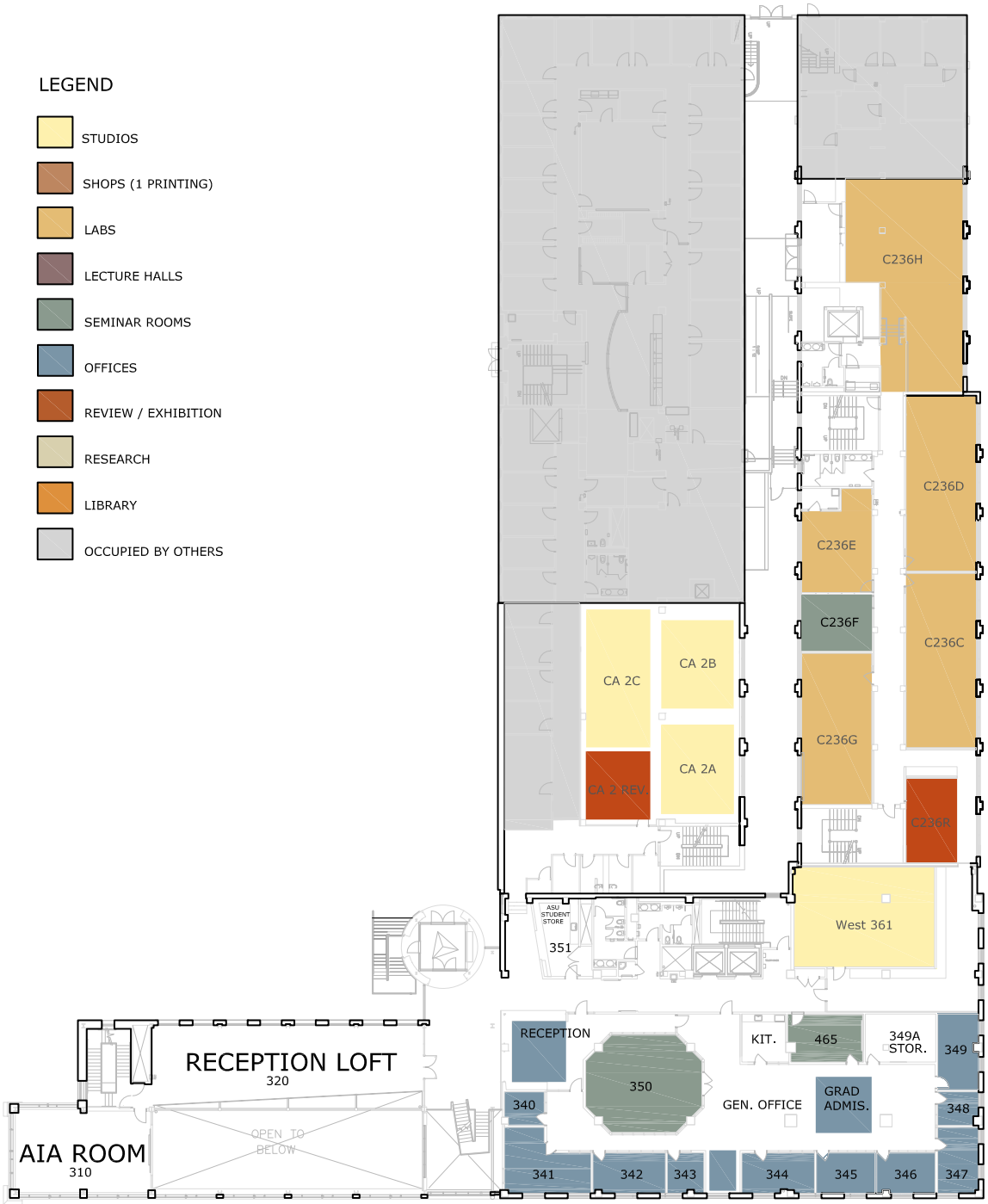


FALL 2013 CONDITIONS - WESTON HALL
COLLEGE OF ARCHITECTURE AND DESIGN

2ND FLOOR

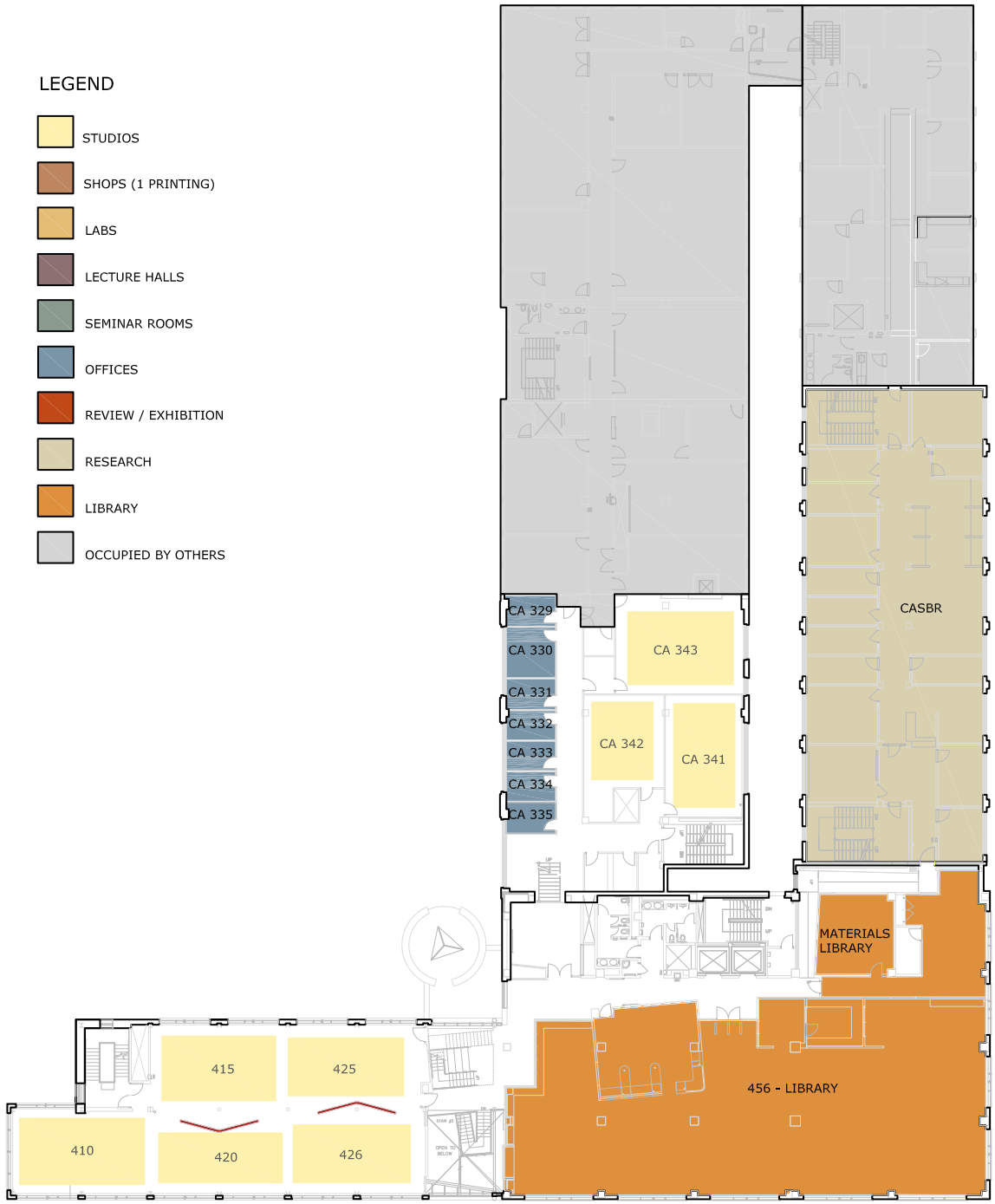
FALL 2013 CONDITIONS - WESTON HALL
COLLEGE OF ARCHITECTURE AND DESIGN

3RD FLOOR



FALL 2013 CONDITIONS - WESTON HALL
COLLEGE OF ARCHITECTURE AND DESIGN

4TH FLOOR

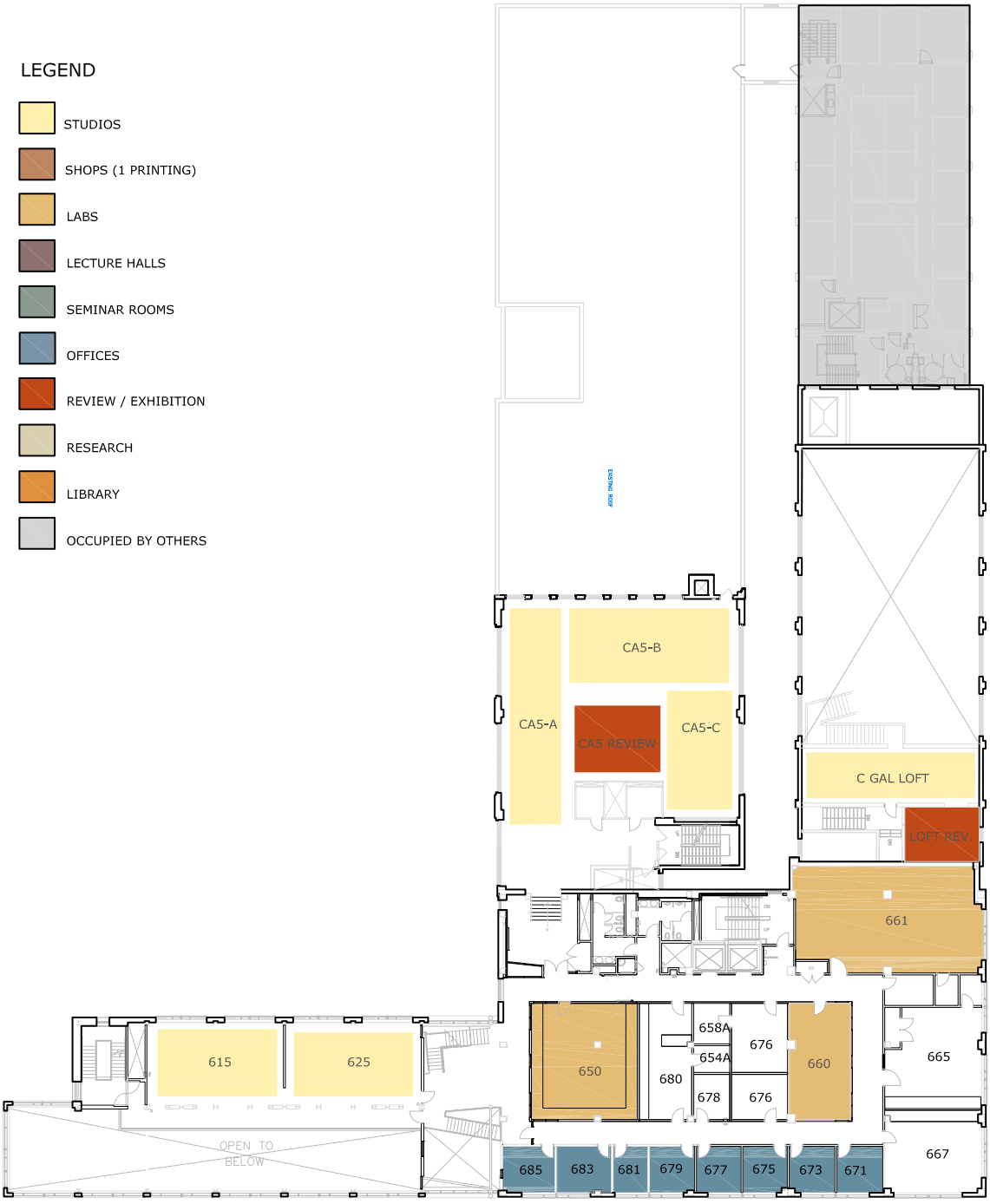


FALL 2013 CONDITIONS - WESTON HALL
COLLEGE OF ARCHITECTURE AND DESIGN

5TH FLOOR

FALL 2013 CONDITIONS - WESTON HALL
COLLEGE OF ARCHITECTURE AND DESIGN

6TH FLOOR



FALL 2013 CONDITIONS - WESTON HALL
COLLEGE OF ARCHITECTURE AND DESIGN

7TH FLOOR

LEGEND

- STUDIOS
- SHOPS (1 PRINTING)
- LABS
- LECTURE HALLS
- SEMINAR ROOMS
- OFFICES
- REVIEW / EXHIBITION
- RESEARCH
- LIBRARY
- OCCUPIED BY OTHERS

Computer Resources

General Access Computer Labs
There are a series of computer labs located throughout the university that are available for scheduled classroom use. While not used extensively by the School of Architecture, these facilities generally host lab-based structures courses and engineering electives.

Restricted Access Computer Labs
The first CoAD Teaching Lab, located in 650 Weston Hall (across the corridor from the Interior Design studios), is used for classes like Contract Documents and Building Information Modeling, as well as elective classes like Life Cycle Assessment for Designers, electives in Structures, Digital Fabrication, and more. The lab is generally scheduled to have no more than five courses per semester and students have 24/7 access when classes are not being held in the space. The Physical Computing Lab, in 661 Weston Hall (down the corridor from the Interior Design studios) is restricted for research, special projects/independent study, and elective classes like Robotics: Extreme Fabrication and Adaptive Environments. These classes, offered by the School of Art + Design, draw a mix of Digital Design, Industrial Design, Information Technology, Interior Design, and Architecture students who frequently work on multi-disciplinary projects. In Fall 2013 a second teaching lab to accommodate demand was installed in 140 Weston Hall. 650 is equipped with Cintiq tablets for art-based courses.

Library Computers
The Van Houten Library is equipped with many computers suitable primarily for text-based research. The College of Architecture and Design Littman Library has 12 Dell T3500 (equivalent to three-year old studio student machines) and 4 Epson 11" x 17" flatbed scanners. These machines are connected to the CoAD network to facilitate file transfer from work done in the library to the students' desktop machines in studio.

Faculty Computers
Full-time faculty (university lecturers, senior university lecturers, assistant professors, associate professors, professors, distinguished professors) are given access to use a graphics-capable laptop computer. These laptops are for educational/academic use and are refreshed every three years. While the program is applied university-wide, CoAD faculty generally receive upgraded laptops since they are among the most intensive users of graphics and computing power for academic purposes. These machines are not provided with the studio suite of software however the university does provide Adobe software, Microsoft software, and various utilities for the faculty laptops. Autodesk provides no cost access for faculty to use the software we have licensed in school. Corel software is available at steep discounts. There are no other products available directly from NJIT for these laptops. Adjuncts may borrow laptops from the Littman Library or Media Services for classroom use if they do not have a computer of their own.

Studio Computers
All students are required to have a computer in design studio. Current generation specifications are for the Dell T3600 Precision Workstation with 64-bit Windows 7 Professional, Four Core Intel Xeon E5-1620 Processor, 32 GB DDR3 RDIMM 1600MHz ECC RAM, NVIDIA Quadro K2000 2GB graphics card, 1 TB 7200 RPM Hard Drive, 8X DVD+/- RW SATA drive, internal 19:1 USB card reader, 21.5" HD UltraSharp monitor, keyboard, mouse, and 3 year warranty – at a base cost of $2,094. Specifications

are upgraded yearly and re-priced/bid. 97% of all students have gigabit network connections at the studio desktop and 3% have 100 mb connections that are scheduled for upgrading during the Fall 2013 semester. All students with the specified desktop computer receive an "image" at the beginning of the school year to facilitate access to licensed software. The campus is in the of upgrading the connections from all buildings to core services which host the virtualized environment containing all CoAD software applications. While wireless support is also being upgraded, the application and use of current generation technology will inevitably result in faster and more secure access via wired connections. Software security for studios requires the hardwired physical connection to use CAD/graphics applications available.

Software

A robust suite of software is made available to all students who purchase the specified studio computer from Dell. Students are required to have a computer in studio (and gigabit network access is provided at most studio desks), but are not required to purchase the specified machine. However, any student who does not purchase the specified computer is responsible for obtaining, installing, and maintaining his or her own software. Software applications provided to the students' desktop include the Autodesk Master Suite (Revit, AutoCAD, 3DS Max, Inventor, SketchBook Designer); Corel Draw Graphics Suite (Draw, Photo-Paint, Capture); Corel Painter; Corel PaintShop Pro; McNeel & Associates Rhino with Flamingo and Penguin Plug-ins; Dessault Systems SolidWorks; Microsoft Office; and various production-based utilities. The specialty labs include all applications in the student/studio collection and also contain applications for which a more limited set of concurrent licenses have been obtained which includes Adobe Master Suite (Photoshop, Illustrator, InDesign, Premiere Pro, After Effects, Dreamweaver, Flash Builder, Flash Professional, Fireworks, Audition, Acrobat Pro); Autodesk Entertainment Creation Suite (Maya, Softimage, Motion Builder, Mudbox); Audacity; Cakewalk Sonar; and in Fall 2013 Digital Project from Gehry Technology. While there are always additional applications requested by individuals, all software types (Raster Painting, Vector 2D Drawing and Drafting, Illustration, Vector 3D Modeling (both NURBS and POLYGONAL), Solids Modeling, Building Information Modeling, Image Processing, Compositing, Non-linear Video and Animation Editing, and Sound Editing) are available in the labs – often more than one application for a particular use. While the studio collection of software is slightly more limited, the critical applications are all available without any additional cost to students. Student machines are configured in such a way that they can still install any additional software for which they have obtained rights.

Digital Production Facilities

There are four laser cutters and a milling machine on the seventh floor of Weston Hall that are managed in conjunction with the traditional wood shop located across the hall. There is also a Dimension 3D digital printer on the sixth floor. CNC equipment is available for use on a scheduled basis and has been used primarily by architecture students, although students in the School of Art + Design Collaborative Design Studios have used the equipment..

IT Support

There are three embedded full-time support staff serving more than 1,000 users. Limited additional support is provided by work-study students who work with IT support staff. In addition to the embedded IT staff, there is a HelpDesk available online, in person, and by phone to sort out issues and assign tasks to individuals most able

to resolve problems in a timely manner. Typically, mid-semester requests deal with password resets and access, however this embedded staff serves as the primary support for all labs (Teaching Lab, A+D Foundation Labs, Digital Design Animation Lab, and Physical Computing Lab) and is a certified Dell service depot with authority to make local repairs and cross-ship defective components under warranty for student-owned machines purchased through the NJIT/Dell agreement. There is no support outside of faculty and student support groups for software instruction and use. Student support groups are not an insignificant component of the overall system and NJIT consistently has had "Student Experts" from the School of Architecture selected and funded by Autodesk for advanced training in Building Information Software (Revit). The Student Experts have (1) organized structured tutorials for students and (2) provided personal one-to-one assistance with students in the design studio. Autodesk has also delivered on-site seminars for advanced uses of building information modeling within the School of Architecture for three years. Teachers are relied upon as the "first level of defense" for application-specific questions. Students are given a significant amount of digital instruction within the first year of professional studies that builds upon the legacy of NJIT as the first program to have fully electronic architectural design studios with 3D modeling in the mid-1980s. Students choose to attend NJIT, in part, because of the commitment to the use of digital technology and the way it is embedded in the fabric of the College of Architecture and Design. As such, students and faculty tend to be(come) somewhat self-reliant. The Library is subscribing to Digital Tutor and starting Fall 2013, students will have at-desk and general on-campus access to online and streaming tutorials they can use while testing applications available to them in the studio.

Sustained growth and the launch of the Art + Design Program in 2008 required the College to house studios beyond the orbit of Weston Hall.

With the sustained growth of the NJSOA, combined with the launch of the Art + Design Program in 2008, the College has been required to house studios beyond the orbit of Weston Hall. Spaces occupied include finished space in the lower level of the NJIT Parking Deck and in the Guttenberg Information Technology Center (GITC). The College has assigned space in the Parking Deck to the undergraduate options studios and in GITC to both the M.Arch program and the MIP program. This practice has some advantages. The Parking Deck studios enjoy large amounts of pin-up space for the exclusive use of three studio sections. The graduate students occupy an entire suite of GITC with similar provisions for exclusive pin-up space. While the CoAD plans to maintain its Parking Deck studios indefinitely, the graduate students will return to Weston Hall after studio space becomes available in Campbell Hall and/or Central King Building, directly adjacent to Weston Hall.

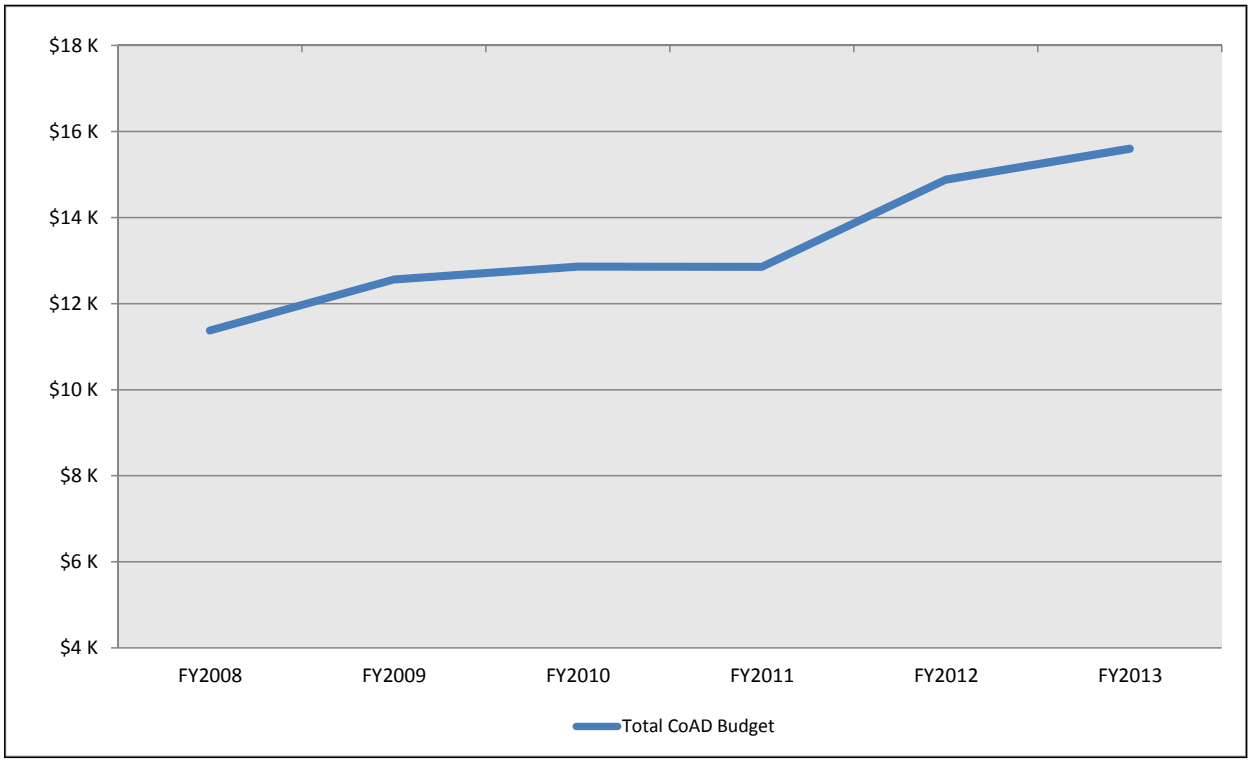
I.2.4 Financial Resources

Schools of architecture are generally expensive to run: they require more space per student, more equipment and software, and facilities that run nearly 24 hours per day, seven days a week. The New Jersey School of Architecture is no different. The demands of our program and our student populations require substantial support from the University. The following text and tables show comparable financial statements, including revenue and expenditures from all sources, for the University as a whole, from FY 2007 through 2012. Revenues at NJIT are not tracked individually by College.

The following charts illustrate the School's fiscal history since the last accreditation. A detailed discussion of NJSOA's budgets in the context of the University's budget will be provided to the visiting team upon their arrival in Spring 2014.

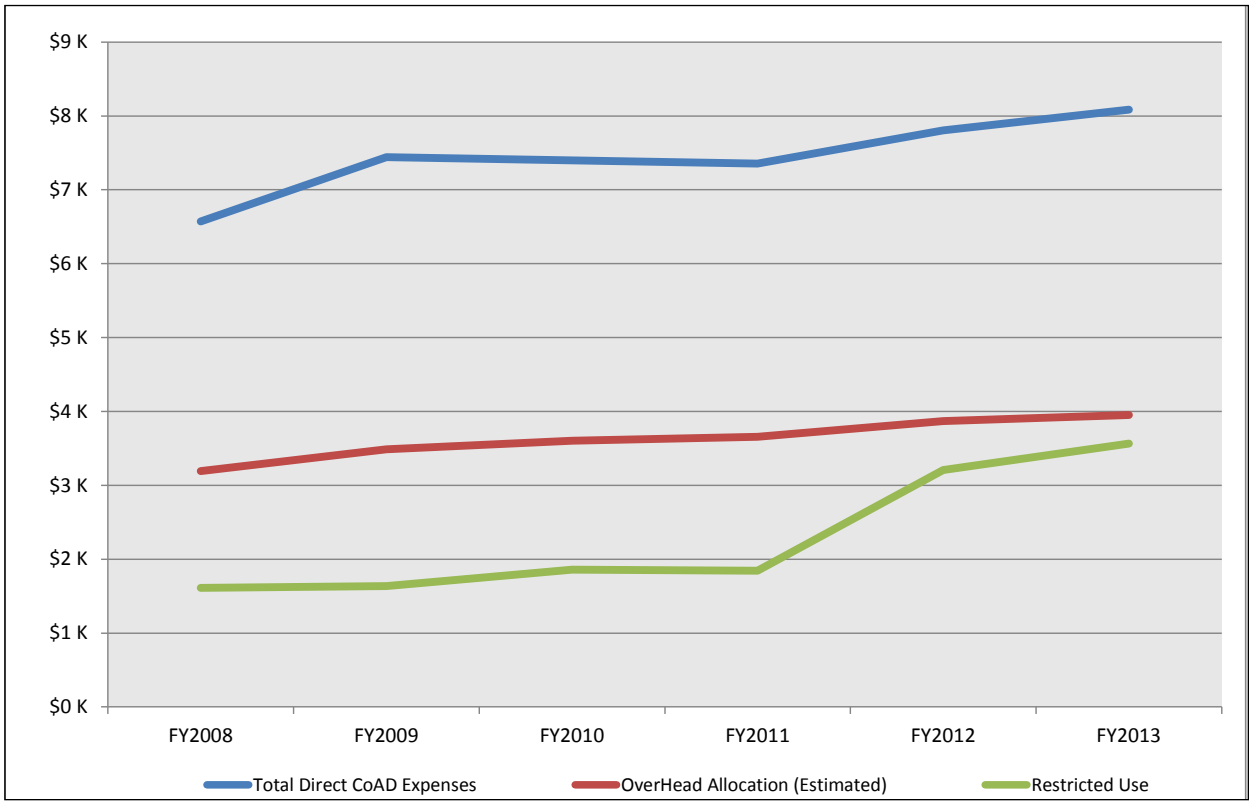
	FY2008	FY2009	FY2010	FY2011
Total Direct CoAD Expenses	6,572	7,443	7,399	7,355
OverHead Allocation (Estimated)	3,190	3,486	3,603	3,656
Restricted Use	1,613	1,634	1,856	1,843
Total CoAD Budget	11,375	12,563	12,858	12,853

CoAD Total Operating Budget FY2008-2013



Source: NJIT Budget Office

Breakdown of CoAD Operating Budget FY2008-2013



Source: NJIT Budget Office

University Development Information FY2008-2013

	FY 2008 - 2009	FY 2009 - 2010	FY 2010- 2011	FY 2011 - 2012	FY 2012 -2013
University Development Information	$1,610,575	$560,509	$572,834	$740,846	$290,772

Source: University Advancement

The institution expects to increase enrollment over the next three years. Between Fall 2012 and Fall 2015, university enrollment is expected to increase to 11,000, with approximately 30% graduate students and 70% undergraduate students, as a result of retention initiatives, with only modest increases in the new student populations. School of Architecture enrollment is expected to remain more or less static.

As a public institution, NJIT operates on a traditional July 1st to June 30th fiscal calendar in line with the State's fiscal timeline. The annual budget preparation process is centralized under the Treasurer and Senior Vice President for Administration. The budgeting process is based on annual requests and allocations by the Office of the Provost. The School's allocation is based on current spending patterns, special requests, university priorities, and legislative mandate. The report below, presented to the Board of Trustees in July of 2013, outlines the University's FY2014 Operating and Capital

budgets including revenue and expense overviews, 2012 year-end actual, FY2013 projected, and FY2014 budget income and expense summaries, and FY2012 year-end actual, FY2013 projected and FY2014 budget revenue summaries. It also shows capital projects funding sources and estimated costs through FY2020 with details of major projects and annual maintenance and "Building our Future" projects. There have been no changes in funding models for faculty, instruction, overhead, or facilities since the last visit.

Current Fiscal Year

FY2014 Budget Highlights
Revenue Overview

Base appropriation of $37.7 million, no change from previous 3 years
$1.4 million in additional tuition and fee revenue based on projected enrollment increase
$3.3 million in additional tuition and fee 'net' revenue resulting from a 3.2% rate increase.
With the completion of the Albert Dorman Honors College Residence Hall and Greek Housing we have increased on campus housing by 600 beds and additional income of $0.8 Million
A 3% rate increase for existing residence beds
No growth to restricted grants and contracts due to sequestration

Expense Overview
$6.6 Million in Strategic Planning Initiatives:
- $3.6 Million - Instruction - Faculty and Staff Strategic Hiring / Program Growth
- $1.0 Million - Retention / Academic and Student Support Programs
- $0.6 Million - Physical Plant and Safety
- $0.8 Million - Institutional Support - Strategic Hiring / Branding / Marketing
- $0.6 Million - Grant and Research Support

Includes $9.1 Million to support ongoing Capital Projects
$4.0 Million to fund estimated FY14 salary program and FY12 and FY13 salary program annualization
$2.4 Million additional fringe benefit expenses
$0.9 Million additional debt service requirements
$0.6 Million decrease to auxiliaries primarily due to the termination of the University Centre Lease
$1.5 Million in savings from anticipated faculty and staff salary turnover
$1.3 Million in estimated faculty separation incentive program savings, resulting from an expected additional 15 faculty retiring by the end of the Fall semester. This would bring the total to 27 faculty participants (from the initial list of 64 interested).

FY2012 Year-End Actual, FY2013 Year-End Projected, and FY2014 Budget

Executive Summary ($000's)

	FY2012 Year-End Committed	FY2013 Year End Projected	FY2014 Preliminary Budget	$ Δ FY14 Budget / FY13 Proj	% Δ FY14 Budget / FY13 Proj
Income					
Tuition and Fees	129,358	141,436	146,730	5,294	3.7%
State Appropriation - Base	37,696	37,696	37,696	-	0.0%
State Appropriation - Fringe Benefits	27,687	43,011	45,933	2,922	6.8%
Other Sources	35,044	34,793	36,510	1,717	4.9%
Subtotal Operating Revenue	**229,785**	**256,936**	**266,869**	**9,933**	**3.9%**
Restricted Programs	94,041	98,820	98,820	-	0.0%
Grand Total Revenues	**323,826**	**355,756**	**365,689**	**9,933**	**2.8%**
Expense					
Salaries & Benefits	141,501	147,758	155,764	8,006	5.4%
General Non-Personnel	61,010	63,672	69,100	5,428	8.5%
Mandatory/Non-Mandatory Transfers	27,274	31,695	27,568	(4,127)	-13.0%
Subtotal Operating Expenses	**229,785**	**243,125**	**252,432**	**9,307**	**3.8%**
Required NJ OMB Fringe Benefit Adjustment		13,811	14,437	626	
Total Operating Expenses	**229,785**	**256,936**	**266,869**	**9,933**	**3.9%**
Restricted Programs	94,041	98,820	98,820	-	0.0%
Grand Total Expenses	**323,826**	**355,756**	**365,689**	**9,933**	**2.8%**
Surplus / (Deficit)	-	-	-		

FY2012 Year-End Actual, FY2013 Year-End Projected, and FY2014 Budget

Revenue Summary ($000's)

	FY2012 Year-End Committed	FY2013 Year End Projected	FY2014 Preliminary Budget	$ Δ FY14 Budget / FY13 Proj	% Δ FY14 Budget / FY13 Proj
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Surplus / (Deficit)	-	-	-		

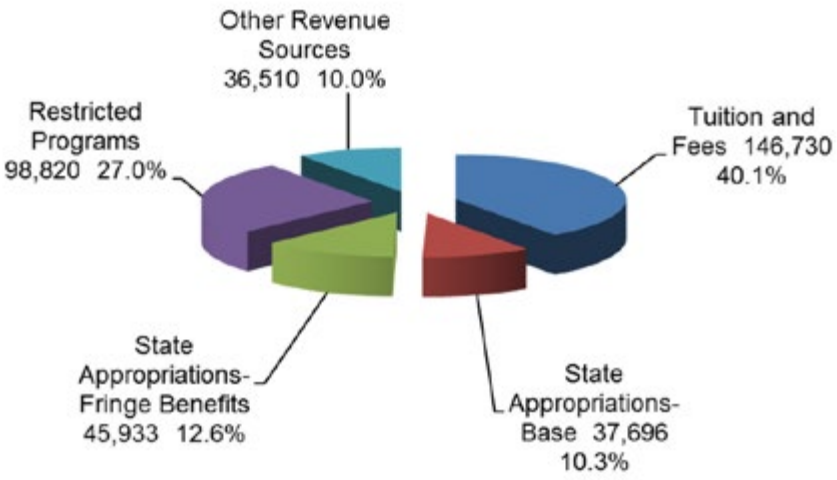
FY2012 Year-End Actual, FY2013 Year-End Projected, and FY2014 Budget

Expense Summary ($000's)

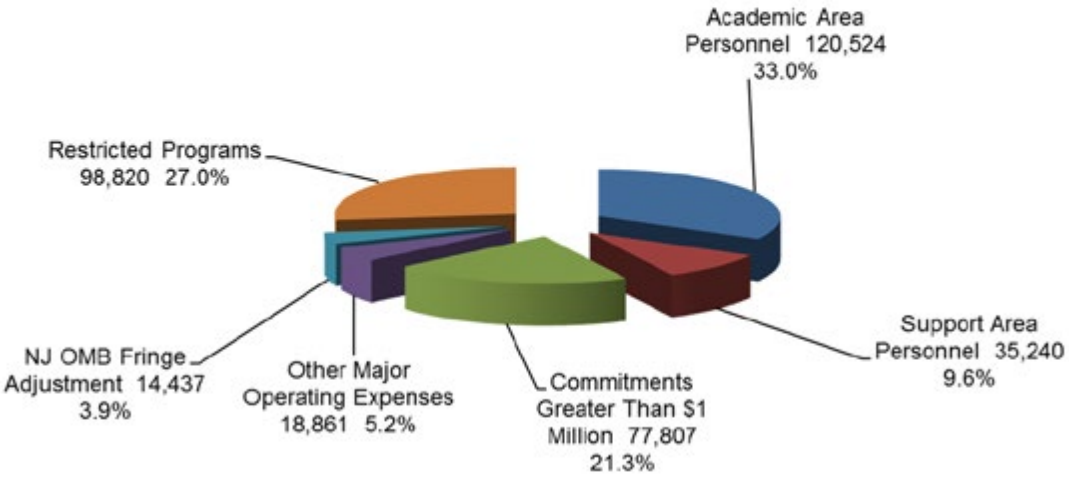
	FY2012 Year-End Committed	FY2013 Projected Committed		FY2014 Proposed Budget	$ Δ FY14 Budget / FY13 Proj	% Δ FY14 Budget / FY13 Proj
Personnel						
Academic Area Salaries	85,131	88,430		93,132	4,702	5.32%
Academic Area Fringe Benefits	23,999	26,007		27,392	1,385	5.33%
Total Academic Area	**109,130**	**114,437**		**120,524**	**6,087**	**5.32%**
Support Area Salaries	24,807	25,749		27,222	1,473	5.72%
Support Area Fringe Benefits	7,564	7,572		8,018	446	5.89%
Total Support Area	**32,371**	**33,321**		**35,240**	**1,919**	**5.76%**
Required NJ OMB Fringe Adjustment		13,811		14,437	626	4.53%
Total Personnel	**141,501**	**161,569**		**170,201**	**8,632**	**5.34%**
Non-Personnel - Commitments Greater Than $1 Million (In FY2013)						
Mandatory/Non-Mandatory Transfers	27,274	31,695	(1)	27,568	(4,127)	-13.02%
Student Awards	20,913	22,310		24,011	1,701	7.62%
Utilities	7,260	7,554		8,472	918	12.15%
Branding/Advertising - Non-Personnel Only	2,611	2,750		3,050	300	10.91%
Other Rents & Leases	2,006	2,188		631	(1,557)	-71.16%
Insurance Premiums	1,940	2,003		2,193	190	9.49%
Consulting/Professional Services	1,602	1,902		2,025	123	6.47%
Repair Services	1,797	1,850		1,845	(5)	-0.27%
Lab & Instructional Equipment > $2,500	1,123	1,455		2,507	1,052	72.30%
Athletic Specific	1,333	1,338		1,352	14	1.05%
Library Specific	1,332	1,295		1,449	154	11.89%
Facility and Grounds Maintenance	1,267	1,457		2,704	1,247	85.59%
Subtotal - Commitments Greater Than $1 Million	**70,458**	**77,797**		**77,807**	**10**	**0.01%**
Other Major Operating Expenses						
Other Major Operating Expenses	13,505	11,611		11,574	(37)	-0.32%
Equipment	1,798	2,900		3,346	446	15.38%
Supplies	1,912	1,916		2,048	132	6.89%
Travel, Meeting, Meals-Major	1,296	1,512		1,362	(150)	-9.92%
Capital Improvements	375	481		474	(7)	-1.46%
Cost Recovery/Chargebacks	(1,060)	(850)		(1,114)	(264)	31.06%
University Reserve	-	-		1,171	1,171	0.00%
Subtotal - Other Major Operating Expenses	**17,826**	**17,570**		**18,861**	**1,291**	**7.35%**
Year End Encumbrances Shown Above	***2,125***	***3,594***		***3,594***		
Subtotal Non-Personnel	**88,284**	**95,367**		**96,668**	**1,301**	**1.36%**
Total Operating Expenses	**229,785**	**256,936**		**266,869**	**9,933**	**3.87%**
Restricted Programs	**94,041**	**98,820**		**98,820**	**-**	**0.00%**
Grand Total Expenses	**323,826**	**355,756**		**365,689**	**9,933**	**2.79%**
Surplus / (Deficit)	**-**	**-**		**-**	**-**	**0.00%**

(1) The FY13 projected surplus of $6 million will be used to fund the State Bond match requirements.

FY2014 Revenue Operating Budget



FY2014 Expense Operating Budget



FY13-FY20 Capital Projects Funding Sources and Estimated Costs Summary ($000's)

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY13-FY20 Total
Funding Sources:									
NJIT Bond Fund	2,500	-	-	-	-	-	-	-	2,500
Gifts	-	50	-	-	-	-	-	-	50
Annual Transfer From Operating Budget	9,262	9,100	9,100	9,100	9,100	9,100	9,100	9,100	72,962
"Building Our Future" State Bond Funds	-	30,000	30,000	39,843	-	-	-	-	99,843
Required Matches to State Bond Funds:									
Plant Reserves	2,500	6,000	1,000	3,945	-	-	-	-	13,445
Transfer From Plant Projects	-	-	750	100	-	-	-	-	850
Tech Fresh	-	1,000	1,000	-	-	-	-	-	2,000
Total Funding Sources	**14,262**	**46,150**	**41,850**	**52,988**	**9,100**	**9,100**	**9,100**	**9,100**	**191,650**
Summary of Projects:									
Major Projects	7,300	5,787	5,700	5,400	5,150	5,550	5,500	5,063	45,450
Maintanance Projects	4,387	3,375	3,375	3,725	3,775	3,775	3,825	3,825	30,062
"Building Our Future" Projects	2,500	40,000	40,000	33,638	-	-	-	-	116,138
Total Projects (See details to follow)	**14,187**	**49,162**	**49,075**	**42,763**	**8,925**	**9,325**	**9,325**	**8,888**	**191,650**
Annual Variance Funding Sources to Capital Projects	**75**	**(3,012)**	**(7,225)**	**10,225**	**175**	**(225)**	**(225)**	**212**	**-**
Cummulative Variance Funding Sources to Capital Projects	**75**	**(2,937)**	**(10,162)**	**63**	**238**	**13**	**(212)**	**0**	**0**
NOTE: State projects will depend on formal approval from State - schedule above presumes early Fall 2013 release. Schedule subject to change based on actual release of State approval.									

FY13-FY20 Detail of Major Projects ($000's)

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY13-FY20 Total
Major Projects									
Tiernan HVAC						2,500	2,700	2,700	7,900
Reclad Guttenberg	1,000	1,500							2,500
Faculty HVAC			800	800	800	800			3,200
York HVAC					1,200	800			2,000
Bio-LabsCtr for Injury Biometrics		500							500
Career Services			1,500						1,500
CKB-Infrastructure	1,000								1,000
Architecture Studios				1,500					1,500
Restore GITC 3rd Conferencearea					300				300
CKB-Services	2,000								2,000
Lot 7 Rehab		300							300
CKB-Classrooms	2,500								2,500
CKB-Master Planning	800								800
Redwood Residence Hall		2,050							2,050
COAD - Library, Computer Lab,Desk		287							287
MEC - Research Lab 119		900							900
Campus Center				900					900
Weston Elevator Rehab			350						350
Disaster Recovery			500	500					1,000
State Project Match			750	100					850
Implement Campus Relo/Facilites Plan		100	200	200					500
Campus Way Finding		50	150	100					300
Major Class/Lab (I- Gen Projects)			1,000	1,000	2,500	1,100	2,500	2,363	10,463
Upgrade AV Capacity		100	100	100					300
Upgrade security System			100	100					200
Major Lab Rehab			100	100	350	350	300		1,200
Tiernan - Research Lab 301			150						150
Total Major Projects	**7,300**	**5,787**	**5,700**	**5,400**	**5,150**	**5,550**	**5,500**	**5,063**	**45,450**

FY13-FY20 Detail of Annual Maintenance and "Building Our Future" Projects ($000's)

	FY13	FY14	FY15	FY16	FY17	FY18	FY19	FY20	FY13-FY20 Total
Major Projects									
Tiernan HVAC						2,500	2,700	2,700	7,900
Reclad Guttenberg	1,000	1,500							2,500
Faculty HVAC			800	800	800	800			3,200
York HVAC					1,200	800			2,000
Bio-Labs Ctr for Injury Biometrics		500							500
Career Services			1,500						1,500
CKB-Infrastructure	1,000								1,000
Architecture Studios				1,500					1,500
Restore GITC 3rd Conferencearea					300				300
CKB-Services	2,000								2,000
Lot 7 Rehab		300							300
CKB-Classrooms	2,500								2,500
CKB-Master Planning	800								800
Redwood Residence Hall		2,050							2,050
COAD - Library, Computer Lab,Desk		287							287
MEC - Research Lab 119		900							900
Campus Center				900					900
Weston Elevator Rehab			350						350
Disaster Recovery			500	500					1,000
State Project Match			750	100					850
Implement Campus Relo/Facilites Plan		100	200	200					500
Campus Way Finding		50	150	100					300
Major Class/Lab (I- Gen Projects)			1,000	1,000	2,500	1,100	2,500	2,363	10,463
Upgrade AV Capacity		100	100	100					300
Upgrade security System			100	100					200
Major Lab Rehab			100	100	350	350	300		1,200
Tiernan - Research Lab 301			150						150
Total Major Projects	**7,300**	**5,787**	**5,700**	**5,400**	**5,150**	**5,550**	**5,500**	**5,063**	**45,450**

FY07-FY12 Components of Revenues

	2012	2011	2010	2009	2008	2007
Operating revenues:						
Student tuition and fees, net	$ 94,898	$ 88,362	$ 80,760	$ 79,272	$ 71,518	$ 66,787
Federal, State, and other grants and contracts	88,518	81,823	72,575	70,180	64,627	64,064
Auxiliary enterprises, net	12,258	11,887	9,900	9,994	9,799	9,670
Other operating revenues	2,314	2,503	3,601	3,434	3,677	3,933
Total operating revenues	197,988	184,575	166,836	162,880	149,621	144,454
Nonoperating and other revenues:						
State appropriations	65,382	66,096	67,913	68,477	71,117	68,253
Gifts and bequests, capital grants and gifts, and additions to permanent endowments	6,897	7,043	7,043	7,233	10,072	7,329
Investment (loss) income	(1,039)	12,204	6,503	(13,125)	(751)	12,094
Other nonoperating revenues, net	2,068	1,758	1,754	1,419	1,391	1,281
Total nonoperating and other revenues	73,308	87,101	83,213	64,004	81,829	88,957
Total revenues	$ 271,296	$ 271,676	$ 250,049	$ 226,884	$ 231,450	$ 233,411

FY07-FY12 Components of Expenses

	2012	2011	2010	2009	2008	2007
Operating expenses:						
Instruction	$ 77,509	$ 74,121	$ 71,145	$ 70,874	$ 69,018	$ 68,464
Research and programs	55,927	48,452	42,336	45,126	42,956	43,275
Public service	1,615	1,965	2,564	2,447	2,540	2,051
Academic support	22,075	19,287	17,788	17,805	19,336	17,845
Student services	17,134	15,687	15,533	15,557	14,448	12,756
Institutional support	37,664	32,067	31,384	32,006	29,454	27,628
Operation and maintenance of plant	13,532	13,524	15,677	16,354	17,310	14,666
Scholarships and fellowships	8,782	9,958	9,698	7,775	6,875	6,536
Depreciation and amortization	18,825	20,360	17,231	18,373	18,387	18,141
Auxiliary enterprises	9,972	9,647	7,391	6,934	6,105	5,776
Total operating expenses	263,035	245,068	230,747	233,251	226,429	217,138
Nonoperating expenses:						
Interest expense	7,588	7,503	7,460	7,608	7,581	7,259
Total nonoperating expenses	7,588	7,503	7,460	7,608	7,581	7,259
Total expenses	$ 270,623	$ 252,571	$ 238,207	$ 240,859	$ 234,010	$ 224,397

FY07-FY12 Statement of Net Assets

	June 30,			June 30,		
	2012	2011	2010	2009	2008	2007
Current assets	$ 91,037	$ 83,828	$ 62,624	$ 67,212	$ 73,930	$ 74,315
Endowment investments	74,513	75,582	64,527	57,742	72,314	70,544
Capital assets, net	234,926	233,274	237,583	235,547	240,773	244,398
Other assets	109,440	35,094	29,150	32,349	25,583	18,806
Total assets	509,916	427,778	393,884	392,850	412,600	408,063
Current liabilities	47,983	38,711	35,647	39,061	37,868	36,038
Long term debt, noncurrent portion	238,828	166,558	155,696	162,874	169,849	165,364
Other liabilities	11,228	11,305	10,442	10,658	10,651	9,869
Total liabilities	298,039	216,574	201,785	212,593	218,368	211,271
Invested in capital assets, net of related debt	76,643	83,996	88,604	81,527	85,586	87,669
Restricted nonexpendable	53,197	49,851	44,809	41,015	42,866	37,937
Restricted expendable	18,225	21,044	17,375	10,730	20,256	24,471
Unrestricted	63,812	56,313	41,311	46,985	45,524	46,715
Total net assets	$ 211,877	$ 211,204	$ 192,099	$ 180,257	$ 194,232	$ 196,792

I.2.5 Information Resources

The Barbara & Leonard Littman Library is a part of the NJIT library system. Housed in Weston Hall, it is the only branch library within the university system. The Littman Library is headed by Director Maya Gervits who reports to the University Librarian, who, in turn, reports to the Provost. The Director is responsible for all library activities including collection development, reference and instructional services, the development of Digital Image Database, Digital Archive of Newark Architecture and the library web site (http://archlib.njit.edu) and is a member of the management team of the Van Houten library. The Littman Library produces annual reports, which are submitted to the University Librarian and shared with the CoAD administration and faculty. The Director also serves on the University Faculty-Library Committee and chairs the CoAD Faculty-Library committee, which includes representatives of the college administration and faculty. In addition to the Director, the library is staffed with an Architecture Library Specialist, a part-time (60% of the time) Library Assistant, and 20-25 students-employees working on average 6 hours per week, (equivalent of 3.4-4FTE).

The Littman Library is located at the very center of the School, symbolizing its importance in the College's pedagogical mission. The Library occupies the central place on the 4th floor of the Weston Hall, adjacent to studios, faculty, and doctoral students' offices.

Content, Extent and Formats

The Library provides in-library and remote access to materials in various formats: print and electronic books; print and electronic journals; bibliographic and full-text databases; slides and digital images; video recordings; microforms and computer files; and product catalogs and material samples. The Library's collections are focused on various subject areas: architecture and design; architectural history; theory and criticism; architecture education; professional practice; building construction and materials; building systems; urban planning; urban history; landscape architecture; architectural education; interior design and decoration; furniture, textiles, and lighting; industrial design; digital design. The Library's collections have been steadily growing and currently contain 28,579 catalogued items, including 22,712 books. More than 17,000 of these are classed in the NA range, which exceeds the NAAB mandated minimum of titles.

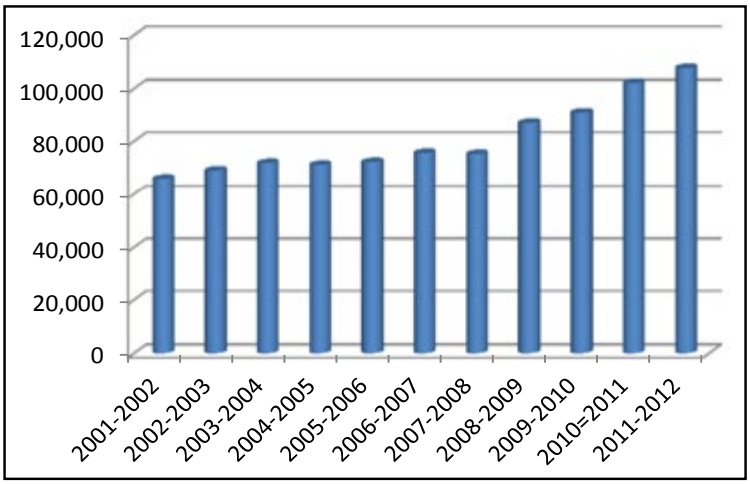
The Library and the Programs

The Library's collections are focused on various subject areas in tandem with the mission, planning, curriculum, and research specialties of the program. Considerable effort has been made to reflect recent trends such as globalization, environmental, demographical and social changes in the world, focusing on sustainability, high-density housing, energy-efficient buildings, and new building materials and media. Although our holdings cover the entire timeline of the history of architecture and design disciplines, and art, the major emphasis is on the 20th and 21st centuries. They concentrate on physical planning, urban design and history, and focus on studies in contemporary architecture in relation to infrastructure planning, technology, urbanism, computer-aided design and manufacturing, Building Information Modeling (BIM) and parametric design. The library also collects materials on building systems, industrial and interior design, historical preservation, transportation, photography, the visual arts, art history, digital design and animation, game design, and environmental psychology among

various subjects. Lately we started collecting extensively materials on resilient design and those related to natural disaster recovery. Over the last nine years we maintained a small collection of rare, out-of-print and scarce resource materials (http://archlib.njit.edu/collections/rarebooks.php).

Librarians and faculty collaborate on assignments that can help students not only develop information literacy skills but also better understand the nature of the design process. In addition to individual and group instruction sessions, librarians offer subject consultations and workshops, design research guides (http://archlib.njit.edu/articles/guides.php)and video tutorials (http://archlib.njit.edu/articles/tutorials.php). Some of these guides and tutorials which are accompanied by assessment quizzes have been incorporated into course management environments like Moodle or Kepler. The Littman Library works closely with the CoAD administration and faculty to develop the Information Literacy plan – the university wide initiative intended to meet the Middle States Commission on Higher Education (MSCHE) requirements. The Librarians also assist faculty to identify, locate and obtain materials for their research, provide bibliographic assistance and help with citation searches during their promotion process, and submit citation analyses to the University Promotion & Tenure Committee.

The services, space and collection have led to a significant level of use. Our statistics demonstrate that over the last 10 years the number of visits to the Littman Library has almost doubled. More than 50% of university transactions occur in areas related to the college curriculum. CoAD students are also responsible for approximately 25% of overall e-books usage.



The number of visits to the library over the last six years has been consistently growing.

Library Resources

Books

Selection is made by the library director based on review of publishers' and dealers' catalogs/websites, book reviews in professional journals, on examination of publication copies sent on approval plan, as well as materials presented at conference exhibits, book fairs, and books stores. Maintaining currency in the areas related to the College's curriculum and its various activities remains a top priority. Comparative analysis of our holdings against those of other institutions helps to identify gaps and fill some of them retroactively.

Journals and Databases

Recognizing that our students and faculty need to have convenient access to current periodicals and a rapidly growing number of digital resources, we subscribe to both print and electronic journals, and to available online indexes and databases. Overall the University library provides access to 337 journals in visual arts, architecture and design, in either print or electronic formats, as well as to ninety nine open-source peer-reviewed periodicals available online. The Association of Architecture School Librarians' Core List of Periodical Titles for a First Professional Degree in Architecture includes 54 titles with another 42 titles in the supplementary list. The Littman Library subscribes to 49 titles on the core list, and 18 titles on the supplementary list.

Visual Resources

Although we maintain an extensive slide collection, the Littman Library focuses its attention on the development of the Image Database and Digital Archive of Newark Architecture, which are more actively used by both students and faculty. Since our last accreditation the image database has grown by almost 60 %, reaching as of August 2013 - 20,926 images. In 2007-2008 the image database migrated to a new server and its interface has become more user-friendly. The library graphic collection includes more than 1,260 maps and architectural drawings mostly related to New York and New Jersey. Many of them have been digitized as part of the Digital Archive of Newark Architecture (DANA).

Equipment

The Library provides a wide assortment of equipment for both in-house use and check out. There are two computers with direct access to the online catalog and eleven public computers with presentation and publishing software, internet connection and access to a shared drive. Within the library patrons can also use the following equipment: flatbed and slide scanners; digital copiers; b/w networked printers; photo station; LCD screen and headphones; light table. Items available for check-out include: laptops with presentation software; XGA projectors; slide projectors; traditional and blue-ray DVD players and VCR; photo cameras; portable screen; light and sound meters.

***

The Littman Library also has cooperative agreements that enhance the services provided through reciprocal access and borrowing privileges such as ILL and Rapid Document Delivery, as well as exchange of professional expertise. VALE membership grants participation in a cooperative agreement with numerous academic libraries in New Jersey. Students cross-registered with Rutgers University have access to collections and services offered by this institution.

Type of Collections	Number of volumes	Budget 2011-2012	Budget 2012-2013	Budget 2013-2014
Books classed in LC-NA or Dewey 720	11,833			
Other Books	22,712	27,267	21,824	39,000[1]
Periodical Subscriptions	64[2]	10,000	17,059[3]	17,500[4]
Microform Reels	11			
Microfiche	3,477			
Slides	80,262			
Videos	110			
Digital Image Files	20,927			
Other Electronic Publications/Databases	11	8,695	8,860	10,557[5]
Drawings	1,260			
Other (Equipment and Collection) Preservation & space renovations	n/a	16,270[6]	14,000[7]	4,000 100,000[8]
Total		62,232	61,743	171,057

Funding

An appropriate portion of the main University library, the Robert Van Houten Library, institutional budget is allocated to the Littman Library for book acquisition and journal/electronic resources subscription. The Van Houten Library provides acquisition process, cataloging, Inter Library Loan (ILL) and Rapid Document Delivery. Funding for computer equipment comes from both the Van Houten library (staff computers), University Computing Services and the College (public computers). Forty two percent of the University library student work-study budget is assigned to the Littman Library. The Library also receives additional budget support from the College. Each year a number of graduate students are assigned to the Littman Library to work on various digitization projects. Additionally the College administration facilitated replacement of digital cameras and some public computers. Annual donations from the ASU and alumni provide supplemental funds for expanding collection of video recordings and books, it also enabled us to acquire additional shelving and a large LCD screen.

We recently conducted a $100,000 renovation project that expanded the library space to its current 7,377 square feet area, adding a room for housing the Materials Library and special collections, as well as additional seating area and multimedia/group study room, which should alleviate existing space constrains. In 2008 we received an external grant to support the development of the Digital Archive of Newark Architecture, to upgrade technology in the Image Lab and to acquire some rare books. A large collection of books, periodicals and archival materials donated by Robert Geddes enabled us to fill gaps in retrospective publications in several subject areas. We also received a small collection of books from the Robert Gutman library, mostly focused on social aspects of architecture.

1 This figure includes $20,000 of an additional funding.
2 Only current print subscriptions. This does not include periodicals available online or those located in the Van Houten Library, or those funded by the state.
3, 4 Including $6,741 allocated by Provost.
5 Including $1,500 of external funding.
6 This figure includes cost of computers funded by the CoAD and an LCD screen
7 This number includes cost of laptops and a printer but does not include cost of XGA projectors provided by the Media Services.
8 This amount includes funds raised for renovation.

I.3 – INSTITUTIONAL AND PROGRAM CHARACTERISTICS

I.3.1 Statistical Reports

Program student characteristics

Demographics

B.Arch. And M.Arch. Programs Demographics

			2007		2007 Total	2012		2012 Total
DegType	NJITProg	Ethnicity	1	2		1	2	
B.Arch.	ARCH	Am.Ind./ Al.Nat.	1	1	2	7	2	9
		Asian	45	32	77	58	47	105
		Black	20	5	25	28	15	43
		Hispanic	84	26	110	100	43	143
		International	21	3	24	21	12	33
		Nat.Haw./ Pac.Isl.				1	2	3
		Unknown	48	18	66	30	9	39
		White	235	63	298	244	74	318
	ARCH Total		454	148	602	489	204	693
B.Arch. Total			**454**	**148**	**602**	**489**	**204**	**693**
M.Arch.	ARCH	Am.Ind./ Al.Nat.				1	1	2
		Asian	1	4	5	3	2	5
		Black	2	3	5	1	1	2
		Hispanic		4	4	2	1	3
		International	6	12	18	7	7	14
		Unknown	5	5	10	4		4
		White	27	12	39	20	7	27
	ARCH Total		41	40	81	38	19	57
M.Arch. Total			**41**	**40**	**81**	**38**	**19**	**57**

NJIT Demographics

		2007		2007 Total	2012		2012 Total
U/G	Ethnicity	1	2		1	2	
U	Am.Ind./ Al.Nat.	29	3	32	25	13	38
	Asian	820	259	1079	1125	401	1526
	Black	383	158	541	525	203	728
	Hispanic	726	189	915	1107	326	1433
	International	219	63	282	215	103	318
	Nat.Haw./ Pac.Isl.				21	4	25
	Unknown	493	171	664	368	216	584
	White	1646	269	1915	2038	421	2459
U Total		4316	1112	5428	5424	1687	7111
G	Am.Ind./ Al.Nat.	9	1	10	11	3	14
	Asian	260	122	382	263	117	380
	Black	103	68	171	167	65	232
	Hispanic	116	54	170	170	74	244
	International	926	409	1335	764	441	1205
	Nat.Haw./ Pac.Isl.				5		5
	Unknown	169	63	232	130	52	182
	White	436	124	560	438	133	571
G Total		2019	841	2860	1948	885	2833
Grand Total		6335	1953	8288	7372	2572	9944

Qualifications of Students

B.Arch. SAT scores	Fall 2006			Fall 2007			Fall 2012		
	SAT Math	SAT Verbal	SAT Writing	SAT Math	SAT Verbal	SAT Writing	SAT Math	SAT Verbal	SAT Writing
25th Percentile	570	480	500	573	510	493	540	490	488
75th Percentile	650	580	618	650	600	580	650	570	573
Average	612	540	554	618	549	543	598	531	532

Full-Time First-Time M.Arch. GRE Scores	Fall 2006			Fall 2007			Fall 2012		
	GREVerb	GREMath	GREAnal	GREVerb	GREMath	GREAnal	GREVerb	GREMath	GREAnal
25th Perc	360	530	35	440	610	30	420	640	3
75th Perc	533	638	45	580	710	40	585	680	4
Avg	456	587	39	501	637	35	503	666	4

Time to graduation.

B.Arch. 100% Time

Normal Time to Completion for First-Time Full-Time B.Arch. Students

Five Year Interval

Corresponding Year	Enrolled	Graduated	Graduation Rate
2007	104	50	48%
2008	117	48	41%
2009	110	57	52%
2010	121	61	50%
2011	90	44	49%
2012	102	47	46%

M.Arch. 100% Time

Normal Time to Completion for First-Time Full-Time M.Arch. Students

Three and a Half Year Interval

Corresponding Year	Enrolled	Graduated	Graduation Rate
2007	26	17	65%
2008	27	15	56%
2009	29	20	69%
2010	19	14	74%
2011	20	11	55%
2012	28	14	50%

B.Arch. 150% Time

150% Time to Completion for First-Time Full-Time B.Arch. Students

Seven and a Half Year Interval

Corresponding Year	Enrolled	Graduated	Graduation Rate
2007	92	50	0.543
2008	81	46	0.568
2009	76	49	0.645
2010	104	71	0.683
2011	117	72	0.615
2012	110	71	0.645

M.Arch. 150% Time

150% Time to Completion for First-Time Full-Time M.Arch. Students

Five Year Interval

Corresponding Year	Enrolled	Graduated	Graduation Rate
2007	23	17	74%
2008	28	22	79%
2009	26	20	77%
2010	27	19	70%
2011	29	24	83%
2012	19	18	95%

Program faculty characteristics

Demographics

Architecture Full-Time Faculty by Rank, Tenure Status, and Gender

			1 Tenured		2 Tenure-Track		3 Non-Tenure-Track		Total		Grand
Rank	Year	Ethnicity	Male	Female	Male	Female	Male	Female	Male	Female	Total
1 FT Professor	2007	White	4	2					4	2	6
	2007 Total		4	2					4	2	6
	2012	White	4	2					4	2	6
	2012 Total		4	2					4	2	6
2 FT Associate Prof	2007	African American		1					0	1	1
		White	4	1					4	1	5
	2007 Total		4	2					4	2	6
	2012	African American		1					0	1	1
		White	5	2	2				7	2	9
	2012 Total		5	3	2				7	3	10
3 FT Assistant Prof	2007	White			2	1			2	1	3
	2007 Total				2	1			2	1	3
	2012	International			1				1	0	1
		White			4	1			4	1	5
	2012 Total				5	1			5	1	6
4. FT Instructor	2007	African American					1		1	0	1
		Hispanic					2		2	0	2
		Unknown					1	1	1	1	2
		White					6	1	6	1	7
	2007 Total						10	2	10	2	12
	2012	African American					2		2	0	2
		Hispanic					2		2	0	2
		White					7	2	7	2	9
	2012 Total						11	2	11	2	13
5 Administrator	2007	White	1				1		2	0	2
	2007 Total		1				1		2	0	2
	2012	White	1						1	0	1
	2012 Total		1						1	0	1
								2007 Grand Total			30
								2012 Grand Total			36

NJIT Full-Time Faculty

Rank	Year	Ethnicity	1 Tenured		2 Tenure-Track		3 Non-Tenure-Track		Total		Grand Total
			Male	Female	Male	Female	Male	Female	Male	Female	
1 FT Professor	2007	African American	2						2	0	2
		Asian	30						30	0	30
		Hispanic	1						1	0	1
		International	5						5	0	5
		Unknown	3						3	0	3
		White	80	12					80	12	92
	2007 Total		121	12					121	12	133
	2012	African American	4	1					4	1	5
		Am.Ind./Al.Nat.	1						1	0	1
		Asian	35	1					35	1	36
		Hispanic	1						1	0	1
		Unknown	2						2	0	2
		White	81	12					81	12	93
	2012 Total		124	14					124	14	138
2 FT Associate Prof	2007	African American	5	3					5	3	8
		Asian	8	5	2	1			10	6	16
		Hispanic	2	1					2	1	3
		International	8						8	0	8
		Unknown	1		2				3	0	3
		White	43	9	5				48	9	57
	2007 Total		67	18	9	1			76	19	95
	2012	African American	4	2					4	2	6
		Asian	15	5					15	5	20
		Hispanic	2	1					2	1	3
		International	1	1					1	1	2
		Unknown	5						5	0	5
		White	50	10	3				53	10	63
	2012 Total		77	19	3				80	19	99
3 FT Assistant Prof	2007	Asian			10	4			10	4	14
		Hispanic			1				1	0	1
		International			1				1	0	1
		Unknown			7				7	0	7
		White	2		17	4			19	4	23
	2007 Total		2		36	8			38	8	46
	2012	African American			1				1	0	1
		Asian			6	4			6	4	10
		Hispanic			1				1	0	1
		International			8	3			8	3	11
		White			14	3			14	3	17
	2012 Total				30	10			30	10	40
4. FT Instructor	2007	African American					2		2	0	2
		Asian					6	2	6	2	8
		Hispanic					3		3	0	3
		International					4		4	0	4
		Unknown					13	1	13	1	14
		White					53	16	53	16	69
	2007 Total						81	19	81	19	100
	2012	African American					4	1	4	1	5
		Asian					13	3	13	3	16
		Hispanic					3		3	0	3
		International					7		7	0	7
		Unknown					8		8	0	8
		White					61	28	61	28	89
	2012 Total						96	32	96	32	128
5 Administrator	2007	Am.Ind./Al.Nat.	1						1	0	1
		Asian	2						2	0	2
		White	6	1			5	2	11	3	14
	2007 Total		9	1			5	2	14	3	17
	2012	African American	1						1	0	1
		Asian	2						2	0	2
		White	6				2	2	8	2	10
	2012 Total		9				2	2	11	2	13

*Faculty Promotions**

Number of Promoted Faculty in Architecture, 2007-2008
2007-2008 CoaD Total: 0 promotions

Details		2008						
Div	**2007**	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	5 Lect	Res Prof	Grand Total
2. CoAD	1 Dist Prof	2						2
	1 Prof		5					5
	2 Assoc Prof			6				6
	3 Asst Prof				2			2
	5 Lect					10		10
	Res Prof						2	2
2. CoAD Total		2	5	6	2	10	2	27

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty at NJIT, 2007-2008
2007-2008 NJIT Total: 13 promotions

Details	2008							
2007	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	4 Inst	5 Lect	Res Prof	Grand Total
1 Dist Prof	24							24
1 Prof	**2**	114						116
2 Assoc Prof		7	87	1				95
3 Asst Prof			4	37				41
4 Inst					8			8
5 Lect						71	1	72
Res Prof							18	18
Grand Total	26	121	91	38	8	71	19	374

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty in Architecture, 2008-2009
2008-2009 CoaD Total: 0 promotions

Details		2009						
Div	2008	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	Lect, Univ	Res Prof	Grand Total
2. CoAD	1 Dist Prof	2						2
	1 Prof		5					5
	2 Assoc Prof			6				6
	3 Asst Prof				4			4
	5 Lect					9		9
	Res Prof						1	1
2. CoAD Total		2	5	6	4	9	1	27

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty at NJIT, 2008-2009
2008-2009 NJIT Total: 10 promotions

Details	2009								
2008	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	4 Inst	Lect, Sr Univ	Lect, Univ	Res Prof	Grand Total
1 Dist Prof	25								25
1 Prof	1	118							119
2 Assoc Prof		3	87						90
3 Asst Prof			6	42					48
4 Inst					7				7
5 Lect					1	30	42		73
Res Prof								20	20
Grand Total	26	121	93	42	8	30	42	20	382

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty in Architecture, 2009-2010
2009-2010 CoaD Total: 0 promotions

Details		2010						
Div	2009	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	5 Lect, Univ	Res Prof	Grand Total
2. CoAD	1 Dist Prof	2						2
	1 Prof		5					5
	2 Assoc Prof			7				7
	3 Asst Prof				6			6
	Lect, Univ					10		10
	Res Prof						1	1
2. CoAD Total		2	5	7	6	10	1	31

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty at NJIT, 2009-2010

2009-2010 NJIT Total: 13 promotions

Details	2010								
2009	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	4 Inst	5 Lect, Sr Univ	5 Lect, Univ	Res Prof	Grand Total
1 Dist Prof	24	1							25
1 Prof	1	120							121
2 Assoc Prof		3	89						92
3 Asst Prof			9	39					48
4 Inst					7				7
Lect, Sr Univ						32			32
Lect, Univ							46		46
Res Prof								20	20
Grand Total	25	124	98	39	7	32	46	20	391

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty in Architecture, 2010-2011

2010-2011 CoaD Total: 2 promotions

Details		2011							
Div	2010	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	Dean CoAD	Lect, Univ	Res Prof	Grand Total
2. CoAD	1 Dist Prof	2							2
	1 Prof		4			1			5
	2 Assoc Prof			7					7
	3 Asst Prof			2	5				7
	5 Lect, Univ						10		10
	Res Prof							1	1
2. CoAD Total		2	4	9	5	1	10	1	32

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty at NJIT, 2010-2011

2010-2011 NJIT Total: 12 promotions

Details	2011								
2010	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	5 Lect, Sr Univ	Administrator	Lect, Univ	Res Prof	Grand Total
1 Dist Prof	21					2			23
1 Prof	2	111				7			120
2 Assoc Prof		3	90						93
3 Asst Prof			7	32					39
4 Inst						6			6
5 Lect, Sr Univ					33				33
5 Lect, Univ					5		42		47
Res Prof					1		1	16	18
Grand Total	23	114	97	32	39	15	43	16	379

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty in Architecture, 2011-2012

2011-201 CoaD Total: 0 promotions

Details		2012							
Div	2011	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	5 Lect	6 No Rank	Admin.: 1 Prof	Grand Total
2. CoAD	1 Dist Prof	2							2
	1 Prof		4						4
	2 Assoc Prof			9					9
	3 Asst Prof				4	1			5
	Dean CoAD							1	1
	Lect, Univ					11			11
	Res Prof						1		1
2. CoAD Total		2	4	9	4	12	1	1	33

Note: the table shows the number of retained faculty (not all faculty)

Number of Promoted Faculty at NJIT, 2011-2012

2011-2012 NJIT Total: 6 promotions

Details	2012									
2011	1 Dist Prof	1 Prof	2 Assoc Prof	3 Asst Prof	4 Inst	5 Lect	6 No Rank	Admin.: 1 Dist Prof	Admin.: 1 Prof	Grand Total
1 Dist Prof	22									22
1 Prof		110							1	111
2 Assoc Prof		3	91							94
3 Asst Prof			3	27		1				31
5 Lect, Sr Univ						38				38
Administrator		1			6			4	4	15
Lect, Univ						50				50
Res Prof							19			19
Grand Total	22	114	94	27	6	89	19	4	5	380

Note: the table shows the number of retained faculty (not all faculty)

* We have an aging faculty. We have been adding and replacing people since the last NAAB accreditation. Eight new faculty members have been hired, six of which were hired at NJSOA. The promotion numbers reflect this trend.

I.3.2. Annual Reports

NJSOA had the last accreditation visit in 2008. Accordingly all reports since then were submitted electronically to NAAB.

The letter below, from Perry Deess, the Director of the Institutional Research and Planning at NJIT, confirms that the data that office provides to the NJSOA for the purpose of preparing the NAAB Annual Reports is consistent with data that they submit to other reporting agencies.

NJIT
New Jersey's Science & Technology University

New Jersey Institute of Technology
University Heights
Newark, NJ 07102-1982
973.596.3110
973.596.3231 fax
deess@njit.edu

Office of Institutional Research & Planning

July 23, 2013

NAAB
Suite 410
1101 Connecticut Ave., NW
Washington, DC 20036

Dear Sir/Madam:

All data submitted to the NAAB through the Annual Report Submission system since the last site visit is accurate and consistent with the reports sent to other national and regional agencies including the National Center for Education Statistics.

Sincerely,

Perry Deess, Ph.D.
Director, Institutional Research & Planning

I.3.3 Faculty Credentials

Please see faculty matrix and resumes in Part Four (IV) of this report. This information shows how our faculty's academic credentials and professional architectural experience qualify them to ensure student achievement of performance criteria.

I.4 – POLICY REVIEW

The following documents will be placed in the on-site team room for the visiting team's review:

- Studio Culture Policy
- University Academic Plan 2013-2015
- CoAD Academic Plan 2012-2017
- Personnel Policies including:

  Position descriptions for all recent faculty hires
  NJIT Faculty Handbook
  NJSOA Faculty Guidebook
  NJSOA Student Guidebook
  Reappointment policies
  EEO/AA policies
  Diversity Policies
  Faculty Development, including but not limited to; research, scholarship, creative activity, sabbatical reports.

- Student-to-Faculty ratios for all components of the curriculum (i.e., studio classroom/lecture, seminar).
- Square feet per student for space designated for studio-based learning
- List of Faculty Offices
- Admissions Requirements
- Advising Policies; including policies for evaluation of students admitted from preparatory or pre-professional programs where SPC are expected to have been met in educational experiences in non-accredited program
- Policies on academic integrity for students
- Library Reports, Focus Groups, etc.
- A description of the information literacy program and how it is integrated with the curriculum
- EOP program
- Honors College Program
- EOP College Program
- Kepler system

PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

II.1 – STUDENT PERFORMANCE -- EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

II.1.1 Student Performance Criteria

The NJSOA offers two professional degree programs, the undergraduate B. Arch and the graduate M. Arch, which share a single faculty and a common overall approach to architectural education: to cultivate students who are professionally ready, technically savvy and socially responsible. A number of features are available to students in both degree programs, including a series of dual degree programs, a summer program in Siena, Italy, and elective course offerings.

Bachelor of Architecture

The undergraduate professional degree is a five-year Bachelor of Architecture (B. Arch). The goal of the undergraduate curriculum is to prepare students according to the NJSOA's pedagogical objectives: to be leading design professionals, to maintain technological prowess and to practice in a socially responsible manner. Meeting these goals prepares them to benefit fully from an Intern Development Program and to achieve licensure through the ARE. The curriculum consists of two tiers: (1) an initial three-year core program that provides the requisite skills and knowledge fundamental to more advanced study (2) a two-year advanced curriculum in which students can both choose from special topics studios and electives in specialized areas of expertise, and also complete advanced courses in technology and practice. The undergraduate curriculum culminates in a studio sequence where students must demonstrate comprehensive design abilities.

The education of a student consists of imparting knowledge, skills and attitudes. Attitudes are formed throughout the curriculum: they are a determining factor in how our graduates see the contract between the profession and society.

Master of Architecture

The accredited professional graduate degree program is the Master of Architecture (M.Arch.), which is conceived and organized as an accelerated, condensed immersion in architecture that covers in six semesters what undergraduates cover in ten. This condensation is possible because virtually all students admitted to the program have fulfilled the NAAB-mandated 45-credit general education requirements in their undergraduate studies and can concentrate almost exclusively on the professional curriculum. The graduate program is enriched by the diverse educational backgrounds of our entering students, over half of whom did their undergraduate degrees in fields outside architecture.

B. ARCH

NAAB B. Arch. Student Performance Criteria Matrix - Fall '12-'13 / Spring '13

			Realm A: Critical Thinking & Representation											Realm B: Integrated Building Practices, Technical Skills and Knowledge												Realm C: Leadership and Practice									
			A1 Communication Skills	A2 Design Thinking Skills	A3 Visual Communication Skills	A4 Technical Documentation	A5 Investigative Skills	A6 Fundamental Design Skills	A7 Use of Precedents	A8 Ordering Systems	A9 Hist Traditions/Global Cult	A10 Cultural Diversity	A11 Applied Research	B1 Pre-Design	B2 Accessibility	B3 Sustainability	B4 Site Design	B5 Life Safety	B6 Comprehensive Design	B7 Financial Considerations	B8 Environmental Systems	B9 Structural Systems	B10 Building Envelope Systems	B11 Building Service Systems	B12 Building Materials/Assemblies	C1 Collaboration	C2 Human Behavior	C3 Client Role in Architecture	C4 Project Management	C5 Practice Management	C6 Leadership	C7 Legal Responsibilities	C8 Ethics/ Professional Judgment	C9 Community/Social Responsibility	
	Required proficiency rating																																		
	Bachelor of Architecture, New Jersey School of Architecture																																		
Year 1	Arch 155	Modes of Communication I																																	Arch 155
	Arch 163	Design I																																	Arch 163
	Arch 156	Modes of Communication II																																	Arch 156
	Arch 164	Design II																																	Arch 164
Year 2	Arch 223	Construction I																																	Arch 223
	Arch 251	History I																																	Arch 251
	Arch 263	Studio I																																	Arch 263
	Arch 227	Environmental Control Systems I																																	Arch 227
	Arch 229	Structures I																																	Arch 229
	Arch 252	History II																																	Arch 252
	Arch 264	Studio II																																	Arch 264
Year 3	Arch 327	Environmental Control Systems II																																	Arch 327
	Arch 329	Structures II																																	Arch 329
	Arch 363	Studio III																																	Arch 363
	Arch 381	History III																																	Arch 381
	Arch 323	Construction II																																	Arch 323
	Arch 364	Studio IV																																	Arch 364
	Arch 382	History IV																																	Arch 382
	Arch 472	Programming and Project Development																																	Arch 472
Years 4 + 5	Arch 423	Construction III																																	Arch 423
	Arch 429	Structures III																																	Arch 429
	Arch 463	Options I Studio																																	Arch 463
	Arch 464	Options Studio II																																	Arch 464
	Arch 563	Comprehensive Studio I																																	Arch 563
	Arch 558	Professional Practice																																	Arch 558
	Arch 564	Comprehensive Studio II																																	Arch 564
	Arch 565	Comprehensive Studio Lab																																	Arch 565

KEY

Understanding

Ability

• For convenience of review, the dot is provided to suggest a starting point for the location of evidence that satisfies each of the NAAB Student Performance Criteria.

M. ARCH

NAAB M. Arch. Student Performance Criteria Matrix - Fall '12-'13 / Spring '13

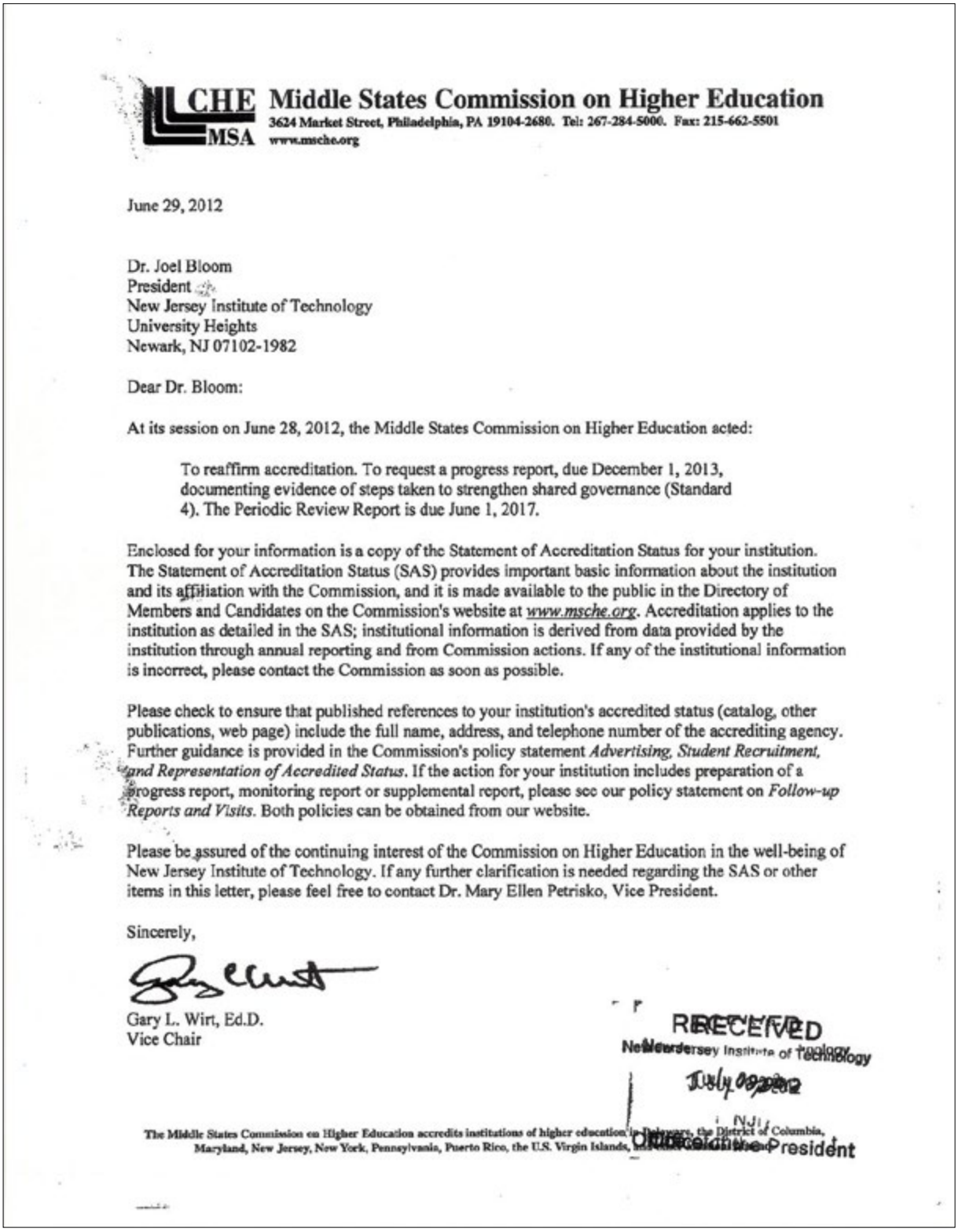
			Realm A: Critical Thinking & Representation											Realm B: Integrated Building Practices, Technical Skills and Knowledge												Realm C: Leadership and Practice									
			A1 Communication Skills	A2 Design Thinking Skills	A3 Visual Communication Skills	A4 Technical Documentation	A5 Investigative Skills	A6 Fundamental Design Skills	A7 Use of Precedents	A8 Ordering Systems	A9 Hist Traditions/Global Cult	A10 Cultural Diversity	A11 Applied Research	B1 Pre-Design	B2 Accessibility	B3 Sustainability	B4 Site Design	B5 Life Safety	B6 Comprehensive Design	B7 Financial Considerations	B8 Environmental Systems	B9 Structural Systems	B10 Building Envelope Systems	B11 Building Service Systems	B12 Building Materials/Assemblies	C1 Collaboration	C2 Human Behavior	C3 Client Role in Architecture	C4 Project Management	C5 Practice Management	C6 Leadership	C7 Legal Responsibilities	C8 Ethics/ Professional Judgment	C9 Community/Social Responsibility	
	Required proficiency rating		■	■	■	■	■	■	■	▭	▭	▭	▭	■	■	■	■	■	■	▭	▭	▭	▭	▭	▭	■	▭	▭	▭	▭	▭	▭	▭	▭	
	Master of Architecture, New Jersey School of Architecture																																		
Year 1	Arch 501G	Architectural Design I		■	■			•	■	•																									Arch 501G
	Arch 528G	History of Architecture I	■								•	▭														▭									Arch 528G
	Arch 541G	Construction I (BS I)				■																				•									Arch 541G
	Arch 555G	Architectural Graphics			•																														Arch 555G
	Arch 662G	Situating Practice (as of Fall 2013)	■								▭																						▭		Arch 662G
	Arch 500G	Advanced Architectural Graphics (C.A.D)			■					•																									Arch 500G
	Arch 502G	Architectural Design II		•	•		■	•						•	■			■																	Arch 502G
	Arch 529G	History of Architecture II	•																								•								Arch 529G
	Arch 543G	Environmental Control Systems I (BS III)																			•		▭												Arch 543G
	Arch 545G	Structures I (BS V)											•									•													Arch 545G
Year 2	Arch 503G	Architectural Design III		■	■		■	■	•	▭				■			•																		Arch 503G
	Arch 542G	Construction II (BS II)				•																				•									Arch 542G
	Arch 544G	Environmental Control Systems II (BS IV)														•					•		•	•											Arch 544G
	Arch 548G	Structures II (BS VIII)											•									•													Arch 548G
	Arch 504G	Architectural Design IV		•	■		■	■				▭															•							•	Arch 504G
	Arch 547G	4D Integration (New Course Spring 2014)			▭	▭			▭				▭													▭									Arch 548G
Year 3	Arch 505G	Advanced Design Options																																	Arch 505G
	Arch 569G	Building & Development												•						•								•			•	•			Arch 569G
	Arch	Hist/Theory Selective	■								▭																								Arch
	Arch 506G	Comprehensive Design	•	■	■	•	•	■	•		▭		▭	■	•	•	•	•	•		▭	▭		•	▭	■	•								Arch 506G
	Arch 579G	Professional Practice																									•	•	•	•	•	•			Arch 579G
	Arch	Hist/Theory Selective (Non-Western)								•	•																								Arch

KEY

▭	Understanding
■	Ability
•	For convenience of review, the dot is provided to suggest a starting point for the location of evidence that satisfies each of the NAAB Student Performance Criteria.

II.2 – CURRICULAR FRAMEWORK

II.2.1 Regional Accreditation



MSCHE Middle States Commission on Higher Education
3624 Market Street, Philadelphia, PA 19104-2680. Tel: 267-284-5000. Fax: 215-662-5501
www.msche.org

June 29, 2012

Dr. Joel Bloom
President
New Jersey Institute of Technology
University Heights
Newark, NJ 07102-1982

Dear Dr. Bloom:

At its session on June 28, 2012, the Middle States Commission on Higher Education acted:

> To reaffirm accreditation. To request a progress report, due December 1, 2013, documenting evidence of steps taken to strengthen shared governance (Standard 4). The Periodic Review Report is due June 1, 2017.

Enclosed for your information is a copy of the Statement of Accreditation Status for your institution. The Statement of Accreditation Status (SAS) provides important basic information about the institution and its affiliation with the Commission, and it is made available to the public in the Directory of Members and Candidates on the Commission's website at www.msche.org. Accreditation applies to the institution as detailed in the SAS; institutional information is derived from data provided by the institution through annual reporting and from Commission actions. If any of the institutional information is incorrect, please contact the Commission as soon as possible.

Please check to ensure that published references to your institution's accredited status (catalog, other publications, web page) include the full name, address, and telephone number of the accrediting agency. Further guidance is provided in the Commission's policy statement *Advertising, Student Recruitment, and Representation of Accredited Status*. If the action for your institution includes preparation of a progress report, monitoring report or supplemental report, please see our policy statement on *Follow-up Reports and Visits*. Both policies can be obtained from our website.

Please be assured of the continuing interest of the Commission on Higher Education in the well-being of New Jersey Institute of Technology. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Dr. Mary Ellen Petrisko, Vice President.

Sincerely,

Gary L. Wirt, Ed.D.
Vice Chair

RECEIVED
New Jersey Institute of Technology
July 2012
NJIT
President

The Middle States Commission on Higher Education accredits institutions of higher education in Delaware, the District of Columbia, Maryland, New Jersey, New York, Pennsylvania, Puerto Rico, the U.S. Virgin Islands, and [illegible]

II.2.2 Professional Degrees and Curriculum

The School of Architecture offers the following NAAB-Accredited first professional degree programs:

B.Arch.: Five-year Undergraduate Architecture Program (164 credits)

M.Arch.: Three-year Graduate Architecture Program (102 Credits)

Outline of the Curriculum - Bachelor of Architecture

The five-year NAAB-accredited Bachelor of Architecture degree program requires successful completion of a minimum of 164 credits as prescribed in the curriculum and maintenance of both a minimum 2.0 cumulative GPA, and a 2.0 studio GPA to advance to each succeeding year. All candidates must complete the requirements categorized as follows:

- Core Curriculum
- Advanced Curriculum
- Years One through Five: Themes, Studio Descriptions, Course Integration
- History Sequence
- Technology Sequence
- Professional Practice Sequence
- General University Requirements (GUR)

Core Curriculum

The three-year core curriculum produces a level of training, skill development and breadth of knowledge that prepares students for the advanced portion of the curriculum, ensuring that all students have a common grounding in architecture before embarking on a series of educational explorations that reflect the interests and possible career paths of each student. These paths include architecture, related fields in the building industry, information technologies, community design, materials, and commerce, as well as further studies in architecture at the graduate level. The core curriculum also prepares students to take Structures III and Construction III in the advanced curriculum. Once these courses are complete, students are considered prepared to demonstrate their comprehensive design ability in the final year.

The core curriculum produces a level of training, skill development and breadth of knowledge that prepares students for the advanced portion of the curriculum.

During this three year period, the NJSOA addresses a large quotient of NAAB criteria requiring students to have successfully completed foundational GURs, six terms of studio design, two representation courses, the complete required history sequence and six of eight required technology courses in structures, construction and environmental control systems. This required sequence of core courses seek to satisfy SPCs for Realm A: Critical Thinking and Representation and specific ones for both Realm B: Integrated Building Practices, Technical Skills and Knowledge; and Realm C: Leadership and Practice, all at competency levels necessary to pursue upper level studies in the advanced curriculum.

The core curriculum follows a lock-step sequence, with each year following clearly defined goals. The faculty organizes these goals with regard to specific skills and knowledge thematically, typologically and tectonically. Coordinators integrate each year with parallel courses in representation, history, and technology. Multiple studio

sections of approximately 15 students each follow a common syllabus with the same assignments and educational objectives. This guarantees a certain homogeneous level of achieved competency among all students in digital and analog graphic communication skills, problem-solving procedures, and general design knowledge, while at the same time allowing students of one studio to compare themselves with a different design emphasis found in another. This heterogeneity underscores the notion that there is no single answer to a design problem and allows a student to view diverse design strategies to enable them to develop their own. Guided by each year's coordinator, faculty review student work at the midterm and final points to establish common grading standards and maintain adherence to the common syllabus.

Advanced Curriculum

The advanced curriculum also affords students a wide array of electives to pursue their own specific interests.

The advanced curriculum combines years four and five. In the fourth year, students select from a range of options studios. These studios provide students a vehicle to address educational areas of personal interest and further expand educational synergies on an individual basis. In the fifth year, students follow a two-step sequence of comprehensive studios focused on a building with both a complex program and setting. The more exacting of the NAAB criteria of Realms B and C – namely, those dealing with complex integrations of building components, systems, codes, programs, technical understanding, and intensive design development – are reserved for advanced curriculum studios and courses, with students required to demonstrate the Comprehensive Design SPCs in the final studio of the fifth year sequence. Of the remaining required courses, students must complete the final two technology courses, two required courses in Programming and Project Development and Professional Practice; and any remaining GURs during this period. The advanced curriculum also affords students a wide array of electives to pursue their own specific interests. The choice of these courses can lead to a minor, dual degree, or future graduate study. The fifth year faculty follow the core faculty practice of reviewing student work at the midterm and final points and add a third stage to establish common grading and presentation standards. While each comprehensive studio designs a different project, they adhere to a basic common syllabus. Given the wide range of fourth year topics, individual faculty use their own discretion when grading and do not maintain a common grading process. However, given that these studios result from a competitive process, faculty vetting of each proposal maintains a clear grading standard.

First Year

The overall theme of the first year is to teach the fundamental theoretical and operational principles of architecture and design and provide the visual literacy required to convey it.

The overall theme of the first year is to teach the fundamental theoretical and operational principles of architecture and design and provide the visual literacy required to convey it. The first year curriculum centers on two courses in both fall and spring semester: Introduction to Design (Arch 163 & 164) and Modes of Design Communication (Arch 155 & 156). Introduction to Design meets during the studio hours common to the NJSOA while Modes of Design Communication meets twice weekly. GURs fill the remainder of a student's typical schedule. Although there are no autonomous courses in history or technology in first year, the curriculum integrates these subjects through various assignments and information that accompany the two courses. Faculty maintain a high degree of interaction between the two courses, participating in each other's interim, mid-term, and final reviews. Senior faculty guide a roster of critics made up of both full-time and adjunct faculty, some teaching both courses.

In a complimentary manner, each course deals with the nature of architectural language, simultaneously both exploring and expressing a design idea. Each closely

coordinates assignments and schedule. In tandem, these courses enable students to conceptualize architectural information and products; to employ the analytic and synthetic skills needed to resolve an architectural, graphic, or representational problem; to research and deploy the lessons inherent in historical precedents; to understand the fundamental principles governing architectural composition and thought, and to amalgamate all this into space, form, technique, and program.

For over a decade now, the initial first year assignment has been to create a structure using toothpicks that supports bricks on an inclined surface that students build with cardboard. In front of the entire class, students test their constructions by adding bricks, often to failure. This exercise introduces themes intended to course through a student's education, ones that will continue throughout their careers: that design should be tested, that design benefits from both individual ingenuity and comparison with peers and that learning is collaborative and ongoing. Assignments continue with an emphasis on making and asking questions of oneself, one's critic and one's peers. As assignments progress, digital explorations, using the array of software served internally, soon join hand drawing and modeling. After direction from faculty to use software to address specific design investigation, students rely primarily on one another - including tutorials provided through student organizations - to master it. After a succession of integrated assignments of increased complexity, focusing on composition, syntax, scale, program, construction, tectonics, rudimentary structural systems, historical precedent and theory, the first year culminates in a program for a small retreat that combines public buildings surrounded by repetitive units of housing. The construction technique is generic stick-built construction.

Second Year

Second year builds upon the abstract design and representational principles introduced in first year, layering onto it a technological logic, an historical awareness, and recognition of an ecological imprint, all combined with an understanding of architecture as an integral component of complex, changing environments. With its design/build exercise, the second year culminates in a dramatic escalation of NJSOA's tradition of *learning through making* initiated in the first year. Throughout the year, students learn how to translate various modes of abstraction into building. In this context, design and representation – through both analog and digital means - transcend simple composition and syntax to become essential tools in the art of building.

The second year emphasizes architecture as the resultant of a design process that is integral rather than sequential.

The introduction of accompanying courses in history, construction, structures and environmental control systems in the second year emphasizes architecture as the resultant of a design process that is integral rather than sequential. By simultaneously considering site conditions, construction materials, assembly techniques and their performative relationship to physical, cultural and historical parameters, students explore the relationship between physical space and behavior. Please find specific description of the integration of historical understanding through "fast-forwards" and technological coordination below. Furthering a specific tectonic awareness, the fall studio semester concentrates on steel construction and the spring on concrete and masonry. This continuing stress on the materiality of architecture throughout all phases of the second year curriculum, its reiteration within varying contexts both pragmatic and historical, represents the beginning stage of comprehensive design both in attitude and methodology as practiced at NJSOA.

This continuing stress on the materiality of architecture throughout the second year curriculum, its reiteration within varying contexts both pragmatic and historical, represents the beginning stage of comprehensive design both in attitude and methodology as practiced at NJSOA.

For several years, the initial second year studio assignment has asked students to design a steel canopy for the street-side elevation of the architecture school. This exercise invites students to look at a familiar environment in a new way, discovering a construction logic hidden behind the wall. This theme of discovery continues with the design of a stairway and programmatic addition to the High Line in Manhattan, allowing students to discern the inherent logic of a seminal contemporary fusion of architecture, urbanism and landscape and append to it both physically and conceptually. The semester culminates with the design of a raptor center programmed for the study and rehabilitation of large birds for a site along their migratory routes, examining the formal implications in steel between public and private users as well as human and avian. One of the hallmark experiences at the NJSOA occurs during the spring semester. Working in teams, students coordinate their design efforts with a group of skilled masons competing in a design/build competition sponsored by the Masonry Contractors of New Jersey in cooperation with the Bricklayers and Allied Craftworkers (NJ Locals 2, 4 and 5) and the International Masonry Institute. The so-called "Brick Build" competition affords students the opportunity to design and build a portion of a studio project. Teams consist of studio sections that work together to produce presentation boards, multimedia presentations and full-scale mock-ups of a portion of the team project. In addition to receiving individual grades, student teams compete for cash awards that further incent team members to work in collaboration. Because the Build weekend coincides with an important NJIT Open House, whose date varies from year to year, precursor and post-build assignments vary in scope and length each year.

Third Year

The third year studios promote the "making" strategies of the first two years to an iterative "learning by doing" strategy.

The third year culminates the B.Arch core program. The studios build upon those of the previous year by developing buildings with increasingly complex program and aggregating typologies in both urban and undeveloped environments for sites both near and far. The third year studios promote the "making" strategies of the first two years to an iterative "learning by doing" strategy that prompts students to develop a clearly articulated design philosophy over the course of the semester, benefiting from the active interchange of ideas among participating students, stakeholders and faculty.

The curriculum prompts students to interweave research findings and apply them to all stages of design from schematic to development.

The continued third year accompaniment of courses in construction, structures and environmental controls allows for the increased understanding of technology as systems. The single material focus of steel or masonry in earlier semesters gives way to the deployment in design of hybrid or composite systems, including other materials such as bamboo or rammed earth. As the history sequence approaches the present, students place their work beside well-known examples. With these courses, learning through research and critical analysis augments the design process, with research not only stressing the collecting of information, but also the importance of observing and studying multiple contexts as a means to formulate a critical understanding of established conditions and conventions. Through interaction between studio and allied courses, the curriculum prompts students to interweave research findings and apply them to all stages of design from schematic to development.

For the past years, the fall semester has focused on downtown Newark, beginning with the urban condition of infill and leading to a large-scale urban assemblage focused on housing. As projects grow in scale and complexity, students examine the language of urbanism for a site they visit regularly, interpret typology and program, and consider technology as an integrated building system with ecological implications. The studio employs analysis of precedent/case studies as a means to program urban space at

the macro scale of urban integration and at the micro scale to understand concepts of "type" and "variant" and how "units" coalesce to form larger wholes. Students arrive at a scale where they can consider the reciprocal relationship between built form and open space, and how these can grow from or challenge existing standards and codes. The spring semester takes several of these themes into a rural environment in India. In the Spring 2013 semester, students designed an intergenerational school that included classrooms, a canteen and a large meeting space using active and passive sustainability strategies, all organized around a demonstration carbon sequestration system. Sponsored by Abellon Clean Energy, a sustainable energy company based in Ahmedabad, India, support allowed for four students and two faculty members to travel to India to visit the site in northern state of Gujarat and tour Ahmedabad, Delhi and Agra. Students served as project consultants to the rest of the class, conveying first-hand knowledge of the site, Abellon's systems and company culture as well as Indian culture as a whole. For their final project in the core, the design focus returned to Newark, asking students to design a library with a resiliency program for a complex site in the Ironbound neighborhood.

Fourth Year

The theme of the fourth year is that of programmatic diversity, student choice and advanced study. The curriculum allows for the widest variety of studio topics for students to choose from. These Options Studios vary in scale, scope, choice of site, conceptual basis, building type, advanced design processes, and other parameters. Eligible students can also take select studios offered at the School of Art + Design, including a collaborative studio, as well as those offered in the Infrastructure Planning program during this year. The fourth year culminates the technology sequence with the final structures and construction courses focusing on advanced topics and case studies. In the fourth year students begin to sample from the eight electives (seven architectural electives and one free elective). Students also study abroad in the Siena Program or at other universities during this year.

The theme of the fourth year is that of programmatic diversity, student choice and advanced study.

Options Studios share basic, common pedagogical objectives. Individual faculty members determine these studio programs on a semester-by-semester basis, working within the framework compiled by the fourth year coordinator with the support of the NJSOA Curriculum Committee. In Fall 2012, Options Studios became merit-based with projects selected by the coordinators and administration based on diversity of studio problems and other aspects such as funding potential, collaborative opportunities within the university, and connections to groups and institutions outside of the College. The studio problems offer a broad variety, ranging from abstract-hypothetical situations freed from normal constraints that might limit a full exploration of various design postulates, to many real-world situations that have a high quotient of pragmatic determinants. For instance, many recent studios have engaged the concepts of resilient design in the wake of Hurricane Sandy. These Options Studios provided in-depth exposure to topics related to architecture that depart from a traditional studio project and have included research-based activities in resilient design, advanced computation and parametric design, large-scale and sustainable planning, and direct-to-manufacture (CNC) strategies. These studios allow greater latitude and tend to be more experimental, more investigative, more conceptually or pragmatically intense, and more apt to engage idiosyncratic design challenges.

Fifth Year

The B.Arch curriculum recognizes the fifth year as an informal capstone year, with the intention that successful completion of the comprehensive studio sequence and the Programming and Project Development and Professional Practice courses launch a student solidly on the path toward licensure.

The B.Arch curriculum recognizes the fifth year as an informal capstone year, with the intention that successful completion of the comprehensive studio sequence launch a student solidly on the path toward licensure.

The Comprehensive Studio sequence includes three courses: Comprehensive Studio One, Comprehensive Studio Two and the Comprehensive Studio Lab (a.k.a.: Comp I, Comp II and Comp Lab, respectively). Both the Comp I and Comp II focus on the integration of systems and contemporary practice, as well as the incorporation of sustainable design concepts at varying scales. Faculty members who teach comprehensive studios are typically licensed architects and experienced practitioners, either by having been in practice or currently practicing. For both studios, students select from a range of studio offerings by lottery, with Honors College students given first choice.

As the final studio in the undergraduate studio sequence at NJSOA, a student's successful completion of Comp II must demonstrate competency with SPC B.6 Comprehensive Design and all its sub-criteria. Comp II simulates procedures and characteristics of contemporary office practice, including material choices, code compliances structural systems, environmental response and mechanical systems. The curriculum requires documentation for each aspect of the design process, both in the traditional two-dimensional drawing format, but increasingly, as advanced computer graphics that simulate building performance attributes such as day-lighting and air flow. Comp II studio problems typically ask students to design a complex public or quasi-public building of approximately 50,000 sf that requires significant integration with a site, whether it be urban, suburban or rural.

Comp I is a preparatory course for Comp II and while less prescriptive, still considers the same systems and their integration required in Comp II. The lack of prescription in Comp II studios allows for more idiosyncratic programs similar to those taught in Options. Students also must take the Comprehensive Studio Lab during the fifth year, either prior to or concurrent with Comp II. Lab activities include studying architectural precedents, reviewing construction documents, reading relevant literature, visiting sites, interviewing practitioners, etc. The lab's goal is to better prepare students for the Comprehensive sequence. The curriculum also allows for a 3-credit course related to a research project or other special topic but whose workload is generally non-design oriented to augment a studio. This allows a student to take a maximum of 8 credits per semester to work on a specific project. Studio faculty typically teach these aligned courses.

Modes of Design Communication Sequence

This sequence of two courses, ARCH 155 and ARCH 156 (a.k.a. Modes), serves as a companion to the fall and spring first year studios, with each Modes assignment supporting and complementing its counterpart. In both semesters, Modes introduces students to the analog and digital tools of contemporary architectural communication, emphasizing how a designer uses them in the design process. Analog tools include freehand drawing, hardline drawing and hand-tool model building. Digital tools include software for desktop publishing (Corel), visualization (Rhino and 3DS Max) and building information modeling (Revit). Through iterative exercises, both courses prompt students to develop representational processes that generate ideas and ask them to choose the right tools to lead logically to final outputs. Each assignment

progressively addresses the relationship between representation and content as problems increase in complexity.

Required History Sequence
Since the last accreditation visit, the faculty has revised the four required courses in the history sequence to foster better synergies with studio and building systems courses, better connect a continuous historical timeline with subsequent examples including contemporary practice and recognize the changing needs of our digital native students. To achieve this, courses include "fast forwards" at every opportunity that demonstrate how later designers and theorists rely on history. This method informs studio design and also gives historical background to issues covered in technology courses. As subject matter approaches the present the method reverses, with flash backs replacing fast forwards. To cite an obvious but useful example of a fast forward, the lecture on the Parthenon considers its form, siting and meaning with respect to the development of ancient classicism, relating it to the persistence of the classical language of architecture from the Renaissance, but then also fast forwarding to Le Corbusier's polemical use of the building in *Vers une Architecture* and Bernard Tschumi's *Acropolis Museum*. Studio faculty can then use this juxtaposition to introduce an understanding of the architectural promenade for the High Line project and site planning issues at the Raptor Center. Additionally, the second year also includes assignments that link past and present. For example, students may be asked to visit an analyze a site in the New York metropolitan area housing ancient artifacts (such as the Egyptian Temple of Dendur at the Metropolitan Museum of Art), and draw comparisons with a contemporary building (such as Roche/Dinkeloo's Sackler Wing or Snøhetta's Blbliotheca Alexandrina in Egypt). In the third year, this method becomes a digital blog/sketchbook.

Arch 251 - History of Architecture I (3-0-3) (a.k.a. Caves to Cathedrals)
This course introduces key architectural concepts beginning with the earliest examples of human occupation, the shaping of space, and the transformation of the natural landscape. The course examines technological and environmental factors from prehistory to the Middle Ages as human settlement patterns and building forms become more complex. Fast forwards include relating the Parthenon to Le Corbusier's polemic in Vers une Architecture and Bernard Tschumi's Acropolis Museum as noted above. Course assignments require students to visit the Metropolitan Museum's Cloisters and to interpret Charles Cullens's design for the museum as a form of collage and compare to Carlo Scarpa's work at the Castelvecchio in Verona.

Arch 252 - History of Architecture II (3-0-3) prerequisite: Arch 251
Also known as Renaissance to Ruskin; this course picks up where 251 leaves off, moving from the late Middle Ages and Early Renaissance of the late 14th and 15th centuries to the High and Later Renaissance, the Reformation and Counter-Reformation, contemporary developments in China, Japan, the Ottoman Empire, the Mughal Empire, and in Meso-America; it covers the architectural and urban significance of Absolutism, Colonialism, the Enlightenment, and Nationalism, as well as a thorough consideration of the Industrial Revolution and its architectural consequences. It also deals with the ongoing transformation of natural and built landscapes in this period, including Renaissance and Romantic gardens and the emergence of the garden suburb. The course ends in the mid- to late- 19th century by dealing with theoretical debates concerning technology and aesthetics in the industrial age and emerging anti-industrial critiques of Ruskin and Morris. Fast forwards include Robert Venturi's embrace of the Campidoglio and Bruno Taut and Kenzo Tange's embrace of Katsura,

among others. Assignments ask students to visit the Morgan Library and to analyze each of its discreet parts by Charles McKim (1906), Benjamin Morris (1928) and Renzo Piano (2006) in relation to changing interpretations of the Renaissance. A second assignment asks students to visit the Metropolitan Museum's newly renovated Art of Arab Lands galleries to study objects and architectural fragments and compare them to contemporary projects emphasizing surface, structure and pattern.

Arch 381 - History of Architecture III (3-0-3) prerequisite: Arch 252
This course examines the emergence of the modern city and modern architecture, from the tall building to public works and large-scale infrastructure, beginning in the late 19th century and continuing to the middle of the 20th century. It continues to investigate the theoretical and practical tensions between technology and aesthetics, paying particular attention to changing ideas about architectural and urban form and meaning as they evolved in the first Machine Age and influenced the extension and decentralization of settlement patterns with World War I, the Great Depression, and World War II as critical historical reference points throughout. History III also examines abstract form as evident in the Beaux-Arts, Art Nouveau, Futurism, Cubism, De Stijl, and the Bauhaus to understand the changing attitudes towards history and historical form as modernity takes hold. It examines the ideology and polemics of the International Style, looking at the diffusion of modern architecture globally in the 1920s and 1930s and focusing on its relationship to modernization and colonialism in the developing world. This course also considers closely the relationship between architectural and political ideology up to and during World War II. To enhance the pedagogical dialogue across the last year of the core curriculum, the course begins with a panel discussion in which 3rd year studio critics and historians debate "why modernism matters." Flash backs progressively replace fast forwards to reinforce a connection to the content of History I and II. Recognizing the maturity of 3rd year students and their habits as digital natives, History III replaces assigned building analysis projects with a "digital analytical journal." Students spend the semester blogging about the relationship between modern architecture and contemporary concerns, relating their course content to issues in the studio and current practice.

Arch 382 - History of Architecture IV (3-0-3) prerequisite: Arch 381
This final course in the sequence examines developments in global modern and contemporary architecture since World War II, beginning with the increasing internationalization of modernism and its global hegemony. The social uprisings of the 1960s, the economic recession of the 1970s, post-colonialism, modernization in the developing world, mass production and mass consumption provide the historical and cultural framework for the course. It examines how ideas about architecture and urbanism changed because of the war and its aftermath and considers the importance of early extensions and critiques of modernism as a result. History IV studies the emergence of postmodernism and its significance as architectural form and cultural paradigm, paying particular attention to its consequences for current debate about the legacy and meaning of modernism. The course considers the importance of changing attitudes towards concepts of the international and universal in a homogenizing global culture and to growing interests in local and vernacular forms and materials. The course also considers the emergence of environmentalism and the discourse of sustainability as it relates to architecture in light of global development and diminishing resources. Finally, the course examines the importance of the cultural shift from Machine Age to Information Age, paying particular attention to how the computer revolution has shaped architectural practice in the recent past and in the present. The course examines

the work of key figures in recent and contemporary practice including, among others, Gehry, Koolhaas, Hadid, Morphosis, UN Studio, Snøhetta, and Sanaa. In a departure from previous semesters, the course consists of one lecture and one discussion section each week. Full time faculty and advanced doctoral students lead these discussion sections of between 15 and 20 students and emphasize the relationship between theory and practice through analysis of key texts and projects. The semester begins with a panel discussion on "the contemporary" as a cultural condition and a moving architectural target.

Required Technology Sequence

The introduction of technical courses in the second year is predicated on the assumption that most students will complete required GUR courses MATH 113, MATH 120, and PHYSICS 102 as pre- or co-requisites to individual courses in the sequence. These courses bridge the gap between technical courses and scientific knowledge required to understand structural and thermal performance concepts covered in technology classes beginning with Environmental Control Systems I (ARCH227) and Structures I (ARCH229). The alignment between design studios and technology courses allows students and faculty to work in parallel on a number of design tasks, such as the stair project designed as part of Architecture Studio I (ARCH263) and technically developed in Construction I (ARCH223). Students must complete all building technology courses prior to beginning the Comprehensive Design sequence in the fifth year.

ARCH 223 - Construction I

This course introduces basic construction materials, techniques, and typologies through a comparative study of wood, steel, masonry, concrete. The course presents these materials' latent properties and potential capacities for combination as single building elements and multi-part assemblies as a core knowledge base for design activity. The course focuses on part-to-whole relationships of a building's constructive anatomy and the various ways fabrication and assembly processes affect the organization and performance of normative construction typologies.

ARCH 227 - Environmental Control Systems I

This is an introductory survey of the basic principles of building, environmental control, and service systems as these relate to the building envelope. The course primarily covers thermal comfort in the built environment, which includes systems and strategies for heating, cooling and ventilating buildings. It addresses the building envelope (enclosure) as well as internal HVAC systems.

ARCH 229 - Structures I

This course is an introductory study of structures. It focuses on the principles of structural behavior in withstanding gravity and lateral forces as well as on the evolution, range, and appropriate application of contemporary structural systems in various building types. The course surveys the history of building structures, continues by introducing structural behavior, forces and responses in structural systems, and concludes with an introduction to static structural analysis. Building Information Management (B.I.M.) is used to test structural propositions.

ARCH 323 - Construction II

This intermediate construction course explores how the design and organization of single building systems such as structure enclosure and MEP services relate to one another. The course builds upon the knowledge of basic materials and assemblies

acquired in ARCH 223 by scaling up and including building systems in the study of normative construction typologies. The course focuses on the synthesis of these various systems into a comprehensive design with the aim of understanding how to optimize their design as an integrated whole considering complete coordination and performance.

ARCH 327 - Environmental Control Systems II
This course focuses on strategies for day lighting, artificial lighting, acoustic design, and energy efficiency as well as alternative energy sources. Additional areas covered include vertical circulation, water resources, plumbing systems, electrical systems, and fire protection systems. The course continues the use of Ecotect software as an analytical tool.

ARCH 329 - Structures II
This course introduces students to the principles of structural analysis and design using traditional structural materials such as steel, reinforced concrete and wood. Utilizing a practical approach combined with computerized methods of analysis and design, the course teaches students how to make structural decisions regarding their designs. The course outlines the principles of designing for lateral forces and lateral stability in high-rise construction. The course explores basic types of foundation and retaining walls systems and their structural requirements.

ARCH 423 - Construction III
This advanced construction course expands upon the normative emphasis of Construction II (ARCH 323) to include experimental, non-standard building projects and processes. It introduces students to complex problems of building construction in the context of the contemporary imperative for integration, high-performance and new technologies. The course introduces students to principles and strategies toward the development of productive synergies between effective technical 'solutions' and experimental design 'techniques'. Topics discussed include: new materials, non-standard details, assemblies, systems, innovative manufacturing processes (prefabrication, CNC fabrication), alternative forms of practice (design/build, interdisciplinary collaboration), and emerging sustainability (adaptability, life-cycle, resiliency) issues.

ARCH 429 - Structures III
This course covers advanced topics in steel, wood, concrete and masonry structures, focusing on indeterminate systems, integrated structural designs, and introduces the finite element method (FEM). The course uses three-dimensional computer modeling to implement structural technology into practical design projects, using case studies of complex contemporary buildings designed by well-known architectural practices as the basis for discussing integrated structural design.

Professional Practice Sequence
Two support courses are required during the last two years of the curriculum. Programming and Project Development and Professional Practice complement the pre-comprehensive and comprehensive studios. These courses address the NAAB criteria whose content focuses on legal responsibilities, code compliance, programming, office management, and leadership roles.

Arch 569G Programming and Project Development
The course is designed as a survey of the programming and project development process as the basis for understanding how the architect can play a productive role in the implementation of a successful project. Development is a complex and interactive process impacted by a wide range of actors and economic forces. The course deals with how architects, engineers, municipal agencies, investors, lenders, community groups, elected officials, contractors and other interested parties define themselves in relation to a project.

Professional Practice
In the B.Arch 5th Year, Professional Architectural Practice (ARCH 558) examines the structure and practices of architecture as a profession. The course studies the formal and informal relationships between architects and clients, government officials, and consultants and the ethics and liabilities associated with each. By preparing students to recognize the responsibilities of leadership and ethical decision-making, the course upholds the unique station architecture maintains relative to other professions. The course also introduces the basic principles of office management for the small and large architectural firms.

General University Requirements
The NJSOA considers the broadly based liberal arts and science education delivered through NJIT's General University Requirements (GUR) as a prerequisite for professional success. In an increasingly competitive and technical professional environment, the value of a general education becomes critical. Leadership and professional success require a solid foundation in basic technical and practical knowledge in order to develop ideas, to express them clearly, to communicate and to adjust to changing parameters of a dynamic world. A firm grounding in science and the liberal arts makes it more likely that ideas and the creation of proprietary design are relevant and actionable. They also ensure that students develop an understanding of science and technology as intellectual disciplines in and of themselves, and recognize their pervasive influence on contemporary life. The GUR enables NJIT graduates to have a confident understanding of themselves and of the ways that their specialized knowledge relates to a broader context. The NAAB mandates that 45 credit hours in the architecture curriculum be devoted to General University Requirements and courses outside the field of Architecture. The 47 credits required for the NJSOA B.Arch. degree exceeds this requirement.

English (6 credits) The ability to communicate ideas is an essential characteristic of educated individuals; all students are expected to achieve proficiency in both oral and written English and to demonstrate it in courses throughout the curriculum. HUM 101 (3 credits) HUM 102 (3 credits)

Mathematics (7 credits) The ability to reason both qualitatively and quantitatively is fundamental to success in all NJIT programs; students must master mathematics at least through the level of differential and integral calculus and understand the basic principles of probability and statistics. Math 107 or 115 (3 credits) Math 113 (3 credits) Math 120 (1 credit)

Physics (8 credits) The natural sciences provide the basis for our knowledge of the physical universe and for technological progress; successful completion of two four credit applied physics courses provides students insight into the forces of nature that

influence and shape their world. Phys 102 (3 credits) Phys 102A (1 credit) Phys 103 (3 credits) Phys 103 (1 credit)

Information Theory /Computer Science (3 credits) As information continues to multiply and becomes increasingly available the challenge to manage and control it grows. How to find, select and use and create pertinent information are the main goals. CS 104 (3 credits)

Management: (3 credits) The broad basic principles of the managerial process that are fundamental to the successful operation of various types of enterprises. Course emphasizes the role of management at all levels of responsibility. A rational synthesis of research and concepts, which together constitute the subject matter of management. Mgmt 390 (3credits)

Physical Education (2 credits) All student are required to take at least 2 classes from a broad range of choices offered by the Division of Physical Education and Athletics For full catalog listings please see http://catalog.njit.edu/courses/pe.php.

Cultural History Elective (3 credits) Selected literary, philosophical and artistic movements are discussed in the context of the major historical developments. The Cultural History courses are The Pre-Modern World (HUM 211), The Making of the Modern World (HUM 212), and the Twentieth-Century World (HSS 213). Students also may take approved introductory course at Rutgers-Newark to fulfill the Cultural History Requirement.

Social Sciences Electives (6 credits) Six credits in basic (100 and 200 level) Social Sciences (SS 201, Econ 265, Econ 266, EPS 202, STS 258 or any of the following Rutgers-Newark courses: R070:203 or 204, R790:201 or 202, R830:101 or 102, R920:201 or 202, R202:201. Students may take R220:101 or 102 instead of Econ 265 or 266.)

Literature/History/Philosophy/Science,Technology,Society Elective (3 credits) One 300 level course in lit, hist or philosophy or STS or approved 300-level Rutgers Course with prefix 350 (English Literature), 352 (American Literature), 510 (History), 512 (American History) or 730 (Philosophy).

Open Humanities Elective (3 credits) Open Elect in Hum/SS: One 300-level course in English, social science, theater, literature, history, philosophy or STS or any 300-level Rutgers-Newark course in humanities, social sciences, fine arts or performing arts. (prefixes 070, 080, 081, 202, 220, 350, 352, 420, 510, 512, 560, 570, 700, 701, 370, 790, 810, 830, 861, 920, 940 , 965, 988)

Science,Technology,Society Capstone Elective (3 credits) 400-level senior seminar in the humanities or social sciences(HSS 401; HSS 402, HSS 403, HSS 404, HSS 405, HSS 406, HSS 407, HSS 408, HSS 491).

Charts describing the B. Arch professional and general studies course curriculum distribution are shown in the Graphic Overview of B. Arch Curriculum below with professional requirements highlighted in yellow and general university requirements highlighted in orange for each year of study.

Graphic Overview of B.Arch. Curriculum

2011

B.Arch Professional and General Studies Course Curriculum with Credit Hours and Distribution

Required Course (117 total credits)
General Ed. Course (47 total credits)

	Fall					Spring		
	Course #	Course Title	Cr.			Course #	Course Title	Cr.
Year 1	*Arch 155*	*Modes of Comm I*	3			*Arch 156*	*Modes of Comm II*	3
	Arch 163	*Design I*	5			*Arch 164*	*Design II*	5
	HUM 101	English Writ, Spk, Thinking	3			HUM 102	English Writ, Spk, Thinking II	3
	Math 107 or 113 ǂ	Trigonometry or Finite Math & Calc I	3			Math 113 or 115 ǂ	Finite Math & Calc I or Analytic Geometry	3
	Frsh Sem	Seminar	0			Math 120	Probability and Statistics	1
	Recommended Minimum Credits/Semester		14			Recommended Minimum Credits/Semester		15
Year 2	*Arch 223*	*Construction I*	3			*Arch 227*	*Environmental Control Systems I*	3
	Arch 251	*History I*	3			*Arch 229*	*Structures I*	3
	Arch 263	*Studio I*	5			*Arch 252*	*History II*	3
	Phys 102	Physics I Lecture	3			*Arch 264*	*Studio II*	5
	Phys 102A	Physics Lab	1			Phys 103	Physics II Lecture	3
	Elect*	Cultural History	3			Phys 103A	Physics II Lab	1
	Recommended Minimum Credits/Semester		18			Recommended Minimum Credits/Semester		18
Year 3	*Arch 327*	*Environmental Control Systems II*	3			*Arch 323*	*Construction II*	3
	Arch 329	*Structures II*	3			*Arch 364*	*Studio IV*	5
	Arch 363	*Studio III*	5			*Arch 382*	*History IV*	3
	Arch 381	*History III*	3			*Arch 472*	*Prog and Proj Dev*	3
	CS 104	Computer Programming	3			Elect ǂ ǂ	Basic SS	3
	Recommended Minimum Credits/Semester		17			Recommended Minimum Credits/Semester		17
Year 4	*Arch 423*	*Construction III*	3			*Arch 464*	*Options II Studio*******	5
	Arch 429	*Structures III*	3			*Arch Elect*		3
	Arch 463	*Options I Studio*	5			Elect***	Lit/Hist/Phil/STS	3
	Arch Elect		3			Elect ǂ ǂ	Basic SS	3
	PE	Phys Ed	1			PE	Phys Ed	1
	Recommended Minimum Credits/Semester		15			Recommended Minimum Credits/Semester		15
Year 5	*Arch 563*	*Comprehensive I Studio*	5			*Arch 564*	*Comprehensive II Studio*	5
	Arch 558	*Professional Practice*	3			*Arch 565*	*Comprehensive Studio Lab*	1
	Arch Elect		3			*Arch Elect*		3
	Arch Elect		3			Free Elect	(Professional or Gen. Ed.)	3
	Elect**	Open Humanities	3			Mgmt 390	Management	3
						HSS****	Capstone	3
	Recommended Minimum Credits/Semester		17			Recommended Minimum Credits/Semester		18

The minimum credit requirement for graduation is the successful completion of 164 credits of prescribed courses within the curriculum and the maintenances of a 2.0 average. Students are required to maintain a minimum 2.0 cumulative to advance to each succeeding year.
i All Bachelor of Architecture students are required to take Math 113
ii Basic Social Sciences GUR: Six (6) credits in basic (100 and 200 level) Social Sciences (SS 201, Econ 265, Econ 266, EPS 202, STS 258 or any of the following Rutgers-Newark courses: R070:203 or 204, R790:201 or 202, R830:101 or 102, R920:201 or 202, R202:201. Students may take R220:101 or 102 instead of Econ 265 or 266.)
*The Cultural History courses are The Pre-Modern World (HUM 211), The Making of the Modern World (HUM 212), and the Twentieth-Century World (HIST 213). Students also may take approved introductory course at Rutgers-Newark to fulfill the Cultural History Requirement.
**Open Elect in Hum/SS: One 300-level course in English, social science, theater, literature, history, philosophy or STS or any 300-level Rutgers-Newark course in humanities, social sciences, fine arts or performing arts. (prefixes 070, 080, 081, 202, 220, 350, 352, 420, 510, 512, 560, 570, 700, 701, 370, 790,, 810, 830, 861, 920, 940 , 965, 988)
***Lit/Hist/Phil/STS: One 300 level course in lit, hist or philosophy or STS or approved 300-level Rutgers Course with prefix 350 (English Literature), 352 (American Literature), 510 (History), 512 (American History) or 730 (Philosophy).
****Three (3) credits in a 400-level senior seminar in the humanities or social sciences(HSS 401; HSS 402, HSS 403, HSS 404, HSS 405, HSS 406, HSS 407, HSS 408, HSS 491).
***** Students entering the fourth year of the 5 year B. Arch degree must have passed all 100, 200 and 300 level courses in the architecture core curriculum.
****** Arch 464 Options studio can also be taken during the summer as a Siena studio or in the spring of 5th year.

Minimum Credit Distribution

General (non-architecture) Studies		Professional Studies	
· Required courses with other than architectural content	32	· Courses with architectural content required of all students	96
· Elective courses with other than architectural content	12	· Elective courses with architectural content	18
	47		117

Table 1

CoAD Bachelor of Architecture Degree

Minimum Credit Distribution

General (Non Architecture) Studies (47 total credits)

Required courses with other than architectural content

Course #	Course Title	Cr.
CS 104	Computer Programming	3
Frsh Sem	Seminar	0
HSS****	Capstone	3
HUM 101	English Writ, Spk, Thinking	3
HUM 102	English Writ, Spk, Thinking II	3
Math 120	Probability and Statistics	1
Math 107 or 113ǂ	Trigonometry or Finite Math & Calc I	3
Math 113 or 115ǂ	Finite Math & Calc I or Analytic Geometry	3
Mgmt 390	Management	3
PE	Phys Ed	1
PE	Phys Ed	1
Phys 102	Physics I Lecture	3
Phys 102A	Physics Lab	1
Phys 103	Physics II Lecture	3
Phys 103A	Physics II Lab	1
	Sub-total	32

Elective courses with other than architectural content

Course #	Course Title	Cr.
Elect ǂǂ	Basic SS	3
Elect ǂǂ	Basic SS	3
Elect*	Cultural History	3
Elect**	Open Humanities	3
Elect***	Lit/Hist/Phil/STS	3
	Sub-total	15

Professional Studies (117 total credits)

Courses w/ arch. content required of all students

Course #	Course Title	Cr.
Arch 155	*Modes of Comm I*	3
Arch 156	*Modes of Comm II*	3
Arch 163	*Design I*	5
Arch 164	*Design II*	5
Arch 223	*Construction I*	3
Arch 227	*Environmental Control Systems I*	3
Arch 229	*Structures I*	3
Arch 251	*History I*	3
Arch 252	*History II*	3
Arch 263	*Studio I*	5
Arch 264	*Studio II*	5
Arch 323	*Construction II*	3
Arch 327	*Environmental Control Systems II*	3
Arch 329	*Structures II*	3
Arch 363	*Studio III*	5
Arch 364	*Studio IV*	5
Arch 381	*History III*	3
Arch 382	*History IV*	3
Arch 423	*Construction III*	3
Arch 429	*Structures III*	3
Arch 463	*Options I Studio*	5
Arch 464	*Options II Studio******	5
Arch 558	*Professional Practice*	3
Arch 563	*Comprehensive I Studio*	5
Arch 564	*Comprehensive II Studio*	5
Arch 565	*Comprehensive Studio Lab*	1
	Sub-total	96

Elective courses with architectural content

Arch Elect		3
Arch Elect		3
Arch Elect		3
Arch Elect		3
Arch Elect		3
Free Elect	(Professional or Gen. Ed.)	3
	Sub-total	18

Outline of the Curriculum - Master of Architecture

The New Jersey School of Architecture's graduate program offers a number of post-baccalaureate programs of study to accommodate both individuals with an NAAB-accredited undergraduate professional degree, and college graduates with either no background in architecture or a non-NAAB accredited four-year pre-professional degrees in architecture. The graduate program in architecture presently comprises four degree programs: the NAAB-accredited Master of Architecture (M. Arch); the Master in Infrastructure Planning (MIP); the non-accredited Master of Science in Architecture (M.S. Arch) and the Ph.D. in Urban Systems.

The core of the program is the professional Master of Architecture degree (M. Arch). In the spring of 2012, the faculty voted to restructure the Master of Architecture degree track by reducing the length of study from seven to six semesters. This change increased the credit hour requirement from 97 to 102, primarily through increasing the credit hours in each studio from 5 to 6. This change was instituted to "add value to our curriculum and strengthen our offerings in the graduate program." It also makes the program more competitive with other graduate schools at a time when prospective students are increasingly scrutinizing the relationship between value and time out of the workforce when considering advance degrees. A corresponding revision of the graduate curriculum accompanied this change in duration and credit hours. A key element of the revised curriculum is the reorganization of the studio and building systems sequence to build a more tightly ordered and synchronized core curriculum that culminates in a 4th semester comprehensive design studio. In this light, all required building systems courses—Construction, Structures, and Environmental Systems— will be more closely coordinated with the core studio sequence and will be completed by the conclusion of the third semester. In the 4th semester, a new course, Arch 547G - 4D Integration, will be taught alongside the comprehensive building design studio to better enable the delivery of thoughtfully designed and well-integrated projects. Additional changes include the re-sequencing of the visualization and representation courses and the addition of a new required theory course, Situating Practice, that introduces students to major streams of thought in architectural practice and discourse through a close reading of important texts and buildings (this course will be assigned a permanent course number upon Graduate Council approval in Fall 2013). The 2013/2014 academic year will conclude our transition from the seven to the six-semester sequence. Our incoming first year class will be the first to follow the revised six-semester curriculum in its entirety.

The full 102-credit program is designed for students without prior studies in architecture. In some instances, students with a prior education in architecture may require fewer credits based upon their level of development and previous coursework taken. The M.Arch. degree program combines a required professional core curriculum with an array of elective courses designed to keep students abreast of technical and theoretical developments in the field. Throughout the curriculum, and particularly in the building systems sequence, there is an emphasis on sustainable design that is bolstered by both a certificate program and a Master of Science degree with this concentration.

The graduate program continues to develop in order to incorporate a clear emphasis on digital design and design of communities. Digital design is introduced in the first architectural graphics course (Arch 555G) and is reinforced and extended in a second, complementary course (Arch 500G) that is devoted entirely to digital applications.

Arch 547G - 4D Integration (a new addition to the curriculum that will run for the first time in the spring of 2014) further strengthens the students' digital proficiency by examining the role of digital tools in project development and delivery. In addition, digital methods and tools are utilized throughout the design studio sequence and an options studio focused on digital processes in design is offered in the third year.

Design of communities is addressed in two ways: first, as a key element of the core studio sequence, and in the options studio sequence where students have the opportunity to take either M.Arch. or M.I.P. studios that focus on community design issues in the New Jersey / New York region and sometimes beyond. Beginning in the first term of the core studio sequence, students are introduced to the discipline and its methods through a series of projects that connect the spatial, formal, and organizational capacity of architecture to social systems from the scale of an individual dwelling to that of the community of dwellings. The second term is devoted to the planning and design of a medium to high-density residential community. In the third semester students explore the theme of public architecture, focusing on the social and cultural function of architecture through the design of a public building in a metropolitan context. In both core and options studios students are afforded the opportunity to address design issues in local communities. In the fall of 2013, for example, two studios will work on real community design projects in New Jersey. The third semester core studio, working closely with the community and the State's Local Planning Services agency, will focus on the design of a community court and justice center in Linden, New Jersey. An options studio, meanwhile, will work with the City of Hoboken to develop proposals for a new Multi-Service Center to replace the current facility that was substantially damaged during Hurricane Sandy. A more complete description of NJSOA's efforts at community engagement may be found in Section I.1.3 E. Architectural Education and the Public Good.

The M. Arch program is structured as a two-year core followed by a two-semester options sequence. The program consists of a sequential grouping of courses including design studios, history/theory, technical subjects, and fundamentals of graphic and computer literacy over the first four semesters in the Core curriculum. Additional design studios and elective courses form the basic requirements for the remaining two semesters, which are designated as the Options sequence. The program is the equivalent of six semesters in total.

Core M.Arch Curriculum

The core curriculum consists of a carefully coordinated four-semester studio sequence accompanied by courses in history/theory, graphics/digital applications, and the recently revised building systems sequence. While all design studios are expected to incorporate, at increasing levels of sophistication, certain essential principles (accessibility, sustainability, human behavior, precedent), there is a clear emphasis within each semester of the core, correlated with an appropriate building type and scale on the one hand, and with the technology sequence on the other. The core studios operate as a single studio with one or two sections coordinated by one of the section leaders. Desk critiques are conducted by section, while seminars, reviews, and field trips are approached collectively.

First Year, Fall Term

A graduate architecture program represents a steep learning curve for most students, particularly for those coming from undergraduate backgrounds in non-design

disciplines. As one graduate student commented, "It's a whole new way of thinking." The first year curriculum is necessarily focused on introducing students to the language of architecture, understood in three senses: the formal principles and operations that underlie design methodology; the terms and concepts that constitute the oral and written architectural discourse; and the tools of representation, both analog and digital, that describe this language in visual terms.

The fall studio introduces students to the fundamentals of architectural design through a focus on architecture's role in organizing activities in space and time. Particular emphasis is placed—in concert with both the required architectural graphics course and architectural theory course—on the development of the conceptual and technical tools necessary for conceiving, developing and communicating architectural ideas. Projects move across scales but all are focused on ideas of inhabitation. This focus provides an analytical framework with which to connect design methodologies to the production of carefully calibrated architectural environments – to foreground, in other words, the deep and fundamental relationship between architecture and human action. The studio begins with an analysis – utilizing diagrams, composite drawings, and physical and digital models – of two significant domestic precedents. Through this exercise the students identify a set of concepts, principles and, ultimately, rules for the organization through architectural design of material, surface, volume, and space. Following this analytical exercise, the students produce a hybrid design – or 'monster' – that bears the genetic markings of each precedent. Through this project, the students learn to move from analysis as reflection to design as projection, to connect concepts not only to forms but also to organizational frameworks.

Students learn to move from analysis as reflection to design as projection, to connect concepts not only to forms but also to organizational frameworks.

The next project of the fall term is the design of a small house that must negotiate, or more aptly choreograph, two living trajectories, both in sync and at odds with one another. The program is delivered in the form of a client interview and the students are first asked to diagram the actions and interactions of each partner in order to establish a spatial and temporal basis for their design. Throughout the process they must identify a set of rules, akin to those identified in the analysis of the precedents, which guide the architectural development of the house.

The final project of the term uses the house designed in the previous project as a building block for the production of a residential urban field. This aggregation is devised according to the principles and concepts originated in the design of the house itself but reworked to achieve new densities, to foster new relationships, and to suggest forms of dwelling in the city.

The transitions in scale and levels of complexity in the studio emphasize the range of applications of architectural investigation and introduce students to new modes of analysis and documentation. The projects ask students to probe for fundamental issues at all scales and to identify the means to abstract and notate their discoveries. It develops a sequence of thinking based on investigation/ research, analysis/ documentation, and speculation/representation. Some of the projects are undertaken in teams, thus imbuing the students with the value and necessity of collaborative work from the outset.

These studio exercises are supported by courses in architectural visualization, construction, history and theory. Arch 555G - Architectural Graphics emphasizes the use of drawing, in its myriad forms, as a tool for both the development and

communication of architecture. Arch 541G - Construction I introduces basic construction materials, techniques, and typologies through a comparative study of low-rise wood, steel and concrete structures. In this class students undertake a detailed investigation of a significant large-scale component from the second studio project, thereby foregrounding the critical relationship between building assembly methods and decision-making in the design process. Arch 528G - Architectural History I uses significant historical structures as a springboard to understanding how and why different architectural historians have viewed the same building through different lenses. The course helps students grasp the complexity of architectural production and its grounding in specific historical conditions. Finally, Situating Practice, the new theory course, introduces students to major streams of thought in architectural practice and discourse through a close reading of important texts and buildings. In lectures, readings and drawing assignments, the students will be exposed to, and analyze, how ideas are put into action through architectural design.

First Year, Spring Term

The second semester studio builds on the foundation design concepts introduced in the first term by applying them to a project of greater site and programmatic complexity. In this core studio, students tackle the design of a medium to high-density residential project in an urban setting. This not only introduces students to the relationship between architecture and its urban context, it also extends the investigations of the first as regards the relationship between architecture and human activity.

The studio begins with an analysis of the site and the program. Students work in teams to gather relevant site information in order to establish the physical, political (zoning, etc.) and environmental parameters of the project. Individually they analyze the program and begin to conceptualize the relationship between community and privacy, at the large scale of the group and at the human scale of the individual with the expressed goal that the building design clearly express the relationship between the collective and the individual as this constructs the idea and reality of a community. With this series of mapping and diagramming exercises the students explore how architects access, analyze and act on information in conceptualizing and developing a design proposal.

Working with both physical and digital models, the students then begin the process of translating organizational concepts into architectural form. Therefore, in addition to exploring issues of site and community, the studio focuses on structure, materiality and construction in both the conception and development phases of the work. Environmental factors are also assessed and environmental response strategies are incorporated in the design.

These areas of investigation are supported by the next two courses in the building systems sequence, which are focused on structural applications and climatic response. Arch 545G - Structures I focuses on the principles of structural behavior in withstanding gravity and lateral forces and on the evolution, range, and appropriate application of structural systems and the criteria for selecting various structural systems in contemporary architecture. Arch 543G - Environmental Control Systems I is an introductory survey looking at environmental performance in buildings with a focus on the building envelope. Principles and practices studied in both courses are applied in the design studio. Moreover, knowledge and skills developed in Arch 500G - Computer Applications in Design are also brought to bear on the work of the design studio.

This course completes the visualization and representation sequence, focusing on more advanced digital modeling and introducing the students to Building Information Modeling applications. Architectural History II completes the second semester curriculum. Students study the emergence of modernism in architecture, exploring the history of western architectural thought and production up to the contemporary period.

Second Year, Fall Term
The third semester focuses on public architecture through the design of a civic building (most commonly a library, courthouse, museum or school) in a metropolitan setting. Students are led through a series of exercises that explore conceptual design through historical precedent, narrative and story telling, programmatic and site analysis, and sequence of movement. Each investigation is explored through production of models and/or drawings. A short first project continues the exploration of ordering systems introduced in the first year. An extended design project of a medium size public building such as a library or school provides the canvas on which to deploy the principles under discussion. This building type offers ground for speculation ("what is the role of a library in the digital age?" "what is the social function of a civic building?") and presents an array of archetypal architectural issues for students to consider: public vs. private places, singular vs. repetitive elements, "servant" vs. "served" components, inside-outside relationships, the "architectural promenade", etc. The emphasis is on editing ideas to produce a clarified concept and a clear partí.

As the building scale becomes more complex, students are asked to make more decisions about its material character – the structural system and the opacity, transparency and texture of the exterior envelope. They are aided in these concerns by concurrent coursework in the building systems sequence. The intention of Arch 542G - Construction II is to provide an overview of the systems, components, and assemblies used in the articulation of mid-rise commercial, residential and civic architecture. Arch 548G - Structures II explores methods of structural computation and investigates hybrid and complex structural systems. Finally, Arch 544G - Environmental Control Systems II focuses on the understanding of the principles, performance criteria, and applications of environmental and building service systems.

Second Year, Spring Term
The comprehensive design studio is the culmination of the Graduate Core sequence. Students are expected to demonstrate the ability to integrate technical and historical content in the delivery of a conceptually strong and formally rigorous building design. The particular design subject of this studio will vary by year (and perhaps by section) but the expectations as regards deliverables will be constant.

A student's successful completion of this studio requires that they satisfy the requirements of SPC B.6 Comprehensive Design and all its sub-criteria. In these studios, students focus intensively on the development of materials and methods, structural systems, environmental response and mechanical systems. Thorough documentation is required for each aspect of the project, both traditional orthographic drawings, but also, increasingly, integrated digital models. This documentation must demonstrate the integration of all building systems—structure, environmental, building envelope, mechanical, and material and assembly—into a coherent and thoughtful architectural project.

With this in mind, concurrently with the comprehensive design studio, students also take Arch 547G - 4D Integration. This is a new required course that functions as the terminal module in the Building Systems sequence. In this course, students focus on the use of computing, including B.I.M. software, as it facilitates and enhances opportunities for the intelligent integration of the totality of building systems in the architectural design and building delivery process. Class projects are coordinated with the project development phases in the comprehensive studio.

Third Year

Focus on cutting edge digital design tools and methods, sustainable architecture, the role of architecture in shaping the public realm, and, increasingly, strategies for the production of resilient urbanism and architecture...

The third and final year of the program is comprised of a two-semester, advanced options studio sequence. This consists of a range of studio offerings in both the fall and spring semesters that are designed to expose the students to contemporary developments in the field. These studios typically focus on cutting edge digital design tools and methods, sustainable architecture, the role of architecture in shaping the public realm, and, increasingly, strategies for the production of resilient urbanism and architecture. In fall 2013 a studio led by Rhett Russo will explore the impact of technology on society and culture through the application of advanced computer software in the design of a visitor center for the space shuttle at Liberty Science Center in Jersey City, NJ. A second, led by Keith Krumwiede, will explore the theme of public architecture through the design of a Multi-Service Center for the City of Hoboken. This studio is being run in response to a request by the city to assist it in upgrading city buildings and facilities following the devastation wrought by Hurricane Sandy. Additionally, students have the option of enrolling in the Master of Infrastructure Planning studio that allows them to explore design at a larger scale, and enables dual degree students to take a studio that will count toward both M. Arch and MIP degrees.

Required History / Theory Sequence

The required history / theory sequence is comprised of five courses, Architectural History I & II, Situating Practice, and two selectives, one of which must be in the area of Non-Western history or theory. As in the undergraduate program, the graduate history/theory sequence is designed to connect the broad arc of architectural history to contemporary issues and concerns. In this regard, the courses continuously move backwards and forwards in time, tracking concepts and tracing lines of influence, to instill an awareness in students of the key relationship between later ideas, practices and projects and earlier historical moments.

Arch 528G - History of Architecture I (3-0-3)

The aim of this course is two-fold: to introduce the students to different methodologies and approaches to architectural history and to reinforce their knowledge of it. After an introduction to some key questions on architectural history as a field of inquiry, the course will turn to case studies drawn from antiquity to the nineteenth century and examine each by looking at the different ways architectural historians have treated them. The course is not about teaching the facts, but about the different perspectives that architecture can be viewed from. Class meetings are structured in three stages: presentation of the case study by the instructor, a discussion of the literature assigned for each case study, and a discussion of up to three buildings from later periods which have some affiliation with the period studied.

Arch XXXG – Situating Practice (3-0-3) (Pending Graduate Council approval Fall 2013)

Situating Practice, a new introductory architectural theory course, explores the critical relationship between theory and practice by focusing on three aspects of the

architectural project: the project (building, drawing or text) itself; the theoretical or discursive context of the project; and the critical response to or influence of the project. The ambition of the course is to introduce students—within a professional degree program—to the question of how to both see architecture and think about it. In light of the rapid changes to the profession in recent years in terms of its relationship to the environment, social consciousness, global economics, politics, technology, and education, this course seeks to reframe "architecture theory," and specifically the evolution of concepts of space—traditionally thought to be external to the profession—as "architecture" itself. As such, the course will grapple with the possibility of an instrumentalized discourse as a means of situating contemporary practice against a rich backdrop of historical and theoretical discussion. This course will be taught for the first time in the fall of 2013 as a required special topics class. It will be officially added to the M.Arch. catalog following approval by the University Graduate Council in Fall 2013.

Arch 529G - History of Architecture II (3-0-3) prerequisite: Arch 528G
This course extends the methodology of Architectural History I in its exploration of the development of modern architecture from its origins in the 19th century up through to the contemporary moment. The past, present and future are considered as a continuum and as such the course focuses on the interplay between temporal periods with the idea that the "Project of Modern Architecture" will be subject to study and scrutiny. In order to better situate the present moment in the lineage of modern architectural thought and practice, the course begins now and moves both backwards in time while also speculating on future developments.

Courses continuously move backwards and forwards in time, tracking concepts and tracing lines of influence, to instill an awareness in students of the key relationship between later ideas, practices, and projects and earlier historical moments.

We will try to think of the past, the present, and the future as a continuum, and as a project. The interplay between temporal periods will be a central part of our methodology.

Selective in Non-Western History or Theory
The final course in the History / Theory sequence is a required selective in Non-Western Art and/or architecture. Students are required to take one selective in either their fourth, fifth, or sixth semester. Recent selectives include the following:

Arch 662-006 – Japanese Architecture
This course is an in-depth examination of Japanese architecture, from its historical underpinnings in the building traditions of Southeast Asia and Polynesia up to its impact on the development of early modern architecture and design. Initial studies will explore the basic principles of spatial and temporal organization in Japanese culture as they were impacted by both the physical context of Japan's climate and topography as well as the cultural influence of Buddhist, Confucian and Shinto thought and practice. Against this background, the course tracks mutual eastern and western influences across time, studying the influences of western technologies and models of social organization on Japanese culture and architecture and the reciprocal influence of Japanese spatial and aesthetic practices on the development of modern architecture in the west.

Arch 662-009 – Project Japan / China Rising
The first section of this seminar, Project Japan, studies the WORDS of the Metabolists—as collected in texts and interviews in Rem Koolhaas and Hans Ulrich Obrist's text Project Japan: Metabolism Talks—in relation to their WORKS. The words describe a

remarkable period of upheaval and transition in world architecture; the works display an unprecedented design vision and vocabulary with remarkable hints of today's morphological investigations. In the second section of the seminar, China Rising, the current situation in China will be analyzed, looking for current signs of comparable beginnings by understanding conditions in the Pacific Rim that are changing the planet once again.

Arch 662-003 Islamic Art at the Metropolitan Museum of Art
Using the Metropolitan Museum of Art as a laboratory (while also making references to other museums), this seminar examines issues related to the display of Islamic art and architecture in the "Western" world. The refurbishing of the Islamic sections of the world's two leading museums, the Metropolitan Museum of Art in New York and the Louvre in Paris attests to the shifts in understanding and interpreting a culture historically considered the ultimate "other." This course deconstructs some of the still-enduring exhibition clichés by situating them in their historic contexts. The format consists of presentations by the instructor, discussions based on readings, visits to the Museum, and student presentations.

Required Building Systems Sequence
The building systems sequence is comprised of courses in Construction, Structures and Environmental Control Systems (ECS). These are structured in a manner that reinforces the students' awareness and understanding of the mutual impact of each area upon the other in the design, development and delivery of architecture. The sequence begins in the first semester with Construction I, which is carefully coordinated with the first core design studio. Structures I and ECS I are required in the second semester and are complimentary in that while one address the "bones" of the building, the other focuses on the "skin." In the third semester, Construction II, Structures II and ECS II are required. These courses cover more advanced systems and applications as well furthering the students' understanding of the necessity for integrated design thinking. The sequence culminates with Arch 547G - 4D Integration, a capstone systems course taught alongside Comprehensive Design Studio, thereby better enabling the delivery of thoughtfully designed and well-integrated projects.

Arch 541G - Construction I
This course provides a foundation in the fundamental nature of construction systems and assemblies. A focus on the tectonics of structural systems introduces students to the technological limits and challenges of the design process. The course focuses primarily on low-rise construction in wood, steel and masonry. It explores the fundamental nature of these materials and their various assembly methods. The course further explores the productive interrelationship between building services (including mechanical, plumbing and electrical systems), structural systems, and construction materials and methods in the design and delivery of architecture. Course material is delivered through lectures and readings and is further explored in a series of drawing assignments connected to student design work in Arch 500G - Architectural Design I.

Arch 543G - Environmental Control Systems I: Thermal Design of Building Enclosures
This course introduces students to the basic principles of environmental control and building service systems as they are impacted by - and influence the design of - the building envelope. This course primarily covers thermal comfort in the built environment, which includes systems and strategies for heating, cooling and ventilating buildings. It focuses primarily on the design of the building envelope—as well as on building orientation—as a performative thermal interface between outside and inside.

Arch 545G - Structures I: Structural Principles and Applications
This structures course focuses on the principles of structural behavior in withstanding gravity and lateral forces as well as on the evolution, range, and appropriate application of contemporary structural systems in various types of building systems. Students are introduced to a wide range of structural principles and examine the composition, as well as performance, of structural systems in the context of contemporary design practice. The objective of this course is to enable students to skillfully demonstrate structural knowledge, and exhibit intuitive wisdom in the application of that knowledge. The course aims to develop structural awareness in an instinctive, yet focused manner.

Arch 542G - Construction II
This course continues the methodology established in Construction I and provides an overview of the systems, components, and assemblies used in the design and construction of mid-rise commercial, academic, civic and institutional architecture. The course examines the implications of different structural systems in the design and building process. The integration and coordination of structural, climate control and enclosure systems is studied through the detailed examination of roof, floor, and wall assemblies. Through a series of lectures and readings, the course explores the methodology of assembling the various components and systems that meet at the confluence of design and construction.

Arch 544G - Environmental Control Systems II
This course provides an understanding of the basic principles and appropriate application of interior environmental control systems. The course inverts the approach of ECS I, which focuses on the design of the envelope as environmental interface, and instead addresses the design of environmental control systems—heating, cooling and lighting—as a consequence of and in relation to the building envelope. As with ECS I, issues of sustainable design are paramount. The course also provides an introduction to aspects of plumbing, vertical transportation systems, and life safety in building design.

Arch 548G - Structures II: Structural Computation
This is an advanced course dealing with structural design and computation that concludes with rigorous case study investigations of hybrid and complex structural systems. Utilizing a practical approach combined with computerized methods of analysis, structural calculation, and design, the course covers the design of steel, wood and reinforced concrete structures. The course focuses on the relationship between the structural decision-making process and the conception and development of an architectural proposal. Issues regarding the coordination and integration of the structural system with other architectural factors—use, maintenance, aesthetics, and mechanical and other systems—are addressed.

Arch 547G – 4D Integration
This is a new required course that uses in-depth, detailed case studies of various construction types, from small scale to large, from simple to complex, to illustrate the totality of building systems integration. Coursework will employ software to examine construction sequences, building components, and shop drawings and their relationship to the design process. It functions essentially as the terminal module in the Construction/Structures/ECS sequence as well as further strengthening the student's digital proficiency by examining the role of digital tools in project development and delivery. Work in the class will be closely coordinated with the design project in Architectural Design IV: the Comprehensive Design Studio.

Professional Practice Sequence
Two courses, Building and Development and Professional Practice, are required during the last year of the curriculum. These courses address the NAAB criteria whose content focuses on legal responsibilities, code compliance, programming, office management, and leadership roles.

Arch 579G – Professional Practice
This course is a forum for examination of the structure and practices of the profession of architecture. The relationship between architecture, the arts, society and the role of architecture as a business are explored. The formal and informal relationships between architects and between architects and clients, government officials, and consultants are studied. The basic principles of office management for the small and large architectural firm are introduced. Issues related to professional ethics and liability are discussed.

Arch 569G – Building and Development
The course examines the role of the architect as it relates to the complex environment of conflicting interests that is the building and construction industry. Students are introduced to the various roles and responsibilities of other, non-architectural, participants—clients and developers, building and planning officials, construction managers, and contractors—in the building process. The course is based on the premise that a full understanding of the intricacies of the building process will enable an architect to be more effective. Furthermore, it emphasizes the necessity of carefully coordinated cooperation and collaboration among all participants in the building design and production process. The course also explores ways in which the architect can add value and align interests.

Visualization, Representation and Fabrication Sequence
This two-course sequence focuses on delivering both analogue and digital drawing and modeling skills in a manner that ties the tools of architectural visualization and communication to a rigorous conceptual process.

Arch 555G – Architectural Graphics
Architectural Graphics complements the work in studio and focuses on the use of drawing as a tool for both the development and communication of architecture. Initial work examines the connection between forms and methods of two-dimensional and three-dimensional drawing and projection. Beginning with free hand 3D sketching as both a tool of description and design, students then move on to orthographic projection and its translation into 3D isometric projection and then onto digital modeling. This combination of analog and digital instruction in the graphics course is intended to build digital skills while providing a base line understanding of what is being represented and the relationship between 2D and 3D projections.

Arch 500G – Computer Applications in Design
The purpose of this course is to interrogate the relationships between drawing, measuring, representation, geometry and presentation techniques. Students will acquire proficiency with a variety of digital tools currently in use in professional practice. Students will develop a single project through a series of exercises designed to explore the implicit relationships between digital tools and architectural production with forays into methods of digital fabrication. This course concentrates on 3D software, with an emphasis on digital modeling applications and an introduction to Building Information Modeling (BIM). The software applications will be applied throughout the semester to work in Architectural Design II.

Graphic Overview of M.Arch. Curriculum

2013

M.Arch Professional Course
Curriculum with Credit Hours and Distribution

Professional Course
Elective Course

	Fall					Spring		
	Course #	Course Title	Cr.			Course #	Course Title	Cr.
Year 1	*Arch*	*Situating Practice*	3			*Arch 500G*	*Comp. Applications to Design*	3
	Arch 501G	*Architectural Design I*	6			*Arch 502G*	*Architectural Design II*	6
	Arch 528G	*History of Architecture I*	3			*Arch 529G*	*History of Architecture II*	3
	Arch 541G	*Const. I*	3			*Arch 543G*	*ECS I - Analysis Bldg. Envelope*	*3*
	Arch 555G	*Architectural Graphics*	3			*Arch 545G*	*Structures I*	3
	Recommended Minimum Credits/Semester		18			Recommended Minimum Credits/Semester		18
Year 2	*Arch 503G*	*Architectural Design III*	6			*Arch 504G*	*Architectural Design IV*	6
	Arch 542G	*Const. II*	*3*			*Arch 547G*	*4D Integration*	3
	Arch 544G	*ECS II*	3			Arch	Elective**	3
	Arch 548G	*Structures II*	3			Arch	Elective**	3
	Arch	Elective**	3			Recommended Minimum Credits/Semester		15
	Recommended Minimum Credits/Semester		18					
Year 3	*Arch 505G*	*Advanced Design Options*	6			*Arch 506G*	*Comprehensive Design*	6
	Arch 569G	*Building & Development*	3			*Arch*	*Hist/Theory Selective (Non-Western)**	3
	Arch	*Hist/Theory Selective**	3			*Arch 579G*	*Professional Practice*	3
	Arch	Elective**	3			Free	Elective†	3
	Free	Elective†	3					
	Recommended Minimum Credits/Semester		18			Recommended Minimum Credits/Semester		15

The minimum credit requirement for graduation is the successful completion of 102 credits of prescribed courses within the curriculum and the maintenance of a 3.0 average.
Students are required to maintain a minimum 3.0 cumulative and an annual studio GPA minimum of 2.75 to advance to each succeeding year.
* History/Theory Selectives may be also be used to fulfill Arch Elective & Free Elective Requirements
** Arch Electives may also be used to fulfill Free Elective Requirements
† Skills-based courses taught under Arch designations are considered "Free Electives"
†Free Electives may be graduate courses in any department of NJIT or Rutgers-Newark.
The order of electives shown above is not mandatory -- students may take History/Theory Elective coursework at any time.
MIP and USYS Courses may also be used to fulfill History/Theory, Arch, and Free Elective Requirements, as appropriate.
Students applying for advanced placement may receive a waiver of individual course requirements on documentation of prior passage of a comparable course with a grade of 3.0 or higher.
In the case of design studio coursework, confirmation of course comparability must be confirmed by presentation of design portfolio.

Table 2

CoAD Master of Architecture Degree Minimum Credit Distribution

Courses w/ arch. content required of all students		
Course #	Course Title	Cr.
Arch 500G	Comp. Applications to Design	3
Arch 501G	Architectural Design I	6
Arch 502G	Architectural Design II	6
Arch 503G	Architectural Design III	6
Arch 504G	Architectural Design IV	6
Arch 505G	Advanced Design Options	6
Arch 506G	Comprehensive Design	6
Arch 528G	History of Architecture I	3
Arch 529G	History of Architecture II	3
Arch 541G	Construction I	3
Arch 542G	Construction II	3
Arch 543G	Environmental Control Systems I	3
Arch 544G	Environmental Control Systems II	3
Arch 545G	Structures I	3
Arch 547G	4D Integration	3
Arch 548G	Structures II	3
Arch 555G	Architectural Graphics	3
Arch 569G	Building & Development	3
Arch 579G	Professional Practice	3
Arch 662	Situating Practice	3
Arch	Hist/Theory Selective*	3
Arch	Hist/Theory Selective (Non-Western)*	3
	Sub-total	84
Elective courses with architectural content		
Arch	Elective**	3
Arch	Elective**	3
Arch	Elective**	3
Arch	Elective**	3
Free	Elective†	3
Free	Elective†	3
	Sub-total	18

Minors, Dual Degrees and Certificates

NJSOA students can choose from over 20 undergraduate academic minors. Minors require a minimum number of credits half of which must be in upper level courses and earned at NJIT.

Refer to http://catalog.njit.edu/undergraduate/frontmatter/academicminors.php for a complete list of minors and their requirements. Popular undergraduate minors include Environmental Studies and Sustainability; Construction Management and Engineering Technology; and Theater Arts and Technology. A significant number of B.Arch. students also pursue Master degrees taken sequentially. For a full list, see I.1.1 History and Mission under Mutual Benefits for NJIT and CoAD. M.Arch. students can also pursue 12-credit graduate certificate programs in specialized areas of professional employment. Refer to http://www.njit.edu/gradstudy/programs/certificates.php for a full list.

II.2.3 Curriculum Review and Development

The NJSOA maintains a three-tiered framework for the evaluation and subsequent development of curricular policies. These include midterm and final evaluations of student work across all studios in a given year; regular Curriculum Committee meetings; and regular CoAD faculty meetings. In addition, the NJSOA schedules a variety of outreach activities (often in concert with A+D) directly to faculty, students or student organizations to advance curricular development. Further described below are both the three-tiered system and outreach activities.

Midterm and Final Evaluations by studio faculty establish common grading standards. These evaluations occur for all B.Arch years and M.Arch comprehensive studios. Organized through the studio-year coordinators, these meetings also allow the faculty to determine whether the work satisfies curricular goals established in the syllabus and that outcomes are consistent across all studios. Typical curricular goals include meeting NAAB requirements, coordinating with allied courses such as systems or history, and following the academic objectives of the School. The coordinator brings these findings to the NJSOA Curriculum Committee for guidance and makes necessary adjustments.

NJSOA Curriculum Committee works cooperatively with the administration to make recommendations to the faculty for the development of the curriculum and advise on other academic matters. The committee includes a balance of elected faculty and those serving as coordinators of studio years and degree programs. The committee addresses relevant issues involving pedagogical structure and educational goals, as well as the content and method of required courses and electives. The committee meets approximately every three weeks during the Academic Year. The CoAD faculty voted in the formation of the committee in May of 2012 and it began meeting regularly the following September. The Curriculum Committee replaced an *ad hoc* Coordinator's Committee that had been meeting regularly since 2008. This committee drafted substantive changes to the B. Arch and M. Arch curricula that then received full approval from the CoAD faculty and requisite NJIT faculty committees for implementation.

The members of the 2014 NJSOA Curriculum Committee are as follows:

Name	*Title*	*Registered*
Matthew Burgermaster	Assistant Professor	x
Gabrielle Esperdy	Associate Professor	x
Julio Garcia Figueroa	University Lecturer	NJ, NY
Richard Garber	Associate Professor	NJ, NY, MD
Keith Krumwiede	Associate Professor	x
Jesse LeCavalier	Associate Professor	x
Michael Mostoller	Distinguished Professor	NJ
Thomas Navin	University Lecturer	NJ, NY
Thomas Ogorzalek	University Lecturer	x
Joy Siegel	University Lecturer	NJ, NY
Steve Zdepski	Associate Professor	NJ, NY, VA
Darius Sollohub (ex officio)	Director, Associate Professor	NJ, NY
Andrzej Zarzycki	Associate Professor	NY
Tom Barry	Adjunct Faculty	NY

CoAD Faculty Meetings are typically scheduled by the Dean's office. These occur twice each term unless there is cause to hold an emergency meeting to deal with a time sensitive matter. CoAD Faculty meetings typically follow Roberts Rules of Order. The Dean's office sends out an agenda in advance that describes activities that will occur, such as reports from the Dean and the Directors of both Schools on relevant matters, or to schedule voting on motions presented. All faculty are invited and all, including adjuncts, hold voting rights, and the right to introduce a motion. Staff are invited but cannot vote. To be heard, the language of the motion must be sent by the Dean's office via email to the entire faculty 14 calendar days prior to the meeting. The full CoAD faculty can debate, vote on, or vote to table, any motion brought before it. The faculty member making the motion can choose or decline to accept amendments from the floor. Motions prevail based on a majority vote. All recommended motions emanating from the NJSOA Curriculum Committee follow this process. A majority vote is required for the administration to take a motion under consideration.

Town Meetings are held on an *ad hoc* basis to discuss an important issue such as a curricular change. The faculty debated the recent changes to the B. Arch and M. Arch curricula to give actionable feedback to the committees responsible. Recently, the School has recorded these meetings and made them available through I-University.

AIAS and Alpha Rho Chi The administration and faculty periodically meet with students from these organization to typically discuss a specific topic. In the past, the administration, faculty and students have called these meetings. Faculty called the most recent meeting to discuss school-wide computer policy.

Pizza with the Dean offers a regular open forum for students to express their concerns, to stay informed about school matters, and enjoy some pizza.

Colloquia At intervals of approximately five years, the Dean has invited faculty to colloquia where they discuss broadly issues related to the school. The most recent of these in spring 2011 focused on the Millennial generation and their relationship with design education. For this colloquium, co-chairs assigned readings and moderated discussion on two afternoons. Findings were published subsequently.

II.3 – EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION

Students admitted to the B.Arch program undergo three or four layers of evaluation:

1) The first review occurs at the Office of the Registrar, which verifies the accreditation of the prior institution and the comparability of courses. Where a course is equivalent to that fulfilling a GUR at NJIT and the grade is "C" or higher, transfer credit is awarded. In the case of Math and Physics coursework, an additional departmental review and/or placement exam may be required.

2) The second review is undertaken by an undergraduate advisor within CoAD, who verifies the comparability of non-studio architecture and design courses to NJIT courses. In most cases, students are coming from partner institutions with whom we have long experience, both as regards to course content and outcomes within our program. When a course is clearly equivalent and the grade is "C" or higher, transfer credit is awarded. In any instances where there are questions regarding the equivalency of the course or the grade, students are directed by the advisor to provide more complete materials such as syllabus and work samples. Should questions still remain, the student is directed to the faculty member within CoAD teaching the course for which transfer credit is sought. In such cases, the judgment of the faculty member is determinate.

3) The third review is undertaken by either the Associate Dean for Academic Affairs or the Director of the School of Architecture, who will review the student's portfolio in all instances where advanced placement in design studio is sought. The same grade standard as noted above applies.

Students admitted to the M.Arch program must have an accredited bachelor's degree as a condition of admission. With regard to professional degree requirements, the process remains the same as noted above, with the following exceptions:

1) Waiver of graduate professional degree coursework on the basis of undergraduate or graduate coursework requires a grade of "B" or higher.

2) Portfolio review is undertaken jointly by the Manager of Graduate Programs and the Director of the Graduate Program.

II.4 – PUBLIC INFORMATION

II.4.1 Statement on NAAB-Accredited Degrees

To ensure an understanding of the body of knowledge and skills that constitute a professional education in architecture, as well as of the accredited professional degree, the School of Architecture highlights our status as having two accredited NAAB professional programs in multiple ways, through various media.

The School cites its NAAB accreditation using exact language from the NAAB Conditions for Accreditation, Appendix 5, page 38, in materials produced specifically for the NJSOA population. All incoming students receive the Student Guidebook and all faculty receive the Faculty Guidebook both of which outline School and University policies and regulations, and contain FAQs and directory information, plus the NAAB statement on accreditation. The handbooks inform students and faculty how to access the NAAB 2009 Conditions for Accreditation, including the Student Performance Criteria, and reference the NAAB website.

The guidebooks are also available at:
http://architecture.njit.edu/docs/Faculty_Guidebook_2013.pdf
http://architecture.njit.edu/docs/Student_Guidebook_2013.pdf

The School's online catalogues are posted on the School of Architecture web site: http://catalog.njit.edu. Both NJSOA graduate and undergraduate catalogues detail all degree programs and excerpt language from the NAAB Student Performance Criteria. Printed catalogues are no longer provided by the University; however, the School works closely with the University to maintain current and accurate information on our website and the online course catalogue.

The School also relies heavily on the use of the website at http://architecture.njit.edu to disseminate information about the NJSOA program and its accreditation. Nearly all printed materials are published on the School's website. This allows the School to frequently update information displayed. Further, we find that the website is the first point of reference among a large number of prospective students before contacting the School directly. The required "Statement on NAAB-Accredited Degrees" is included on the NJSOA website at http://architecture.njit.edu/students/naab.php; http://architecture.njit.edu/academics/undergraduate/b-arch.php; http://architecture.njit.edu/academics/graduate/m-arch.php

II.4.2 Access to NAAB Conditions and Procedures

NAAB 2009 Conditions for Accreditation and Procedures for Accreditation, 2012 Edition, can be found in the Littman Library in Weston Hall and on the NJSOA website at: http://architecture.njit.edu/students/naab.php

II.4.3 Access to Career Development Information

In addition to creating overt modules in the professional practice courses at both the undergraduate and graduate levels, University Lecturer, Mark Bess has been assigned to act as liaison between NCARB and the AIA and NJSOA students. In that regard, Mark functions as the School's IDP Education Coordinator and in addition to the enhanced

coursework, Mark organizes seminars with AIANJ and NCARB New Jersey State IDP Coordinator, Ashton Quintin, to walk all students through the entire IDP process. Students can find career information on the NJOSA website at:
http://architecture.njit.edu/students/naab.php
http://architecture.njit.edu/careers/index.php

II.4.4 Public Access to APRs and VTRs

Public access to the Architectural Program Report (2007) and the Visiting Team Report (2008) can be gained in the Littman Library in Weston Hall. Earlier APRs and VTRs are also available in the Library.

II.4.5 ARE Pass Rates

This information is available via a link on the NJSOA website.at: http://architecture.njit.edu/students/naab.php

PART THREE (III) – PROGRESS SINCE THE LAST SITE VISIT

III.1 - SUMMARY OF RESPONSES TO THE TEAM FINDINGS

III.1.1 Responses to Conditions Not Met

13.9 Non-Western Traditions Understanding of parallel and divergent canons and traditions of architecture and urban design in the non-Western world

Met Not Met B. Arch. [x] [ ]
Met Not Met M. Arch. [ ] [x]

"This criterion is met in the B. Arch. program. In the M. Arch. program, the Team found evidence that some non-western material was presented in the required History of Architecture courses (ARCH 528G and ARCH 529G), but did not find consistent evidence of understanding in the student work. The Team noted a limited number of examples of non-western precedents referenced in the studio work of either program."

A course in Islamic Architectural History is taught annually by Professor Celik (Ph.D.) and a course in Japanese Architectural History is taught annually by Adjunct Professor Little (Ph.D.). Specifically in response to the NAAB's findings, the M. Arch. program now requires that at least one of these be taken to fulfill the course requirement for non-western history.

Many studio options deal with sites in other continents. Examples are: comprehensive studios in Africa, Japan and Europe.

13.14 Accessibility Ability to design both site and building to accommodate individuals with varying physical abilities

Met Not Met B. Arch. [ ] [x]
Met Not Met M. Arch. [ ] [x]

"As in the previous visit, this criterion is not met by either the B. Arch. or the M. Arch. program. Both curricula state that accessibility is a criterion for evaluating the comprehensive studio. While it appears that most students may have an understanding of accessibility, most of the projects submitted for Team review did not provide sufficient evidence to consistently demonstrate the ability of students to incorporate the fundamentals of accessibility in their design work. Additionally, the Team found insufficient evidence that students can demonstrate the ability to design accessible sites, particularly in the immediate vicinity of a building and its points of entry/ egress."

Beginning in the second year undergraduate sequence and in particular in studios in the 3rd year undergraduate sequence, as well as in the Pre-Comp/Comp sequence, in both the undergraduate and graduate levels, students are required to address the design of code compliant sites and buildings. Students are required to review the ADA design guidelines and integrate these standards into their designs with increasing rigor as they move through their studio sequence.

In the undergraduate program, as per the third year project statement, all designs must comply with ADA guidelines. This applies especially to entry and exit conditions, bathroom and housing unit design as well as site design. In the multi-residential projects, each unit must have an ADA compliant bathroom and kitchen. All students are given online links to proper resources and are also given an overview of ADA requirements.

13.20 Life-Safety Understanding of the basic principles of life-safety systems with an emphasis on egress

Met Not Met B. Arch. [ ] [x]
Met Not Met M. Arch. [ ] [x]

"While the Team found that students were exposed to the basic principles of life-safety systems in the coursework of each program, there was insufficient evidence in the student work that they had gained an understanding of those principles. For both programs, the Team found too many examples of a failure to incorporate life safety principles into projects."

Building system courses at both the undergraduate and graduate levels require that students demonstrate understanding of life safety / egress code issues including horizontal and vertical egress. Generally, comprehensive and pre-comprehensive studios also require evidence of the integration of basic egress considerations in student work.

As per the third year project statements, projects require that all designs must comply with the International Building Code. The circulation systems, including egress requirements are especially emphasized. This includes elevators, egress stairs, dead ends, egress widths and maximum travel distance. These lessons are emphasized in the fall of third year through two multi-residential projects and in the spring through two small civic structures such as a primary school and branch library.

13.31 Professional Development Understanding of the role of internship in obtaining licensure and registration and the mutual rights and responsibilities of interns and employers

Met Not Met B. Arch. [ ] [x]
Met Not Met M. Arch. [ ] [x]

"Although some students who choose to pursue employment in architectural offices appear to glean this information informally through the internship experience itself, the Team found insufficient evidence in either program that the role of internship in obtaining licensure and registration --especially for the local jurisdiction-- is being understood by each student either through the program coursework or through school-sponsored presentations as required by this criterion."

In addition to creating overt modules in the professional practice courses at both the undergraduate (Arch 558) and graduate levels (Arch 579G), University Lecturer, Mark Bess has been assigned to act as liaison between NCARB and the AIA and NJSOA students. In that regard, Mark functions as the School's IDP Education Coordinator and in addition to the enhanced coursework, Mark organizes seminars with AIANJ and NCARB New Jersey State IDP Coordinator, Ashton Quintin, to walk all students through the entire IDP process.

III.1.2 Responses to Causes of Concern

"The Causes for Concern identified by this Visiting Team center principally on issues of financial support and on aspects of intramural communication. Among these:

- The current proposal to expand the New Jersey School of Architecture through the creation of a multi-disciplinary College of Design will undoubtedly increase the unit's contribution to NJIT –if properly planned, fully communicated and financially supported-- even as the school maintains and continues to improve the quality and aspirations of its successful existing programs in architecture.

- As new programs develop, the school of architecture at NJIT has the potential to sustain and expand its current academic and research connections. Careful and inclusive planning, development, and communication with all stakeholders, are each critical to ensuring that all opportunities are maximized.

- Due to a large adjunct faculty component which delivers over fifty percent of its academic credit hours, the school of architecture faces several unique conditions. Among them: Institutional support for this excellent, dedicated constituent of the faculty ranks is limited, and the compensation and benefit structure for these positions is of significant concern. At this point in time, the adjunct academic faculty system functions well in the classroom due to the energy and commitment of the individuals who hold those positions. However, there is a critical need to explore and resolve the allocation of resources for this major sector of the school and program faculty.

- The overall financial resources of the school of architecture are strained but largely adequate to provide its current levels of service. However, there are significant areas, such as information technology, digital fabrication shops, and printing services for which additional funding is currently necessary in order to support the school's digitally driven curriculum. The situation is projected to become even more critical as the State of New Jersey and its system of public education currently face major budget reductions.

- The stated aspirations of the school and of the central administration at NJIT are to expand the New Jersey School of Architecture into a College of Design that will include programs in industrial design, digital design, fine arts and interior design. In the face of a potential economic downturn, the financial resources that will support this growth must be very carefully considered –particularly in order to continue to support the existing programs of the school at the level required to achieve the stated goals of academic leadership in professional architecture education."

The expansion of the College to include the School of Art + Design has run smoothly. Inclusive planning and ease of communication among College stakeholders is thriving in our tightknit community and is bolstered during regular weekly Wednesday lunchtime meetings which include the Dean, the Associate Dean for Academic Affairs, the Associate Dean for Administrative Affairs, the Director of the School of Architecture and the Director of the School of Art + Design.

Since the last NAAB visit, two new tenure track lines and two university lecturer lines have been added in the School of Architecture. This enables nearly all required non-studio courses to be taught by full time faculty. The University has supported the

establishment of the College of Architecture and Design and the School of Art + Design within it, with programs in digital design, industrial design and interior design, creating more opportunities for architecture students to be exposed to a wider culture of design and in some cases to pursue alternate or additional courses of study. The University has established a new programs budget for exclusive use of the School of Art + Design to fund these new start up programs. In addition, two new tenure track faculty lines and two new university lecturer lines, for a total of three, have been added in the School of Art + Design. None of the programs in the New Jersey School of Architecture which were in place during the last NAAB accreditation visit have been diminished, curtailed or canceled.

In addition to new faculty hires the University has supported the College with funding for new equipment. Since the last accreditation visit we have added a Laser Lab with two new laser cutters, for a total of four, and a new CNC machine, for a total of two, for use by both Schools. The Print Shop, with expanded hours, continues to successfully handle all student printing needs for the College.

III.2 - SUMMARY OF RESPONSES TO CHANGES IN THE NAAB CONDITIONS

Changes made in the 2009 Conditions are largely consistent with practices already underway at the NJSOA since the last visit and have helped validate decisions made by the School to the wider University and to its own faculty. Those regarding long-range planning (I.1.4 Long-Range Planning) affirm the academic planning the NJSOA has undergone every six years. The 2012 plan, entitled Smart Design/Smart Technology, will guide the School through the next six years. Having the plan in place empowered the NJSOA to hire three new faculty members to fulfill goals the plan identified. That the NAAB now requires such a plan enhanced the NJSOA's petition to hire these individuals within a competitive process at NJIT.

Through the two previous accreditation cycles, the NJSOA has carefully crafted its comprehensive studio curriculum to achieve its internal curricular goals. To have these validated by the NAAB supports the case for the NJSOA's standards to the faculty as a whole. In its own criteria, the NJSOA requires one additional SPC - B. 10. Building Envelope Systems – to bring the total to twelve that the School requires of comprehensive studio projects. The NJSOA respectfully recommends that the NAAB consider adding this sub-criterion to the B.6. Comprehensive Design criterion.

PART FOUR (IV) – SUPPLEMENTAL INFORMATION

IV.1 - DESCRIPTION OF POLICIES AND PROCEDURES FOR EVALUATING STUDENT WORK

The NJSOA Curriculum Committee administers the content and method of all courses in the NAAB-accredited degree programs and oversees the evaluation of all student work. The committee includes a balance of elected faculty and those serving as coordinators of studio years as well as those supervising the sequence of technology, history and practice courses. In each studio year, coordinators are responsible for maintaining common grading standards and organizing the review of all studio coursework at the midterm and the final. These review sessions allow that year's studio faculty to determine whether the work satisfies curricular goals established in the syllabus and that outcomes are consistent across all studios. These meetings also allow faculty to gauge whether allied courses such as structures, systems and history are adequately informing design decisions. The studio coordinators bring these findings to the NJSOA Curriculum Committee for guidance to make necessary adjustments. For an in depth description of how this evaluation process fits with curricular development, please refer to II.2.3 Curriculum Review and Development.

IV 2 – COURSE DESCRIPTIONS

Number & Title of Course (total credits awarded): Arch 155, Modes of Design Communication, 3 cr

Course Description:
This course will explore analog and digital tools of contemporary architectural communication and also the ways in which these tools can be used as an integral part of the design process.

Course Goals & Objectives:
- Students learn analog tools including freehand drawing, hardline drawing and hand-tool model building
- Students learn to use digital tools including software for desktop publishing (Corel), visualization (Rhino and 3DS Max) and building information modeling (Revit)

Topical Outline:
Freehand drawing exercise 1 (10%)
Freehand drawing exercise 2 (10%)
Orthographic projections (25%)
3D representation (25%)
Portfolio (15%)
Class participation (10%)

Prerequisites: Course taken in coordination with Arch 163, Design I

Textbooks/Learning Resources:
Clark, Roger H., and Michael Pause. Precedents in Architecture Analytic Diagrams, Formative Ideas, and Partis.New York: Wiley, 2004.
Lupton, Ellen, and Phillips Jennifer Cole. Graphic Design The New Basics. New York: Princeton Architectural, 2008.
Lupton, Ellen. Thinking with Type A Critical Guide for Designers, Writers, Editors, & Students (Design Briefs). New York: Princeton Architectural, 2007.
Moussavi, Farshid. The Function of Ornament. Barcelona: Actar, 2006.
Reiser, Jesse. Atlas of Novel Tectonics. New York: Princeton Architectural, 2005.
Rowe, Colin. The Mathematics of the Ideal Villa and Other Essays. New York: MIT, 1982.
Unwin, Simon. Analysing Architecture. London: Routledge, 2009.
Yee, Rendow. Architectural Drawing: a Visual Compendium of Types and Methods. Hoboken: John Wiley & Sons, 2007.

Offered (semester and year):
Fall 2012

Faculty:
Abigail Coover (coordinator), Thomas Barry, Emilia Ferri, Angus Eade, Julio Figueroa, Matt Gosser, Brent Klokis, Andrew Mailloux, Nidhip Mehta, Jorge Prado, Jennifer Switala

Number & Title of Course (total credits awarded):
Arch 156, Modes of Design Communication, 3 cr

Course Description:
This course will continue an exploration of analog and digital tools of contemporary architectural communication started with Arch 155.

Course Goals & Objectives:
- Students learn analog tools including freehand drawing, hardline drawing and hand-tool model building
- Students learn to use digital tools including software for desktop publishing (Corel), visualization (Rhino and 3DS Max) and building information modeling (Revit)

Student Performance Criterion/a addressed:

Topical Outline:
Project 1/ Chair Study (15%)
Project 2/ Case Study (40%)
Project 3/ Assemblage (25%)
Project 4/ Portfolio (10%)
Archive (5%)
Class participation (5%)

Prerequisites:
Arch 155

Textbooks/Learning Resources:
Clark, Roger H., and Michael Pause. Precedents in Architecture Analytic Diagrams, Formative Ideas, and Partis.New York: Wiley, 2004.
Lupton, Ellen, and Phillips Jennifer Cole. Graphic Design The New Basics. New York: Princeton Architectural, 2008.
Lupton, Ellen. Thinking with Type A Critical Guide for Designers, Writers, Editors, & Students (Design Briefs). New York: Princeton Architectural, 2007.
Moussavi, Farshid. The Function of Ornament. Barcelona: Actar, 2006.
Reiser, Jesse. Atlas of Novel Tectonics. New York: Princeton Architectural, 2005.
Rowe, Colin. The Mathematics of the Ideal Villa and Other Essays. New York: MIT, 1982.
Unwin, Simon. Analysing Architecture. London: Routledge, 2009.
Yee, Rendow. Architectural Drawing: a Visual Compendium of Types and Methods. Hoboken: John Wiley & Sons, 2007.

Offered (semester and year):
Spring 2013

Faculty: Abigail Coover (coordinator), Thomas Barry, Emilia Ferri, Angus Eade, Julio Figueroa, Nidhip Mehta, Jorge Prado, Joy Siegel, Kathleen Sowle, Jennifer Switala, Tim Wood

Number & Title of Course (total credits awarded): Arch 163 Introduction to Design I, 5 cr

Course Description: Introduction to Design I is a studio course that provides students opportunities to develop communication skills and to develop visual literacy.

Course Goals and Objectives: (1) To provide sufficient exposure to the design process and different design fields to help students understand whether or not they want to pursue a career in a design or design-related profession; (2) provide opportunities to learn how to use, and achieve a measure of proficiency with, a combination of traditional and digital drawing and modeling techniques to use as tools for thinking and representation; (3) provide exposure to, and initial practice with, an iterative and reflective design process; (4) provide assignments and instruction to facilitate development of an ability to apply formal principles of basic design to applications with architectural, structural, and/or functional uses; (5) provide an opportunity to develop the ability to clearly present a project to others.

Student Performance Criterion/a addressed (list number and title):

Topical Outline (include percentage of time in course spent in each subject area):
Completion of a number of discrete projects is required. Projects are graded roughly in proportion to the time allotted. In general, work is graded based on the presence of a concept, the extent and development of the concept, and the execution of the concept - including proficiency and craft in presentation (traditional and digital media). Grading Allocations are as follows:

Attendance :	Required (per University Requirements, unexcused absences in excess of 5 will result in advisement to withdraw from the course or receive a failing grade)
Kepler Posting:	Required
Information Literacy Quizzes:	Required
Brick Structure:	5%
Series A Exercise 1:	10%
Series A Exercise 2:	10%
Series A Exercise 3:	10%
Series B Exercise 1:	10%
Series B Exercise 2:	10%
Series B Exercise 3:	10%
Final Project:	30%
Class Participation:	5%

Prerequisites:
None (ARCH 155 is a co-requisite)

Textbooks/Learning Resources:
Preliminary edition of the Introduction to Design course reader. All course readings can be found in digital format through the architecture library webpage.

Offered (semester and year):
Fall 2012

Faculty Assigned:
Daniel Kopec (Coordinator); Thomas Barry, Chris Booth, Emilia Ferri, Gabe Fuentes, Anthony Harrington, Brent Klokis, Jesse Lecavalier, Josh Lindemans, Ernesto Martinez, Jennifer Switala

Number & Title of Course (total credits awarded): ARCH 164, Introduction to Design II, 5 cr

Course Description: Architecture 164 is an introductory studio course that builds on ARCH 163 to develop students' communication skills, focusing on the use of graphic language.

Course Goals & Objectives (list):

- provide sufficient exposure to the design process and different design fields to help students understand whether or not they want to pursue a career in a design or design-related profession;
- provide opportunities to learn how to use, and achieve a measure of proficiency with, a combination of traditional and digital drawing and modeling techniques to use as tools for thinking and representation;
- provide exposure to, and initial practice with, an iterative and reflective design process;
- provide assignments and instruction to facilitate development of an ability to apply formal principles of basic design to applications with architectural, structural, and/or functional uses;
- provide an opportunity to develop the ability to clearly present a project to others.

Student Performance Criterion/a addressed (list number and title):
N/A

Topical Outline (include percentage of time in course spent in each subject area):

Activities and assignments are designed to introduce students to architecture and allied arts including - but not limited to - furniture design, industrial/product design, interior and landscape design, and fine arts/painting/sculpture. Completion of a number of discrete projects is required. Projects are graded roughly in proportion to the time allotted. In general, work is graded based on the presence of a concept, the extent of the concept, and the execution of the concept - including proficiency and craft in presentation (traditional and digital media). Grading Allocations are as follows:

Attendance :	Required (per University Requirements, unexcused absences in excess of 5 will result in advisement to withdraw from the course or receive a failing grade)
Kepler Posting :	Required
Chair:	10%
Work Space:	25%
Music Space:	25%
Pavilion:	30%
Class Participation:	10%

Prerequisites:
ARCH 163

Textbooks/Learning Resources:
Introduction to Architecture by Frank Ching

Offered (semester and year): Spring 2012

Faculty assigned (list all faculty assigned during the two academic years prior to the visit): Daniel Kopec, Coordinator; Thomas Barry; Esteban Beita; Brian DeLuna; Emilia Ferri; Gabriel Fuentes; Matthew Gosser; Anthony Harrington; Nathan Hume; Ceu Martinez; Ernesto Martinez; Jennifer Switala

Number & Title of Course: Architecture 223, Construction 1, 3 cr

Course Description: Through a series of lectures, readings, and drawing assignments, this course will provide an overview of the nature of the construction process.

Course Goals & Objectives (list):

- students will focus on the art and science of the building process
- identify and establish criteria that affect the selection of structure, systems, materials, methods, and assemblies

Student Performance Criterion/a addressed:
A.4 Technical Documentation
B.2 Accessibility
B.3 Sustainability
B.9 Structural Systems
B.10 Building Envelope Systems
B.12 Building Materials and Assemblies

Topical Outline:
Technical Documentation 10%
Accessibility 10%
Sustainability 10%
Structural Systems 30%
Building Envelope Systems 10%
Building Materials and Assemblies 30%

Prerequisites:
None

Textbooks/Learning Resources:
Building Construction Illustrated-4 ed Francis DK Ching John Wiley & Sons
Visual Dictionary of Architecture-2 ed Francis DK CHing John Wiley & Sons

Offered (semester and year):
Fall 2012

Faculty assigned:
Matthew Peckham

Number & Title of Course: Environmental Control Systems, Arch 227, 3 cr

Course Description: Environmental Control Systems I (Arch 227) covers thermal comfort in the built environment. This includes systems and strategies for heating, cooling and ventilating buildings.

Course Goals & Objectives:

- Students will learn the impact of temperature, moisture, pressure, light, and sound on the built environment.
- Students will learn about mechanical, electrical, and plumbing systems (both passive and active) that affect and modulate the above-listed factors.

Student Performance Criterion/a addressed (list number and title):
N/A

Topical Outline (include percentage of time in course spent in each subject area):

This course will have a midterm and final examination. Additionally, completion of a number of discrete projects is required. Project submissions are treated as professional documents and will be graded on their clarity and appearance as well as their content. Grading Allocations are as follows:

Project 01. Research :	10%
Project 02. Analysis:	20%
Project 03. Heat Transfer:	10%
Midterm Examination :	30%
Final Examination :	30%

Prerequisites:
None

Textbooks/Learning Resources:
Grondzik, Walter, Alison Kwok, Benjamin Stein, and John Reynolds. Mechanical and Electrical Equipment for Buildings. 11th Ed. Hoboken, NJ: John Wiley and Sons, 2010.
ISBN: 978-0-470-19565-9

Lechner, Norbert. Heating, Cooling, Lighting: Sustainable Design Methods for Architects. 3rd Ed. Hoboken, NJ: John Wiley and Sons, 2009.
ISBN: 978-0-470-04809-2

Offered (semester and year):
Spring 2012

Faculty assigned:
Daniel Kopec

ARCH 229, Structures 1, 3 Cr

Course Description: This course begins with the history of building structures, continues by introducing structural behavior, forces and responses in structural systems, and concludes with an introduction to static structural analysis.

Course Goals & Objectives:
Throughout the semester students are given the opportunity to rigorously examine a number of structural issues through lectures, assignments and research to allow them to focus on the following objectives:

☐to develop an understanding of the principles of structural behavior and criteria for the selection of an appropriate structural system for a particular design;

☐to develop knowledge of stresses that are present in structural systems, materials, and members;

☐to develop a broad knowledge of structural proportions and connections;

☐to develop an awareness of structures not as absolutes, but as context dependent constructs that are contingent upon the intensions of the designers in a specific technological and cultural milieu;

☐review examples of significant buildings and structures that use innovative types of structural systems;

☐to develop an independent sense of scrutiny and experimentation in the pursuit of structural ideas in the context of architectural practice and, to articulate versatile and imaginative structural analogies;

Student Performance Criteria addressed:

Ability:	A.4,	Technical Documentation
	A.7,	Use of Precedents
	B.6 (B.9),	Comprehensive Design / Structural Systems
Understanding:	A.9,	Historical Traditions and Global Culture
	A.11,	Applied Research
	B.9,	Structural Systems
	B10,	Building Envelope Systems
	B12,	Building Materials and Assemblies

Topical Outline (include percentage of time in course spent in each subject area):
Structural Theory (15%)
Structural Systems (Framed, Trussed, Funicular, Shell) (35%)
Selection of Structural Systems (5%)
New Materials, New Ideas in Structuring Architecture (5%)
[Historical] Survey of Significant Buildings and Structures (20%)
Static Structural Analysis (20%)

Prerequisites:
MATH 113, Finite Mathematics and Calculus I

Textbooks/Learning Resources:
Moore, Fuller. *Understanding Structures* (McGraw-Hill, 1998)
Allan and Zalewski. *Form and Forces; Designing Efficient and Expressive Structure* (Wiley 2009)
Sandaker, B, Eggen, A & Cruvellier, M. *The Structural Basis of Architecture.* (Routledge 2011)
Ching, F, Onouye, B, and Zuberbuhler, D. *Building Structures Illustrated* (Wiley, 2009)

Offered (semester and year):
Spring and Summer only; annually

Faculty assigned:
Andrzej Zarzycki (F/T)
Rima Taher (F/T)

Number & Title of Course: Arch 251, History of Architecture I, 3 cr

Course Description: This course introduces architectural history, theory, and design, providing a conceptual framework for looking at and analyzing the built environment.

Course Goals & Objectives:

- to enhance students' awareness of how architecture from prehistory to the Middle Ages reflects the cultural developments of the period
- to foster students' understanding of the relationship between building and urban forms and social and political systems
- to promote students' ability to analyze programmatic, formal, and technological precedents and design solutions to assist in the development of studio projects
- to develop students' ability to think critically and to sharpen their analytical skills
- to coordinate the study of history with design studio and building systems, arguing for an integrated approach to the study of architecture.

Student Performance Criterion/a addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline:

- In class writing/sketching, Ching,Jarzombek, Prakesh/diagramming exercises, **10%** of final grade (cumulative)
- Moodle Forums & Flickr participation, **10%** of final grade (cumulative)
- Historic & Contemporary Building Analysis I & II, **20%** each; **40%** of final grade
  Final exam, **40%** of final grade

Prerequisites:
HUM 101

Textbooks/Learning Resources:

- Ching, Frances, Mark Jarzombek, and Vikramaditya Prakash. A Global History of Architecture. 2nd Edition. New York: Wiley, 2010.
- Kostof, Spiro. A History of Architecture: Settings and Rituals. 2nd Edition. New York: Oxford, 1995.
- Bernard Rudofsky, "Preface" to Architecture without Architects: A Short Introduction to Non-Pedigreed Architecture (1964)
- Vitruvius, selections from De Architectura (ca. 25 BCE)
- Le Corbusier, "Eyes that Do Not See III, Automobiles" from Vers une Architecture (1924)
- Bernard Tschumi, "The New Acropolis Museum" and "History Constructed from the Superimposition of the Past and the Present" (2009)
- Procopius, "The Great Church" [Hagia Sophia], De Aedificis (ca. 550 CE)
- Abbot Suger of St. Denis, selections from On What was Done during His Administration (ca. 1144 CE)

Offered (semester and year):
Fall 2012, 2013

Faculty:
Gabrielle Esperdy (F/T)

Number & Title of Course (total credits awarded): History of Architecture 1 (Arch 251), 3 cr

Course Description: This course introduces architectural history, theory and design, from the earliest examples of human occupation, the shaping of space and the transformation of the natural landscape.

Course Goals & Objectives:

- To provide students with a conceptual framework for looking at and analyzing the built environment
- To teach students the history of architecture from prehistory (circa 400,000 BCE) to the late Middle Ages (up to circa 1400 CE) with a global scope, Western and so-called "non-Western" contexts considered in parallel
- To contextualize architectural history in relation to environmental, political, economic, and artistic trends

Student Performance Criterion/a addressed:
A.1. Communication Skills

Topical Outline:

- Moodle posts, 20% course grade
- Building Analysis I assigned, 20% course grade
- Midterm, 20%
- Building Analysis II, 20% course grade
- Final Exam, 20% course grade

Prerequisites: Humanities 101

Textbooks/Learning Resources:

1. Ching, Frances, Mark Jarzombek and Vikramaditya Prakash. *A Global History of Architecture.* 2nd Edition. New York: Wiley, 2010.
2. Kostof, Spiro. *A History of Architecture: Settings and Rituals*. 2nd Edition. New York: Oxford, 1995. (SUGGESTED)

Offered:
Fall 2012

Faculty:
Susan Nowicki (adjunct)

Number & Title of Course: Arch 252, History of Architecture II, 3 cr

Course Description:
This survey considers the architecture, urban forms, and built and natural landscapes from the 15th century to 1900 in Europe, the Americas, the Middle East, and Asia.

Course Goals & Objectives:
This survey of the social, political, technological, functional, and aesthetic concerns of architecture, urban forms, and built and natural landscapes is a continuation of Arch 251. Students learn the following:

- To understand the impact and significance of absolutism, colonialism, nationalism, humanism, the enlightenment, industrialization and modernity to architecture
- To examine buildings, projects, landscapes, urban environments and designers in relation to the social, economic and political climates that produced them
- To offer a global geographic scope with Western and so called "non-Western" contexts considered in parallel
- To draw attention to important innovations in painting and sculpture of the periods
- To identify design precedents and their contemporary recurrence in modern and contemporary building examples

Student Performance Criterion/a addressed:
A.9. Historic Traditions/ Global Culture

Topical Outline:
- Moodle posts- 20% course grade
- Building Analysis I,-20% course grade
- Midterm, 20% course grade
- Building Analysis II,20% course grade
- Final Exam, 20% course grade

Prerequisites:
Arch 251

Textbooks/Learning Resources:
1. Ching, Frances, Mark Jarzombek and Vikramaditya Prakash. *A Global History of Architecture.* 2nd Edition. New York: Wiley, 2010.
2. Kostof, Spiro. *A History of Architecture: Settings and Rituals*. 2nd Edition. New York: Oxford, 1995. (SUGGESTED)

Offered:
Spring 2012, 2013

Faculty assigned:
Susan Nowicki (adjunct)

Number & Title of Course: Arch 263, Undergraduate Design Studio, 5 cr.

Course Description: The first architectural studio of the core curriculum, this course requires students to develop a framework for generating, testing, verifying and validating their designs.

Course Goals & Objectives:

- Students will learn to create a dialog between project requirements and their validation in placement, form, ordering system and material assembly.
- Students will explore the relationship between physical space, behavior and construction as a means to generate, expand and validate an architectural intent, its applicability and expression.
- Students will learn to understand the material assembly of building as it relates to its performance, construction and design intent.
- Students will learn to use multiple 2 and 3 dimensional representational tools as a way to demonstrate and test architectural ideas and strategies.
- Students will use multiple digital and analog representational tools as a way to test and explore architectural design ideas at multiple scales.

Student Performance Criterion/a addressed:

A.1. Communication Skills	B.2 Accessibility
A.2 Design Thinking Skills	B.3 Sustainability
A.3. Visual Communication Skills	B.4 Site Design
A.4 Technical Documentation	B.5 Life Safety
A.5 Investigative Skills	B.8 Environmental Systems
A.6 Fundamental Design Skills	B.9 Structural Systems
A.7 Use of Precedents	B.10 Building Envelope Systems
A.8 Ordering Systems Skills	B.12 Building Materials and Assemblies
A.11 Applied Research	C.1 Collaboration

Topical Outline (include percentage of time in course spent in each subject area):
Readings, research and analysis (15%), Case study analysis (15%), Project-based exercises (50%), Presentation skills (20%)

Prerequisites:
Arch 153 and 154

Textbooks/Learning Resources:
Allen, Edward and Iano Joseph, *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (3rd Edition, John Wiley & Sons, Inc. New York 2002).

Offered (semester and year):
Fall 2012

Faculty assigned:
Fall 2011: Julio Figueroa (Coordinator, University Lecturer), Ersin Altin (Adjunct), Silva Ajemian (Adjunct), Christopher Booth (Adjunct), Susan Bristol (Adjunct), Matthew Burgermaster (Tenure Track), Frederick Cooke (Adjunct), Anthony Harrington (Adjunct), Ersela Kripa (Adjunct), Michael Mostoller (Tenure), Andrzej Zarzycki (Tenure Track).
Fall 2012: Julio Figueroa (Coordinator, University Lecturer), Ersin Altin (Adjunct), Kutan Ayata (Adjunct), Frederick Cooke (Adjunct), Angus Eade (Adjunct), Henry Grosman (Adjunct), Cleve Harp (University Lecturer), William Prince (Adjunct), Andrzej Zarzycki (Tenure Track),Josh Zinder (Adjunct).

Number & Title of Course: ARCH 264, Undergraduate Design Studio, 5 cr

Course Description: Students consider site conditions, construction materials, assembly and their performative relationship to physical, cultural and historical parameters. Through a masonry design-build competition, students test the physical validity of their designs.

Course Goals & Objectives:

- Students will learn to create a dialog between project requirements and their validation in placement, form, ordering system, and material assembly.
- Students will explore the relationship between physical space, behavior, and construction as a means to generate, expand, and validate an architectural intent, its applicability, and expression.
- Students will learn to understand the material assembly of building as it relates to its performance, construction and design intent.
- Students will learn to use multiple 2- and 3-dimensional representational tools as a way to demonstrate and test architectural ideas and strategies.
- Students will use multiple digital and analog representational tools as a way to test and explore architectural design ideas at multiple scales.

Student Performance Criterion/a addressed:

A.1. Communication Skills	B.2 Accessibility
A.2 Design Thinking Skills	B.3 Sustainability
A.3. Visual Communication Skills	B.4 Site Design
A.4 Technical Documentation	B.5 Life Safety
A.5 Investigative Skills	B.8 Environmental Systems
A.6 Fundamental Design Skills	B.9 Structural Systems
A.7 Use of Precedents	B.10 Building Envelope Systems
A.8 Ordering Systems Skills	B.12 Building Materials and Assemblies
A.11 Applied Research	C.1 Collaboration

Topical Outline:
Readings, research and analysis (15%), Project-based exercises (55%), Presentation skills (30%)

Prerequisites:
Arch 153 and 154

Textbooks/Learning Resources:
Allen, Edward and Iano Joseph, *The Architect's Studio Companion: Rules of Thumb for Preliminary Design* (3rd Edition, John Wiley & Sons, Inc. New York 2002)

Offered (semester and year):
Spring only; annually

Faculty assigned:
Spring 2012: Julio Figueroa (Coordinator, University Lecturer), Silva Ajemian (Adjunct), Ersin Altin (Adjunct), Christopher Booth (Adjunct), Matthew Burgermaster (Tenure Track), Frederick Cooke (Adjunct), Angus Eade (Adjunct), Ersela Kripa (Adjunct), Thomas Navin (University Lecturer), Mitch McEwen (Adjunct), Ira Smith (Adjunct).
Spring 2013: Julio Figueroa (Coordinator, University Lecturer), Ersin Altin (Adjunct), Frederick Cooke (Adjunct), Angus Eade (Adjunct), Gabriel Fuentes (Adjunct), Henry Grosman (Adjunct),Ersela Kripa (Adjunct), Jorge Prado (Adjunct), William Prince (Adjunct), Andrew Varela (Adjunct).

Number & Title of Course (total credits awarded): Arch 312, Environmental Education, 3 cr

Course Description:
This elective is designed to provide students with an opportunity to engage gifted and non-gifted pre-k through elementary grade students in active awareness of design related fields.
Course Goals & Objectives:

- To introduce local children to design work by leading workshops, departmental tours, and briefings by faculty about their research

Student Performance Criterion/a addressed:
N/A

Topical Outline:
Class participation, 15%
Teacher Evaluation, 15%
Mid-term review, 20%
Detailed journal, 20%
Final presentation/exhibition, 30%

Prerequisites:
N/A

Textbooks/Learning Resources:
N/A

Offered (semester and year):
Spring 2013

Faculty:
Sandy Moore

Number & Title of Course (total credits awarded): Arch 323, Construction II, 3 credits

Course Description:
This course provides an overview of the systems, components, and assemblies used in the articulation of mid-rise, commercial, academic, civic, and institutional architecture.

Course Goals & Objectives):
- To enable students to have a further understanding of the tectonics of structural systems that have critical implications in the design process and their integration and coordination with other building systems, components, and assemblies
- To give students the means to use structure to express an architectural idea

Student Performance Criterion/a addressed:
A4 Technical Documentation

B12 Building Materials/Assemblies

Topical Outline:
Midterm exam (50%)
Final exam (50%)

Prerequisites:
Arch 223

Textbooks/Learning Resources:
Building Construction Illustrated—4th Edition, Francis DK Ching, John Wiley & Sons, 2007
Visual Dictionary of Architecture—2nd Edition, Francis DK Ching, Van Nostrand Reinhold

Offered (semester and year):
Spring 2013

Faculty:
Matthew Peckham

Number & Title of Course (total credits awarded): ARCH 327, Environmental Control Systems II, 3 cr

Course Description: Environmental Control Systems II focuses on lighting and acoustics. Additionally water resources & plumbing systems, energy & electrical systems, and fire protection systems are covered.

Course Goals & Objectives:

- Students learn about the building envelope (enclosure) as well as internal HVAC systems, as well as lighting and acoustics.
- Additionally water resources & plumbing systems, energy & electrical systems, and fire protection systems are covered in ECS II.

Student Performance Criterion/a addressed (list number and title):

Topical Outline (include percentage of time in course spent in each subject area):

Project 01	10%
Project 02	15%
Project 03	15%
Project 04	10%
Project 05	15%
Examination 01	10%
Examination 02	10%
Final Examination	15%

Prerequisites: ARCH 227

Textbooks/Learning Resources:

Lechner, Norbert. Plumbing, Electricity, Acoustics: Sustainable Design Methods for Architects. Hoboken, NJ: John Wiley and Sons, 2012.
ISBN: 978-1-118-01475-2

Lechner, Norbert. Heating, Cooling, Lighting: Sustainable Design Methods for Architects. 3rd Ed. Hoboken, NJ: John Wiley and Sons, 2009.
ISBN: 978-0-470-04809-2

Offered (semester and year):
Fall 2012

Faculty assigned:
Daniel Kopec

Number & Title of Course (total credits awarded): Arch 329, Structures II, 3 cr

Course Description (limit 25 words):. This course introduces the students to the basic principles of structural analysis and design using traditional structural materials such as steel, reinforced concrete and wood. It uses a practical and simplified approach combined with computerized methods of analysis and design. The course also outlines the principles of designing for lateral forces and lateral stability in high-rise construction.

Course Goals & Objectives (list):

- Students will learn how to select a structural system for a building, and how to lay out a typical floor or roof framing and use some established rules of thumb.
- In a second phase, students are introduced to some analytical methods to help them prove their design decisions beyond the general rules of thumb.
- Students will learn how to structurally design simple structural elements such as beams, columns.
- Some practical assignments and a project are used to illustrate the process with some computer applications.

Student Performance Criterion/a addressed (list number and title):

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedents
A.11. Applied Research
B.9. Structural Systems
B.12. Building Materials and Assembly
C.1.Collaboration
C.3. Client Role in Architecture
C.7. Legal Responsibilities
C.9. Community and Social Responsibility

Topical Outline (include percentage of time in course spent in each subject area):

Lectures (60%)
Regular Assignments (25%)
Main Project (15%)

Prerequisites:

Structures I (ARCH 229)

Textbooks/Learning Resources:

Simplified Engineering for Architects and Builders, 11th Edition, by James Ambrose and Patrick Tripeny, Wiley & Sons, 2011, ISBN # 978-0-470-43627-1
A list of reference is given on the syllabus.

Offered (semester and year):

Fall and summer 2012

Faculty assigned:

Rima Taher

Number & Title of Course (total credits awarded): ARCH 333, Architecture: Image and Word II, 3 cr

Course Description: This course presents films on Architecture in which architects speak about and show their own work.

Course Goals & Objectives:

- Develop an understanding of architectural decisions and design as a response to context, climate and culture.
- Evaluate the relationship between the designer's description of architectural concepts and processes, and architectural outcome itself.
- Documentation of specific works of architecture through four photographic types, utilizing the camera as both an expressive and analytical tool.
- Recording statements from videos about architecture which have universal or lasting value.
- Recording statements from videos about architecture which appear inaccurate or untrue.
- Extended site visits to six seminal works of architecture.

Student Performance Criterion addressed:

A1: Communication Skills
A2: Design Thinking
A3: Visual Communications
A5: Investigative Skills
A7: Use of Precedents

Topical Outline:

a. Word Diary: 25%
b. Image Portfolio: 75%

Prerequisites:

N/A

Textbooks/Learning Resources:

Architectural Photography the Digital Way: Gerry Kopelow, Princeton Architectural Press

Offered:

Spring 2013

Faculty assigned:

Michael Stephen Zdepski (F/T)

Number & Title of Course (total credits awarded): Arch 337, Building Information Modeling, 3 cr

Course Description:
This course will introduce students to the principles and practice of Building Information Modeling. Course exercises and projects are designed to enrich the students' understanding of the potential of this emerging technology.

Course Goals & Objectives:
Upon satisfactory completion of the course, students will be prepared for architectural office-level BIM implementation or for advanced studies in computer modeling systems.

Topical Outline:
Participation (20%)
Semester project (40%)
Final project (40%)

Prerequisites:

Textbooks/Learning Resources:
Commercial Design Using AutoDesk Revit 2013, Daniel John Stine, SDC Publications

Offered (semester and year):
Fall 2012

Faculty:
Vincent Benanti (adjunct)

Number & Title of Course (total credits awarded): Arch 363, Architecture Studio III, 5 credits

Course Description: Third Year Design Studio will reinforce the foundation established in the first two core years**,** the emphasis will expand to include the exploration of urbanism, interpretation of typology and program, and integration of basic building systems. Learning will occur within a design process that is based on research and critical analysis.

Course Goals & Objectives

Assessment of Site and Program Contexts

- Ability to make impressions and nurture impressions
- Ability to gather, filter, dissect, scale, and apply information
- Ability to critically assess site conditions and its multiple contexts
- Ability to critically evaluate and interpret given programs based on the study of historical and contemporary programmatic, formal and typological precedents
- Ability to understand how typology evolves within a specific cultural context
- Ability to critically evaluate and interpret programs based on use and user needs.

Conceptualization of Assessments

- Ability to think in the abstract with thoughts that are general
- Ability to model reality with critical thinking and subjective analysis
- Ability to translate assessments of the urban environment and program into clear conceptual ideas.

Application and Synthesis of Conceptual Ideas into Form

- Ability to make relationships between distinct ideas about site context, programmatic use, and basic building systems to generate a thoughtful, and coherent architecture project
- Ability to translate general and abstract thoughts into architectural strategies
- Ability to apply formal, functional, and construction ordering systems to strengthen strategies for form and space.

Representation

- Ability to select and incorporate multiple two and three dimensional representational mediums for communication of research, assessment, ideas and strategies
- Ability to verbally articulate analysis, ideas and intentions.

Student Performance Criterion/a addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.10. Cultural Diversity
A.11. Applied Research
B. 1. Pre Design
B. 2. Accessibility
B. 3. Sustainability
B. 4. Site Design
B. 5. Life Safety

Topical Outline:

Design (60%), Analysis (30%) Presentation (10%)

Prerequisites: Arch 264

Textbooks/Learning Resources:

Shane, David Grahame, *Recombinant Urbanism: Conceptual Modeling in Architecture, Urban Design and City Theory.* Wiley, 2005.; Ferre, Albert, and Tihamer Salij. *Total Housing: Alternatives to Urban Sprawl.* Actar, 2010.; Allen Edward. *The Architect's Studio Companion.* Wiley, 2006.

Offered: Fall only; annually

Faculty: Joy Siegel (UL), Silva Ajemian (adjunct), James Dart (UL), Brian Loughlin (adjunct), Sabrina Pagani (adjunct), Tony Schuman (Assoc. Prof.), Tim Wood (UL), Ross Woolley (adjunct).

Number & Title of Course: Arch 364, Architecture Studio IV, 5 credits awarded.

Course Description:
This course is a continuation of Arch 363. The emphasis expands to include studying the role of site strategy, and materials and craft in building sustainably and indigenously for a specific climate and culture. The evolving roles of civic architecture in communities is explored. Learning is project based and occurs within a design process that is based on research and critical analysis.

Course Goals & Objectives:

Assessment of Site and Program Contexts

- Ability to make and nurture impressions
- Ability to gather, filter, dissect, scale, and apply information
- Ability to critically assess site conditions and its multiple contexts
- Ability to critically evaluate and interpret given programs based on the study of historical and contemporary programmatic, formal and typological precedents
- Ability to understand how typology evolves within a specific cultural context
- Ability to critically evaluate and interpret programs based on use and user needs.

Conceptualization of Assessments

- Ability to think in the abstract with thoughts that are general
- Ability to model reality with critical thinking and subjective analysis
- Ability to translate assessments of the urban environment and program into clear conceptual ideas.

Application and Synthesis of Conceptual Ideas into Form

- Ability to make relationships between distinct ideas about site context, programmatic use, and basic building systems to generate a thoughtful, and coherent architecture project
- Ability to translate general and abstract thoughts into architectural strategies
- Ability to apply formal, functional, and construction ordering systems to strengthen strategies for form and space.

Representation

- Ability to select and incorporate multiple two and three dimensional representational mediums for communication of research, assessment, ideas and strategies
- Ability to verbally articulate analysis, ideas and intentions.

Student Performance Criteria addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.10. Cultural Diversity
A.11. Applied Research
A.13.9 Non Western Traditions
B.1. Pre Design
B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety

Topical Outline:
Research and Analysis (20%)
Design: Schematic (30%), Development (40%)
Presentation (10%)

Prerequisites: Arch 363.

Learning Resources: (for required readings)
Correa, Charles. "The Public the Private and the Sacred".
Kimmelman, Michael. New York's Public Architecture Gets a Face-Lift, NYTimes.
Mehrotra, Rahul. Urbanization Seminar Series: "The Future of South Asia: A Landscape of Pluralism"
Murdock, James. Beauty and the Book.

Offered:
Spring only; annually
Faculty assigned:
Spring 2012: Joy Siegel (UL),, James Dart (UL), Larry Sassy (adjunct), Tony Schuman (F/T), Sabrina Pagani (adjunct), Jorge Prado (adjunct), Maria Vrdoljak (adjunct),
Spring 2013: Joy Siegel (UL), Silva Ajemian (adjunct), James Dart (UL), Anthony Harrington (adjunct), Tony Schuman (F/T), Jae Shin (adjunct), Roger Smith (adjunct), Tim Woods (UL)

Number & Title of Course (total credits awarded): Arch 381, History of Architecture III, 3 credits

Course Description:
This course examines the history of architecture, urbanism, and the built environment from the Renaissance to the end of the 19th century (c. 1400-1900).

Course Goals & Objectives:
Emphasis is on buildings, projects, and designers examined in relation to the social, economic, and political climates that produced them, with a focus on Western developments and key non-Western contexts. Though arranged according to historical chronology, lecture content is driven by thematic and contextual issues such as humanism, absolutism, colonialism, the Enlightenment, and industrialization. The course goals are as follows:

- to enhance students' awareness of how architecture from the 15th to 19th centuries reflects the cultural developments of the period
- to foster students' understanding of the relationship between architectural and urban forms and social and political systems
- to promote students' ability to analyze programmatic and formal precedents and design solutions to assist in the development of studio projects
- to develop students' ability to think critically and to sharpen their analytical skills

Student Performance Criterion/a addressed:
A10 Cultural Diversity

Topical Outline:
- In class writing/sketching/diagramming exercises, **10%** of final grade
- Quizzes based on primary readings, **10%** of final grade
- Review Presentation & Poster, **20%** of final grade
- Building Analysis, **20%** of final grade
- Final exam, **40%** of final grade

Prerequisites:
Arch 251, 252

Textbooks/Learning Resources:
1. Ching, Frances, Mark Jarzombeck, Vikramaditya Prakesh. A Global History of Architecture. 2nd Edition.New York: Wiley, 2010.
2. Kostof, Spiro. A History of Architecture: Settings and Rituals. 2nd Edition. New York: Oxford, 1995.
3. Selection of primary readings

Offered (semester and year):
Fall 2012, 2013

Faculty:
Gabrielle Esperdy (F/T)

Number & Title of Course (total credits awarded): Arch 382, History of Architecture IV, 3 credits

Course Description:
This course examines the history of modern and contemporary architecture, urbanism and the built environment from the middle of the 20th century to the early 21st century.

Course Goals & Objectives:
- to enhance students' awareness of how modern and contemporary architecture reflects the cultural developments of the period (ca. 1960-present)
- to foster students' understanding of the relationship between architectural and urban forms and social and political systems, historically and in the present day
- to promote students' ability to analyze programmatic and formal precedents and design solutions to assist in the development of studio projects
- to expand students' understanding of historical traditions, global culture, and diversity as embodied in all aspects of the built environment
- to develop students' ability to think critically and to sharpen their communication, design thinking, analytical, and investigative skills

Student Performance Criterion/a addressed:
A1 Communication Skills
C2 Human Behavior

Topical Outline:
- Participation in discussions & in class assignments, **25%** of final grade
- Mid-Term Exam, **25%** of final grade
- Contemporary Building Analysis, **25%** of final grade
- Final exam, **25%** of final grade

Prerequisites:
Arch 251, Arch 252, Arch 381

Textbooks/Learning Resources:
1. Ching, Frances, Mark Jarzombek, Vikramaditya Prakash. A Global History of Architecture. 2nd Edition. New York: Wiley, 2010.
2. Cohen, Jean-Louis. The Future of Architecture. Since 1889. New York/London: Phaidon, 2012.
3. Curtis, William J. Modern Architecture since 1900. New York/London: Phaidon, 1982 or later. [STRONGLY RECOMMENDED]
4. Ghirardo, Diane. Architecture after Modernism. *World of Art*. New York/London: Thames & Hudson, 1996. [STRONGLY RECOMMENDED]
5. Ingersoll, Richard and Spiro Kostoff, A History of World Architecture. New York: Oxford University Press, 2013.

Offered (semester and year):
Spring 2013

Faculty:
Gabrielle Esperdy (F/T)

Number & Title of Course: Arch 419, 619 Architectural Photography, 3 cr

Course Description: Students, after learning manual operation with digital cameras and the 4X5 view camera, apply their skills in weekly assignments challenging their expressive capabilities. Presentations, gallery and museum visits provide study of great photographic works.

Course Goals & Objectives:
☐This course is designed for architecture students in the use of photography to better visualize form in space, 3-D composition in a 2-D format, color, lighting, and to delight in their expressive abilities of the camera.
☐ Students willlearn correlating historical movements in architecture and the visual arts including photography.

Student Performance Criterion/a addressed (list number and title):
A.3. Visual Communication Skills

Topical Outline (include percentage of time in course spent in each subject area):
Photography skills (60%)
Creative application (30%)
Oral presentation (10%)

Prerequisites:
N/A

Textbooks/Learning Resources:
Cervin Robinson and Joel Hershman, *Architecture Transformed: A History of Buildings from 1839 to the Present,* NY Architectural League of America; MIT Press, 1987
Robert Elwall, *Building With Light: The International History of Architectural Photography*, London: Merrell, 2004

Offered:
Fall 2012 and Spring 2013

Faculty assigned:
Nina Prantis (adjunct)

Number & Title of Course: Arch 423, Construction 3: Contemporary Topics + Advanced Applications, 3 cr

Course Description:
This course addresses advanced problems of construction in the context of contemporary issues of integration and high-performance, complex building projects, and non-standard processes.

Course Goals & Objectives:
☐Students will be introduced to advanced, non-standard construction technologies, processes, and practices
☐Students will learn about systems integration for complex design and construction problems
☐Students will learn about a variety of contemporary topics, including: advanced building types, innovative manufacturing processes, alternative forms of practice, new materials, non-standard details, assemblies, and systems, and emerging sustainability + resilient design issues.
☐Students will develop the ability to conduct in-depth, case study analysis of complex buildings
☐Students will develop a creative and critical approach to conventional building construction practices
☐Students will learn to apply technical knowledge to 'hands-on' project-based design problems
☐Students will focus on the detailed design and documentation of a prototypical building envelope
☐Students will use digital software (3D and information modeling) in technical design problems
☐Students will develop knowledge of methods of technical documentation for comprehensive design
☐Students will learn to bridge the traditional divide between design thinking and construction practices

Student Performance Criterion/a addressed:
A.1.Communication Skills, A.2 Design Thinking Skills, A.3.Visual Communication Skills, A.4 Technical Documentation, A.5 Investigative Skills, A.7 Use of Precedents, B.3 Sustainability, B.4 Site Design, B.6, Comprehensive Design, B.8 Environmental Systems, B.9 Structural Systems, B.10 Building Envelope Systems, B.11 Building Service Systems, B.12 Building Materials and Assemblies, C.2 Human Behavior, C.3 Client Role in Architecture, C.6 Leadership

Topical Outline:
Readings, research and analysis (15%)
Project-based exercises (35%)
Case study analysis (50%)

Prerequisites:
ARCH 363, 364 (studio), ARCH 323 (construction)

Textbooks/Learning Resources:
Allen, Edward. *The Architect's Studio Companion.* 4th Edition. (MIT Press, 1993)
Ching, Francis. *Building Construction Illustrated.* 4th Edition. (John Wiley + Sons, 2008)
Bachman, Leonard. Integrated Buildings, The Systems Basis of Architecture. (John Wiley + Sons, 2002)
Deplazes, Andrea, ed. *Constructing Architecture: Materials Processes Structures.* (Birkhauser, 2005)
Ford, Ed. *Details of Modern Architecture.* (MIT Press, 1993)
Ford, Ed. *Details of Modern Architecture.* Volume 2. (MIT Press, 1996)
Moe, Kiel. *Integrated Design in Contemporary Architecture.* (Princeton Architectural Press, 2008)
Rush, Richard. ed. *The Building Systems Integration Handbook/AIA.* (Butterworth-Heinemann, 1991)

Offered:
Spring 2012

Faculty assigned:
Matt Burgermaster (F/T)

Number & Title of Course (total credits awarded): ARCH 429, Structures III, 3 cr

Course Description: This is an advanced structural analysis and design course. It covers the principles of design of reinforced concrete structures first then covers some advanced topics and applications in steel, wood, and masonry structures

Course Goals & Objectives (list):

- To teach the difference between determinate and indeterminate structural systems, and to introduce students to the structural analysis of some indeterminate elements such as continuous beams and rigid frames.
- To teach the analysis and design of various concrete structural elements and slab systems.
- The implementation of structural technology into a practical design project using a 3D-approach with some computerized applications.
- Case studies of complex modern buildings designed by well-known architects or architectural firms.

Student Performance Criterion/a addressed (list number and title):
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.7. Use of Precedents
A.11. Applied Research
B.9. Structural Systems
B.12. Building Materials and Assembly
C.1.Collaboration
C.3. Client Role in Architecture
C.7. Legal Responsibilities
C.9. Community and Social Responsibility

Topical Outline:
Lectures (60%)
Regular Assignments (25%)
Main Project (15%)

Prerequisites:
Structures II (ARCH 329)

Textbooks/Learning Resources:
Simplified Engineering for Architects and Builders, 11th Edition, by James Ambrose and Patrick Tripeny, Wiley & Sons, 2011. A list of references is given on the syllabus.

Offered (semester and year):
Fall 2012

Faculty:
Rima Taher,

Number & Title of Course (total credits awarded): Arch 463, Options 1, 5 credits

Course Description:
The studio project is an *Adega* or winery in the Alentejo region of Portugal.

Course Goals & Objectives:

- to broaden students architectural and cultural knowledge through the development of one semester-long project
- to research wine making processes, develop a program, engage in comprehensive site documentation and analysis, study examples of contemporary winery operations, and design a modern-day winery and visitor center that meets today's challenges

Prerequisites:
4th and 5th year students in good standing

Textbooks/Learning Resources:
Adventurous Wine Architecture, 2006, Michael Webb
Wine Architecture, The Winery Boom, 2008, Herdusgegeben
Wine by Design, 2010, Sean

Offered (semester and year): Fall 2012

Faculty: Prof. Margaret Santos (adjunct)

Number & Title of Course (total credits awarded): Arch 463, Options 1, 5 cr

Course Description: The Habitat studio will design a multi-family affordable housing project in East Orange NJ for the Newark Chapter of Habitat for Humanity (Newark Habitat).

Course Goals & Objectives:

- to broaden students architectural and cultural knowledge through the development of one semester-long project
- to participate in all aspects of the development of a community design project, working closely with Newark Habitat staff and various other professionals

Student Performance Criterion/a addressed:

Topical Outline:
Class Participation (10%)
Pre-design Tasks (20%)
Mid-term review of studio project (30%)
Final review of studio project (40%)

Prerequisites:
4th and 5th year students in good standing

Textbooks/Learning Resources:
Brown, Mark, G.Z and Mark DeKay . Sun, Wind & Light: Architectural Design Strategies, 2nd edition. New York: Wiley, 2001. ISBN: 0471348775 (on reserve)
US Green Building Council, LEED for Homes Rating System, Washington, 2008
Other recommended texts

Offered (semester and year):
Fall 2012

Faculty:
Prof. Darius Sollohub (F/T)

Number & Title of Course (total credits awarded): Arch 463, Urban Age, 5 cr

Course Description: This studio will design new urban housing and community types that not only allow people to age in place, but that co-evolve and support residents over the course of an entire lifetime.

Course Goals & Objectives:

- to broaden students architectural and cultural knowledge through the development of one semester-long project
- To develop research and analytic skills and integrate them in the design process
- To encourage large-scale design thinking
- To develop ability to design comprehensively
- To learn to respond to the needs of particular user groups
- To explore the relationship between time and architecture
- To develop team and interdisciplinary skills

Topical Outline:
Phase I (Modeling Urban Organization): 30%
Phase II (Designing in the Fourth Dimension): 70%.

Prerequisites:
4th and 5th year students in good standing

Offered (semester and year):
Fall 2012

Faculty:
Prof. Georgeen Theodore

Number & Title of Course (total credits awarded): Arch463, Options Studio I**,** 5 credits

Course Description: This Studio provides students an opportunity to pursue highly exploratory and advanced levels of design enquiry utilizing material based design strategies dealing with technology, the environment and the social order.

Course Goals & Objectives:

- Students will develop an understanding of an integrated design approach linked through conceptual, technical, constructive, and material based design criteria.
- Students will be investigating emerging areas of architectural design, specifically enabled by material innovations in building technologies and construction methodologies.
- Students will understand and utilize parametric design technologies for project visualization and development

Student Performance Criterion/a addressed:

A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.11. Applied Research

B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety
B.9. Structural Systems
B.10. Building Envelope Systems
B.12. Building Materials and Assemblies
C.1. Collaboration

Topical Outline:

Site Analysis + Building Systems Research (10%)
Investigative Research, Analysis + Communication (10%)
Schematic Design Strategies Site + Building + Program (35%)
Integration of Building Envelope, Materials, + Structural Systems (10%)
Detailed Project Development (35%)

Prerequisites: Arch364

Textbooks/Learning Resources:

Borden + Meredith, ed. *Matter: Material Processes in Architectural Production* (Routledge, 2012)
Frampton, Kenneth edited by John Cava *Studies in Tectonic Culture: the Poetics of Construction in 19th and 20th Century* (Graham Foundation For Advanced Studies and MIT Press 1995)
Garcia, Mark, ed. *The Diagrams of Architecture: AD Reader* (Wiley and Sons Ltd., 2010)
Ghiselin, Brewster *The Creative Process* (University of California Press, Ltd. 1952)
Gissen, David, ed. *Territory: Architecture Beyond Environment:AD (*Wiley and Sons Ltd., 2010)
Kwinter, Sanford *Architectures of Time: toward a theory of event in modernist culture* (MIT Press, 2002)
Lally, Sean, ed. *Energies: New Material Boundaries: AD* (Wiley and Sons Ltd., 2009)
Schropfer, Thomas ed. *Material Design: Informing Architecture by Materiality* (Birkhäuser, 2011)
Spuybroek, Lars *The Architecture of Variation* (Thames and Hudson Ltd, 2009)
Thomas, Katie Lloyd ed. *Material Matters: architecture and material practice* (Routledge, 2007)
Zumthor, Peter *Thinking Architecture* (Birkhauser, 2006)

Offered: Fall 2012

Faculty: Thomas Ogorzalek, University Lecturer (F/T)

Number & Title of Course: ARCH 463, Options I, Habitat for Humanity Studio, 5 credits.

Course Description (limit 25 words): The Habitat studio designs a multi-family project for a local chapter of Habitat for Humanity culminating in a competition. The winning project moves toward construction. The studio is funded by the 2010 NCARB Award.

Course Goals & Objectives (list):

- Students design a multi-family affordable housing project for a local Chapter of Habitat for Humanity.
- Throughout the semester, students interact closely with Habitat staff, local officials, various professionals, and with Habitat's architect on a paraprofessional basis.
- Students balance rigorous design quality, cost efficiency and the highest possible LEED rating.
- Students must design using Autodesk Revit and Ecotect software exclusively, including cost-estimate analysis.

Student Performance Criterion/a addressed (list number and title):

A.1. Communication Skills
A. 2. Design Thinking Skills
A. 3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A. 6. Fundamental Design Skills
A. 7. Use of Precedents
A. 8. Ordering Systems Skills
A. 10. Cultural Diversity
A.11. Applied Research
B. 1. Pre-Design
B. 2. Accessibility
B. 3. Sustainability
B. 4. Site Design
B. 5. Life Safety
C. 2. Human Behavior
C. 3 Client Role in Architecture
C. 4. Project Management
C. 5. Practice Management

Topical Outline (include percentage of time in course spent in each subject area):
Class Participation (10%)
Pre-Design Tasks (20%)
Studio Project Mid-term Review (30%)
Studio Project Final Review (40%)

Prerequisites:
ARCH 364

Textbooks/Learning Resources:
Brown, Mark, G.Z and Mark DeKay. Sun, Wind & Light: Architectural Design Strategies, 2nd edition. New York: Wiley, 2001. ISBN: 0471348775

US Green Building Council, LEED for Homes Rating System, Washington, 2008

Offered:
Fall only; annually

Faculty assigned:
Darius Sollohub

Number & Title of Course (total credits awarded): Arch 463.011, Options 1, 5 cr

Course Description: This studio's intention is to investigate architecture as catalyst for precarious thinking about architectural thinking.

Course Goals & Objectives:

- The program, to be understood here simply as a means to a further end, involves the design of a space for the writing of a book entitled "The Scientific Image, Volume Two - From Computer and Beyond". The author, Harry Robin, is now involved with its conceptualization and data gathering. He wishes to have a small-scale building complex constructed exclusively for this purpose. (His old studio was demolished by fire.) The specific goal is architecture that expresses "The Beyond" aspect of the book's title. This will involve various criteria at a residential scale.
- Criteria such as parametric strategies, new materials and their deployment, the impact of current emerging ideologies, the politics and philosophy of conflict, the heterogeneous disjunctive, private language; etc., as design determinants conceptually & technically. Each student, according to their own interests, will research recent scientific imagery as "quarries" that might provide cues, clues, as "spoors for thought."

Topical Outline:

Prerequisites:
4th and 5th year students in good standing
Textbooks/Learning Resources:

Offered (semester and year):
Fall 2012

Faculty: Prof. Don Wall (F/T)

Arch 464 Option Studio, Emergent and Smart Materials, Reactive Environments, 5 credits.

This course examines various ways in which emergent and smart materials can enable reactive and performative architectures that can respond to a variety of situations.

Course Goals & Objectives (list):

- to develop an awareness and knowledge of emergent materials, in particular the various types and classes of smart materials: what they are, how they perform, what they can do, and what their limitations are,
- to develop an appreciation of the broad design implications of these emerging technologies,
- to develop the ability to examine and comprehend the fundamental principles present in relevant precedents and a broad range of works by designers that make use of smart materials and emergent technologies,
- to make choices regarding the incorporation of such principles into your own projects,
- to contemplate new design applications for smart materials, applications that might exploit their unique properties and, at the same time, might help us address problems that merit our concern,
- to develop an architectural program that is supported by the use of smart materials, and that demonstrates the ability to produce a comprehensive architectural project that corroborates the capacity to make design decisions across scales,
- to develop design propositions that are reasonable and convincing arguments based on research and evidence,
- to develop innovative design works that elegantly, and appropriately, make use of smart materials,
- to develop an independent sense of experimentation and scrutiny, yet participate in critical discourse,
- and to demonstrate effective representation and communication skills that are highly-accomplished throughout the semester.

Student Performance Criterion/a addressed:

A.1	Communication Skills	B.1	Pre-Design
A.2	Design Thinking Skills	B.3	Sustainability
A.3	Visual Communication Skills	B.4	Site Design
A.5	Investigative Skills	B.6	Comprehensive Design
A.6	Fundamental Design Skills	B.12	Building Materials and Assemblies
A.7	Use of Precedents	C.9	Community and Social Responsibility

Prerequisites:
None

Textbooks/Learning Resources:

- Axel Ritter. Smart Materials: in architecture, interior architecture and design. Boston, Basel, Berlin: Birkhäuser. ©2007.
- Blaine Brownell. Transmaterial1, 2 and 3: a catalogue of materials that redefine our physical environment. New York: Princeton Architectural Press. ©2006, ©2008, and ©2010
- Michelle Addington and Daniel Schodek. Smart Materials and Technologies: for the architecture and design professions. Oxford, UK: Elsevier Architectural Press. ©2005.
- Thorsten Klooster, Niels Boeing, Simon Davis, Almut Seeger. Smart surfaces and their application in architecture and design. Basel; Boston: Birkhäuser, ©2009.
- Thomas Schröpfer. Material design: informing architecture by materiality. Basel: Birkhäuser, ©2011.
- Philip Ball. Made to Measure: new materials for the 21st century. Princeton, NJ: Princeton University Press. ©1997.

Faculty:
Martina Decker (F/T)

Arch464 Options Studio II

Type of Course: Undergraduate Studio, 5 credits, 12 contact hours, meets 3 times a week

Course Description: This Studio provides students an opportunity to pursue highly exploratory and advanced levels of design enquiry utilizing material based design strategies dealing with technology, the environment and the social order.

Course Goals & Objectives:

- Students will develop an understanding of an integrated design approach linked through conceptual, technical, constructive, and material based design criteria.
- Students will research resilient design strategies and understanding emerging areas of architectural design, specifically enabled by material innovations in pre-cast concrete building systems
- Students will research and collaborate with industry design professionals during project development
- Students will understand and utilize parametric design technologies for project development

Student Performance Criterion/a addressed:

A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.11. Applied Research

B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety
B.9. Structural Systems
B.10. Building Envelope Systems
B.12. Building Materials and Assemblies
C.1. Collaboration

Topical Outline:

Material Research + Explorations (10%)
Site Analysis + Building Systems Research (10%)
Schematic Design Strategies Site + Building + Program (25%)
Integration of Building Envelope, Materials, + Structural Systems (20%)
Detailed Project Development (35%)

Prerequisites: Arch463 Options I

Textbooks/Learning Resources:

Bell + Buckley, ed. *Solid States: Concrete in Transition*. (Princeton Architectural Press, 2010)
Borden + Meredith, ed. *Matter: Material Processes in Architectural Production* (Routledge, 2012)
Bergdoll, Barry au.ed. *Rising Currents: Projects For New Yorks's Waterfront* (MOMA, 2011)
Cohen + Moeller, ed. *Liquid Stone: New Architecture in Concrete* (Princeton Architectural Press, 2006)
Lovell *Building Envelopes:An Integrated Approach (*Princeton Architectural Press, 2010)
Nordenson, Seavitt, Yarinsky, ed. *On The Water | Palisade Bay* (The Museum of Modern Art, 2010)
Schropfer, Thomas ed. *Material Design: Informing Architecture by Materiality* (Birkhäuser, 2011)
Schittich, ed. *Building Skins: Concepts, Layers, Materials*. (Birkhauser, 2001)
Staib, Dorrhofer, + Rosenthal, ed. *Components and Systems* (Birkhauser, 2008)

MAPA: www.mapa.org
PCI: www.pci.org
NPS Gateway National Recreation Area: www.nps.gov/gate/index.htm
Sandy Hook Foundation: http://sandyhookfoundationnj.org/

Offered: Spring; annually

Faculty: Thomas Ogorzalek, University Lecturer (F/T)

Arch464 Options Studio II

Type of Course: Undergraduate Studio, 5 credits, 12 contact hours, meets 3 times a week

Course Description: This Studio provides students an opportunity to pursue highly exploratory and advanced levels of design enquiry utilizing material based design strategies dealing with technology, the environment and the social order.

Course Goals & Objectives:

- Students will develop an understanding of an integrated design approach linked through conceptual, technical, constructive, and material based design criteria.
- Students will research resilient design strategies and understanding emerging areas of architectural design, specifically enabled by material innovations in pre-cast concrete building systems
- Students will research and collaborate with industry design professionals during project development
- Students will understand and utilize parametric design technologies for project development

Student Performance Criterion/a addressed:

A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.11. Applied Research

B.2. Accessibility
B.3. Sustainability
B.4. Site Design
B.5. Life Safety
B.9. Structural Systems
B.10. Building Envelope Systems
B.12. Building Materials and Assemblies
C.1. Collaboration

Topical Outline:

Material Research + Explorations (10%)
Site Analysis + Building Systems Research (10%)
Schematic Design Strategies Site + Building + Program (25%)
Integration of Building Envelope, Materials, + Structural Systems (20%)
Detailed Project Development (35%)

Prerequisites: Arch463 Options I

Textbooks/Learning Resources:

Bell + Buckley, ed. *Solid States: Concrete in Transition*. (Princeton Architectural Press, 2010)
Borden + Meredith, ed. *Matter: Material Processes in Architectural Production* (Routledge, 2012)
Bergdoll, Barry au.ed. *Rising Currents: Projects For New Yorks's Waterfront* (MOMA, 2011)
Cohen + Moeller, ed. *Liquid Stone: New Architecture in Concrete* (Princeton Architectural Press, 2006)
Lovell *Building Envelopes:An Integrated Approach (*Princeton Architectural Press, 2010)
Nordenson, Seavitt, Yarinsky, ed. *On The Water | Palisade Bay* (The Museum of Modern Art, 2010)
Schropfer, Thomas ed. *Material Design: Informing Architecture by Materiality* (Birkhäuser, 2011)
Schittich, ed. *Building Skins: Concepts, Layers, Materials*. (Birkhauser, 2001)
Staib, Dorrhofer, + Rosenthal, ed. *Components and Systems* (Birkhauser, 2008)

MAPA: www.mapa.org
PCI: www.pci.org
NPS Gateway National Recreation Area: www.nps.gov/gate/index.htm
Sandy Hook Foundation: http://sandyhookfoundationnj.org/

Offered: Spring; annually

Faculty: Thomas Ogorzalek, University Lecturer (F/T)

Number & Title of Course (total credits awarded): MIP 602 / ARCH 464: Better Boroughs, Resilient Regions, 5 cr

Course Description:
The subject of this studio is the rebuilding of New Jersey in the aftermath of Hurricane Sandy.

Course Goals & Objectives:

- To develop research and analytic skills and integrate them in the design process
- To encourage large-scale design thinking
- To develop ability to design comprehensively
- To learn to respond to the needs of particular user groups
- To explore the relationship between planning and architecture
- To develop team and interdisciplinary skills

Topical Outline:
Phase I: 30%
Phase II: 70%

Prerequisites:
4th and 5th year students in good standing

Offered (semester and year):
Spring 2013

Faculty:
Prof. Georgeen Theodore

Number & Title of Course (total credits awarded): Arch 464, Options II, 5 cr

Course Description: ”Towards an Architecture of Discredited Newness: Investigations into Compositions for a Prepared Building Altered Weekly Through Dionysian Principles of Reason, Also …..”

Prerequisites:
4th and 5th year students in good standing

Textbooks/Learning Resources:
John Cage, “Music for Prepared Piano”
Le Corbusier: “Towards a (New) Architecture”
Robert Morris: “A Continuous Project Altered Daily”
Owen Moss: “Gnostic Architecture”
Frederich Nietzsche: “The Birth of Tragedy”

Offered (semester and year): Spring 2013

Faculty: Prof. Don Wall

Number & Title of Course: Arch 472 - Architectural Programming and Project Development (3 credits)

Course Description: This course teaches the essentials of defining the types of spaces in a building and understanding the full scope of the programming phase.

Course Goals & Objectives:

- Students will identify major stakeholders and techniques in the building design and production process with an emphasis on user requirements and client values,
- Students will learn to specify the spatial requirements and building spatial relations and how to perform conceptual construction cost estimation.

Student Performance Criterion/a addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline (include percentage of time in course spent in each subject area):

Programing Lectures:	60%
Project Design:	10%
Final Project:	30%

Prerequisites:
Arch 264 - Architecture Studio II

Textbooks/Learning Resources:
William M. Pena and Steven A. Parshall (HOK). *Problem Seeking. An Architectural Programming Primer,* 5th Edition. Wiley, 2012.

Offered (semester and year):
Spring only; annually

Faculty assigned (list all faculty assigned during the two academic years prior to the visit):
L. Nicolas Ronderos Gaitan (adjunct)

Number & Title of Course (total credits awarded): ARCH 483.662, Many Faces of Architecture, 3 cr

Course Description:
In recognition of the need "to expand practice settings and diversity" in the profession, this course is designed to introduce students to the many and varied career options for architects beyond traditional practice.

Course Goals & Objectives):
- Students will be exposed to careers in government, business & industry, and a variety of allied professions; as well as emerging opportunities that are 'outside the box', and strategies to pursue success.

- Students will gain an understanding of new approaches to 'job creation' (trends that affect traditional practice and the expansion of practice settings, diversity, etc.).

Student Performance Criterion/a addressed:
A.1 Communication Skills
A.2 Thinking Skills
A.5 Investigative Skills
A.10 Cultural Diversity
B.3 Sustainability
C.1 Collaboration Skills
C.2 Human Behavior
C.6 Leadership
C.9 Community / Social Responsibility

Topical Outline:
Collaborative Skills – (20%)
Investigative, Analysis Skills – (40%)
Presentation Skills – (40%)

Prerequisites:
N/A

Textbooks/Learning Resources:
101 Things I Learned in Architecture School: Matthew Frederick; Who Moved My Cheese?: Spencer Johnson, MD; The Big Idea: Donny Deutch w/Catherine Whitney; The Architect as Developers: John Portman; Game On: Find Your Purpose in Life: Emmit Smith; and Selected Websites & Corporate magazines, i.e. Entrepreneur, Newsweek, Black Enterprise, NY Times, Wall Street Journal, Dwell, Fast Company, etc.

Offered (semester and year):
Fall 2012

Faculty: Prof. Sandy Moore

Number & Title of Course (total credits awarded): Arch 483H.02, Plastic, Paper and Glass (Honors Seminar), 3 cr

Course Description:
This course will look at waste and excess from a range of perspectives, from theories of waste and entropy to the role of ornament in architecture to begin thinking about new priorities for design.

Course Goals & Objectives:

- Visually communicate architectural concepts and research using discipline-specific techniques
- Work independently and in collaborative groups on design/research projects
- Verbally and visually communicate architectural concepts in multiple media formats
- Understand historical and theoretical contexts for the design of and discussion of waste and excess in architecture
- Work between theoretical texts and architectural propositions
- Utilize, at an advanced level, digital fabrication technology in the design process

Topical Outline:

25% Class Participation – Reading Questions/Discussions

20% Project 1

25% Project 2

30% Project 3

Prerequisites:
Upper level honors student

Textbooks/Learning Resources:

Bataille, Georges. "The Meaning of General Economy" and "Laws of General Economy" in The Accursed Share: An Essay on General Economy, New York, Urzone, Inc. 1988, pp. 19-41; Angelil, Marc and Cary Siress, "Re: Going Around in Circles: Regimes of Waste"; Lynn, Greg. Intricacy, Philadelphia, ICA Exhibition Catalogue, 2003; Lavin, Sylvia. "The Temporary Contemporary" in Perspecta 34, 2002, pp.132-145; Moussavi, Farshid. "The Function of Ornament" in The Function of Ornament, Actar, 2006, pp. 2-8; Hawkins, Gay. The Ethics of Waste: How We Relate to Rubbish. Rowman and Littlefield Publishers Inc., Lanham: 2006; Lynch, Kevin."The Waste of Things" in Wasting Away: An Exploration of Waste: What It Is, How It Happens, Why We Fear It, How To Do It Well; Random House, Inc., 1991, pp. 42-80, 81-117; Rogers, Heather. Gone Tomorrow: The Hidden Life of Garbage http://video.google.com/videoplay?docid=5934530156227758850#; Kennedy, Greg. An Ontology of Trash: The Disposable and its Problematic Nature. State University of New York Press, Albany: 2007.

Offered (semester and year):
Spring 2012

Faculty:
Richard Garber

Number & Title of Course (total credits awarded): AD 490, Extreme Fabrication: Robotics for Architects and Designers, 3 cr

Course Description (limit 25 words):
The course will involve design experimentation and model construction using robotics technologies and provide a laboratory for designing and building working models of kinetic structures.

Course Goals & Objectives (list):
☐Provide sufficient exposure to robotics technologies and their applications in architecture and design.
☐To introduce principles of a feedback system using microcontrollers.
☐To learn basic principles of programming language that is necessary for implementing feedback logics.
☐Provide exposure to various sensors, actuators, and their applications in design.
☐To gain perspective and understanding about history of the use of robotics technologies in architecture and design.
☐To develop advanced skills in digital fabrication techniques using various prototyping tools.

Student Performance Criterion/a addressed (list number and title):
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline (include percentage of time in course spent in each subject area):
Learning technical materials for microcontroller, sensors, and actuators (45%)
Fabrication Skills (20%)
Producing original and creative final project (35%)

Prerequisites:
Arch 251, DD 275, DD 363, IT 201

Textbooks/Learning Resources:
Igoe, Tom. *Making Things Talk, 2nd Edition* (O'Reilly Media / Make Released: September 2011)
Margolis, Michael. *Arduino Cookbook* (O'Reilly Media; 1 edition, March 31, 2011)
Noble, Joshua. *Programming Interactivity: A Designer's Guide to Processing, Arduino, and Openframeworks* (O'Reilly Media; 1 edition, July 21, 2009)

Offered (semester and year):
Spring 2013

Faculty assigned (list all faculty assigned during the two academic years prior to the visit):
Taro Narahara (F/T)

Number & Title of Course (total credits awarded): AD 490, Life Cycle Assessment for Designers, 3 cr

Course Description: This course will cover the foundation of LCA, from the first study done by the Coca Cola Corporation in 1969, to today's multitude of sustainable products offered by nearly every major industry.

Course Goals & Objectives:

- to provide design students with a basic understanding of how formal and informal Life Cycle Assessments (LCA) are used to measure and improve the design decisions that affect the environment in which we all live
- To research and critically evaluate the latest LCA or EPD inventory databases, online governmental and third party LCA tools, and design software (Revit and/or Solidworks)
- to integrate quantitative and qualitative LCA techniques into their own decision making and design processes

Student Performance Criterion/a addressed:
N/A

Topical Outline:
Class Participation: 15%
Documentation and Analysis Project: 20%
Team or individual Final Project: 30%
360 peer review (on team projects) : 10% Individual Report 25%

Prerequisites:
N/A. Course open to Architecture students as well as Art + Design students

Textbooks/Learning Resources:

Curran, Mary Ann, ed.. Life Cycle Assessment Handbook: A Guide for Environmentally Sustainable Products. (Hoboken, NJ, John Wiley & Sons and Scrivener Publishing LLC, Salem MA, 2012)

Konig, Holger, et al. A *Life Cycle Approach to Buildings: Principles, Calculations, Design tools.* (Munich, Germany, Insitut fur international Architektur-Dokumentation GmbH & Co., 2010)

McDonough, William and Braungart, Michael. *Cradle to Cradle: Remaking the Way We Make Things.* (New York, North Point Press, 2002)

Schenck, Rita C. *LCA for Mere Mortals: A Primer on Environmental Life Cycle Assessment.* (Vashon, WA, Institute for Environmental Research and Education, 2000)

Tufte, Edward. *The Visual Display of Quantitative Information.* (Cheshire, CT, Graphics Press, 2001) and all books by this author.

Vogtlander, Joost G.. *LCA: A practical Guide for Students, Designers and Business Managers.* (Delft, The Netherlands, VSSD 2010)

Offered (semester and year):
Spring 2013

Faculty:
John Cays

Arch 500G – Computer Aided Design (3 cu)

Course Description: Emphasis is on developing technical drawing, digital modeling, parametric modeling and rendering skills.

Course Goals & Objectives:

- intro to 2d vector based drawings and architectural drawing conventions
- intro to 3d modeling tools and drawing extraction
- intro to drawing and modeling units
- intro to raster based image methods
- intro to texture, material, illumination and environment mapping
- intro to parametric modeling using solid models and drawing preparation

Student Performance Criterion/ addressed:

- Critical Thinking Skills
- Graphics Skills
- Research Skills
- Formal Ordering Systems
- Fundamental Design Skills
- Western Traditions

Topical Outline:
2d digital drawing conventions (25%)
NURBS based model building (25%)
Parametric solid modeling (25%)
Photo realistic rendering (25%)

Prerequisites:
none

Textbooks/Learning Resources:
Rhino online index
Inventor online index
Vray online index

Offered (Fall 12):
Fall only

Faculty assigned:
Rhett Russo Fall 12 (F/T)
Henry Grosman 11 (P/T)

Number & Title of Course (total credits awarded): Arch 501G, Architectural Design I, 5 credits

Course Description:
This first studio experience at NJIT will focus on design in relation to tectonic formation and materiality in the physical realm and the use of public space in the social realm.

Course Goals & Objectives:

- to explore an evolving set of situations and utilize a variety of intellectual tools and procedures
- to conduct an unfolding series of design exercises that explore specific material possibilities and parameters
- to spark the creative spirit, develop the design mind, form the steady hand, and encourage the seeing eye

Student Performance Criterion/a addressed:
A.6. Fundamental Design Skills
A.8. Ordering Systems

Evaluation is based upon your contribution of knowledge to the group, daily progress in completing assignments, the precision and care taken in the presentation of your work, an openness and responsiveness to critique, the verbal clarity and graphic legibility of your work, your level of initiative and self-reliance, the ability to develop and transfer a concept into physical dimensions, and the ability to synthesize the geometric, functional, tectonic and aesthetic demands of the exercises.

Prerequisites:
None

Textbooks/Learning Resources:
Lisa Iwamoto, *Digital Fabrications: Architectural and Material Technique;* Frei Otto, Bodo Rasch, *Finding Form* (2006).

Offered (semester and year):
Fall 2012

Faculty:
Prof. Michael Mostoller (F/T)

Arch 502G – Core Design Studio (5 credits)

Course Description: Emphasis is on developing technical drawing, and model-making skills. Also covered are two- and three-dimensional composition. Links to the history and theory sequence are made.

Course Goals & Objectives:

- Use of heavy timber construction methods
- Development of mixed use program
- The development of public space in the city
- Introduction to zoning constraints
- Understanding of modular and long span spatial parameters
- Resilient site design strategies
- Implementation of dimensional constraints for traffic, distribution and egress
- Design of the building envelope, fenestration and paneling
- Delivery of project in a competition format

Student Performance Criterion/ addressed:

Speaking and Writing Skills	Critical Thinking Skills
Graphics Skills	Research Skills
Formal Ordering Systems	Fundamental Design Skills
Western Traditions	Human Behavior
Human Diversity	Sustainable Design
Program Preparation	Site Conditions
Structural Systems	Life Safety
Building Envelope Systems	Building Materials and Assemblies

Topical Outline:

Analog to digital Model building (15%)
Resiliency strategy + Zoning (15%)
Wood construction systems and CLT (15%)
Mixed use Residential and Manufacturing (25%)
Design development (15%)
Presentation skills (15%)

Prerequisites:

Prerequisites: Arch 501G, Arch 521G, Arch 528G, Arch 555G.

Textbooks/Learning Resources:

• Michael Green, Tall Wood Buildings
• reThink Wood – Educational Resources <http://www.rethinkwood.com/education-resources>
• Binational Softwood Lumber Council
Softwood Lumber, Binational Softwood Lumber Council. Softwood Lumber, Binational Softwood Lumber Council, n.d. Web. 01 Aug. 2012. <http://www.softwoodlumber.org/>
• Fountain, Henry. “Wood That Reaches New Heights.” The New YorkTimes. The New York Times, 05 June 2012. Web. 01 Aug. 2012. <http://www.nytimes.com/2012/06/05/science/lofty-ambitions-for-cross-laminated-timber-panels.html?_r=1>

Offered (Spring 13):

Spring only

Faculty assigned:

Rhett Russo Spring 13 (F/T)
Michael Mostoller Spring 12 (F/T)

Number & Title of Course (total credits awarded): ARCH 503G, Architectural Design III, 5 credits.

Course Description (limit 25 words): Architectural Design III explores urbanism, the critical reading of typology and program, and the integration of basic building systems in the design of multi-family housing.

Course Goals & Objectives (list):

- The development of critical analytical skills through both individual and team-based data collection, research, analysis and documentation
- The development of critical reading skills through individual readings and group discussions where each member of the studio serves as leader for seminar discussions, offering both summary analysis and critical thinking within a studio-wide forum of discussion.
- The development of a critical design process through the use of digital and hand drawing techniques as well as physical models and digital modeling to explore design concepts at various scales and in various contexts.
- The strengthening of writing skills through self-assessments and articulation of design intentions in written form by each student.

Student Performance Criterion/a addressed (list number and title):

13.1 Verbal and Writing Skills
13.2 Critical Thinking Skills
13.3 Graphic Skills
13.4 Research Skills
13.5 Formal Ordering Systems
13.7 Collaborative Skills
13.10 National and Regional Traditions
13.11 Use of Precedents
13.15 Sustainable Design
13.16 Program Preparation
13.17 Site Conditions
13.20 Life Safety

Topical Outline (include percentage of time in course spent in each subject area):

Drawing and other representational techniques (45%)
Collaborative skills (15%)
Research (25%)
Written and oral presentation skills (15%)

Prerequisites:

ARCH 501G Architectural Design I
ARCH 502G Architectural Design II

Textbooks/Learning Resources (Selected Bibliography):

Allen, Edward. *Fundamentals of Building Construction: Materials and Methods*. Wiley, 2003.
Allen, Edward. *The Architect's Studio Companion*. Wiley, 2006.
Architectural League of New York. *Urban life: Housing in the Contemporary City*. New York: Architectural League of New York City, 2003.
Herzberger, Herman. *Lessons for Students in Architecture*. Rotterdam: Uitgeverrij 010, 1991.
Jacobs, Jane. *The Death and Life of Great American Cities*. New York, 1961.
Sherwood, Roger. *Modern Housing Prototypes*. Cambridge, Mass.: Harvard University Press, 1981.
Rowe, Colin, and Fred Koetter. *Collage City*. Cambridge Mass.: MIT Press, 1984.
Vidler, Anthony. "The Third Typology." *Oppositions Reader*. 13-16.
Whyte, William Hollingsworth. *The Social Life of Small Urban Spaces*. Project for Public Spaces Inc., 2001.

Offered (semester and year):

Fall only; annually

Faculty assigned (list all faculty assigned during the two academic years prior to the visit):

Jorge Prado, RA LEED AP (adjunct)

Number & Title of Course (total credits awarded): ARCH 504G, Grad Design IV, 5 credits.

Course Description (limit 25 words): You will now be fully in charge of INVENTING a new civic architecture that will be the Lower East Side Hub, which is to include the programs of a branch of the New York City Public Library, a Bodega and one additional program.

Course Goals & Objectives (list):

☐If the current nature of cites and history require new ways of assembling material to create civic spaces then we will need to develop new processes for the production of architecture. For this studio, we will use the concept of BREADBOARDING as a way to unlock the production of architecture and ultimately allow us to create new types of civic spaces.

☐BREADBOARDING allowed for an incredible fluid way to theorize, test, tinker, reconfigure and most importantly to invent whole new machines, ideas, processes out of little more than a supposition. For us it will mean to actively theorize new modes of civic architecture and to quickly create evolving prototypes. Here we favor the *smart and ugly* over the *dumb and pretty*, we will "work fast and think slow".

Student Performance Criterion/a addressed (list number and title):

A.1. Communication Skills: Ability
A.2. Design Thinking Skills: Ability
A.3. Visual Communication Skills: Ability
A.5. Investigative Skills: Ability
A.6. Fundamental Design Skills: Ability
A.8. Ordering Systems Skills: Understanding
A.9. Historical Traditions and Global Culture: Understanding
A.10. Cultural Diversity: Understanding
A.11. Applied Research: Understanding
B.1. Pre-Design: Ability
B.2. Accessibility: Ability
B.3. Sustainability: Ability
B.4. Site Design: Ability
C.1. Collaboration: Ability
C.2. Human Behavior: Understanding

Topical Outline (include percentage of time in course spent in each subject area):

Design and Thinking Skills (80%)
Presentation skills (20%)

Prerequisites:

None

Textbooks/Learning Resources:

Stan Allen, “Diagrams Matter,” *ANY*, 1998.
Jon Gertner, *The Idea Factory: Bell Labs and the Great Age of American Innovation*, 2012
Rem Koolhass, *Delirious New York: A Retroactive Manifesto for Manhattan*, 1997
Sanford Kwinter, “Flying the Bullet, or, When Did the Future Begin?” in Rem Koolhaas, *Conversations with Students*, 1996.
Reiser + Umemoto, *Atlas of Novel Tectonics*, 2006
Richard Serra, “Verb List,” and “About Drawing,” in *Richard Serra Writings, Interviews*, 1994.

Offered (semester and year):

Spring 2013

Faculty assigned:

Mark Kroeckel (adjunct)

Number & Title of Course (total credits awarded): Arch 505G Advanced Design Options, 6 credits

Course Description:
This studio explores the theme of a public architecture of production and consumption, with a public *Kunsthalle* and a private production component conceived of as an arts factory.
.

Course Goals & Objectives:

- To critically explore the connections—both architectural and cultural—that have, throughout the modern era, linked museums—typologically and mythically—to factories as sites for active creative production
- To analyze the programmatic and architectonic subject via the dissection of
- significant precedents
- To address both the organizational and formal structure of a particular building as a whole as well as elucidating the relationship between that whole and a significant component analyzed in detail

Topical Outline:
10% Class Participation
30% Exercises One - Three
15% Mid Review
45% Final Project

Prerequisites:
Arch 504G

Textbooks/Learning Resources:
Reading assignments were distributed (digitally) throughout the semester and were discussed as a group during selected class meetings.

Offered (semester and year):
Fall 2012

Faculty:
Keith Krumiede (F/T)

Arch 505G – Advanced Options Design Studio (6 cu)

Course Description: Study of advanced design issues in depth: integration of organizational, social, technical, spatial, and aesthetic issues within consistently articulated applied design solutions.

Course Goals & Objectives:
Use of optimization tools to evaluate constructability

- Use of Parametric design tools
- Site design and the development of public space in the city
- Understanding of market typologies, their cultural significance and role in public health
- Integration of landscape design
- Implementation of dimensional constraints for traffic, distribution and egress
- Design of the building envelope, and long span multipurpose space

Student Performance Criterion/ addressed:

Speaking and Writing Skills	Critical Thinking Skills
Graphics Skills	Research Skills
Formal Ordering Systems	Fundamental Design Skills
Western Traditions	Use of Precedents
Human Behavior	Human Diversity
Sustainable Design	Program Preparation
Site Conditions	Building Envelope Systems

Topical Outline:
3d scanning and digital optimization workflow (15%)
Urban site research (15%)
Landscape and water collection (10%)
Market typologies case study (15%)
Programming (15%)
Envelope development (15%)
Representation, 3d printing and documentation (15%)

Prerequisites:
Prerequisites: completion of all core courses or their equivalent. Required vertical studio electives; must be taken sequentially.

Textbooks/Learning Resources:
John Rajchman, "A New Pragmatism?"
Georges Didi -Huberman, “The Drapery of Sidewalks”
Sophia Vizoviti: “From Paperfolds to Object-Space Prototypes”
Greg Lynn “Composites, Surfaces, and Software: High Performance Architecture:”
Mike Silver, “Many From One.” Log 23.
Roland Snooks, “Volatile Formation” Log 25
Roberge, Heather, Sheet Logics, Matter, Routledge, 2011.
Waldheim Charles, Notes Toward and Agrarian Urbanism
Hwang Joyce, Vertical Farming in Las Vegas, Beyond Pragmatism Toward Desire. 2011.

Offered (Spring 13):
Spring only

Faculty assigned:
Rhett Russo Spring 13 (F/T)
Keith Krumweide Spring 13 (F/T)
Henry Grosman Spring 12 (P/T)
Kutan Ayata Spring 12 (P/T)

Number & Title of Course (total credits awarded): Arch 506/507, Graduate Comprehensive Studio, 6 credits

Course Description:
This comprehensive building design studio will focus on the design of a high-performance, high-density, mid-rise urban housing prototype that capitalizes on the ecological merits of wood as a primary building material.

Course Goals & Objectives and Student Performance Criterion/a addressed:
The specific learning objectives of this studio are identified below as they correspond to the required student performance criteria defined by the NAAB.
A. 2. Design Thinking Skills: ***Ability*** *to* raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test alternative outcomes against relevant criteria and standards.
A. 3. Visual Communication Skills: ***Ability*** *to* use appropriate representational media, such as traditional graphic and digital technology skills, to convey essential formal elements at each stage of the programming and design process.
A.4. Technical Documentation: ***Ability*** to make technically clear drawings, write outline specifications, and prepare models illustrating and identifying the assembly of materials, systems, and components appropriate for a building design.
A. 6. Fundamental Design Skills: ***Ability*** *to* effectively use basic architectural and environmental principles in design.
A. 7. Use of Precedents: ***Ability*** to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects.
A. 8. Ordering Systems Skills: ***Understanding*** of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.
A. 9. Historical Traditions and Global Culture: ***Understanding*** of parallel and divergent canons and traditions of architecture, landscape and urban design including examples of indigenous, vernacular, local, regional, national settings from the Eastern, Western, Northern, and Southern hemispheres in terms of their climatic, ecological, technological, socioeconomic, public health, and cultural factors.
B. 2. Accessibility: ***Ability*** to design sites, facilities, and systems to provide independent and integrated use by individuals with physical (including mobility), sensory, and cognitive disabilities.
B. 3. Sustainability: ***Ability*** to design projects that optimize, conserve, or reuse natural and built resources, provide healthful environments for occupants/users, and reduce the environmental impacts of building construction and operations on future generations through means such as carbon-neutral design, bioclimatic design, and energy efficiency.
B. 4. Site Design: ***Ability*** to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.
B. 5. Life Safety: ***Ability*** to apply the basic principles of life-safety systems with an emphasis on egress.
B. 6. Comprehensive Design: ***Ability*** to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales.
B. 11. Building Service Systems: ***Understandin****g* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems.
B. 12. Building Materials and Assemblies: ***Understanding*** of the basic principles utilized in the appropriate selection of construction materials, products, components, and assemblies, based on their inherent characteristics and performance, including their environmental impact and reuse.
C. 1. Collaboration: ***Ability*** to work in collaboration with others and in multi- disciplinary teams to successfully complete design projects.

Topical Outline:
10% Class Participation;15% Individual Material Organism;10% Material Organism Recalibrated; 25% Mid Review – Schematic Design; 40% Final Review – Design Development

Prerequisites:
Arch 504G

Textbooks/Learning Resources:
A selection of resource materials related both to wood construction and building systems integration is available at the Littman Architecture Library in Weston Hall.

Offered (semester and year):
Fall 2012, Spring 2013

Faculty:
Prof. Keith Krumwiede and Prof. Michael Mostoller

Number & Title of Course (total credits awarded): Arch 528G, Graduate History of Architecture, 3 credits

Course Description:
The aim of this course is to survey Western architecture from its origins to the nineteenth century by studying in some depth a limited number of well-known architectural examples.

Course Goals & Objectives:

- to produce research projects that investigate the historical backgrounds of specific buildings and their cultural and physical contexts,
- to analyze architectural design and criticism
- to synthesize the findings of the research projects
- to sharpen writing, speaking and graphic skills,
- to effectively communicate insights and ideas

Student Performance Criterion/a addressed:
A9 Hist Traditions/Global Culture

Topical Outline:
2 Project Reports (40% each)
Presentations and class participation (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Kostof, Spiro, *A History of Architecture* (New York, 1986)Norberg-Schulz, Christian, *Meaning in Western Architecture* (New York, 1980, rev. edition)
Pevsner, Nikolaus, *An Outline of European Architecture* (Baltimore, 1963, seventh edition)

Offered (semester and year):
Fall 2012

Faculty:
Prof. A. Santos (F/T)

Number & Title of Course (total credits awarded):
529G History of Architecture II, 3 credits

Course Description:
An investigation into the architecture of the late 19th, 20th and 21st centuries.

Course Goals & Objectives:
- To provide an understanding of the Modern Movement.
- To investigate the meaning of that movement in contemporary architecture.
- To consider issues in the years ahead and how the ideals of the movement will inform practice.

Student Performance Criterion/a Addressed:

Topical Outline:
Investigation into the history of the Modern Movement-50%
Investigation of general issues such as sustainable design in terms of the relationship between the Modern historical inheritance and current trends and specific projects of the 21st century-50%

Prerequisites:
528G History I

Textbooks:
Kenneth Frampton, *A Critical History of Modern Architecture*
Michael Mostoller*, Architecture in the 21st Century* (ms)

Offered:
Spring only: annually

Faculty Assigned:
Michael Mostoller (F/T)

Number & Title of Course: Architecture 541G-Construction 1; 3 credits

Course Description: Through a series of lectures, readings, and drawing assignments, this course will provide an overview of the nature of the construction process.

Course Goals & Objectives (list):

- students will focusing on the art and science of the building process
- identify and establish criteria that affect the selection of structure, systems, materials, methods, and assemblies

Student Performance Criterion/a addressed:
A.4 Technical Documentation
B.2 Accessibility
B.3 Sustainability
B.9 Structural Systems
B.10 Building Envelope Systems
B.12 Building Materials and Assemblies

Topical Outline:
Technical Documentation 10%
Accessibility 10%
Sustainability 10%
Structural Systems 30%
Building Envelope Systems 10%
Building Materials and Assemblies 30%

Prerequisites:
None

Textbooks/Learning Resources:
Building Construction Illustrated-4 ed Francis DK Ching John Wiley & Sons
Visual Dictionary of Architecture-2 ed Francis DK CHing John Wiley & Sons

Offered (semester and year):
Fall only; second year

Faculty assigned:
Matthew Peckham

Number & Title of Course: Architecture 542G-Construction 2; 3 credits

Course Description: Continuing the methodology used to investigate low-rise building systems in Construction 1, this course considers the systems, components, and assemblies used for mid-rise, commercial, academic, civic, and institutional architecture.

Course Goals & Objective:

- students will focus on the the structural system and the enclosure system including, roofing assemblies, and door, window, and glass assemblies.
- establish an understanding of the methodology of assembling the various components and systems that meet at the confluence of design and construction.

Student Performance Criterion/addressed:
A.4 Technical Documentation
B.2 Accessibility
B.3 Sustainability
B.9 Structural Systems
B.10 Building Envelope Systems
B.12 Building Materials and Assemblies

Topical Outline:
Technical Documentation 10%
Accessibility 10%
Sustainability 10%
Structural Systems 15%
Building Envelope Systems 40%
Building Materials and Assemblies 15%

Prerequisites:
Architecture 223

Textbooks/Learning Resources:
Building Construction Illustrated-4 ed Francis DK Ching John Wiley & Sons
Visual Dictionary of Architecture-2 ed Francis DK CHing John Wiley & Sons

Offered:
Spring only; third year

Faculty assigned:
Matthew Peckham

Number & Title of Course (total credits awarded): Arch 543G, Thermal Design of Building Enclosures, 3 credits

Course Description:
This course covers the conventional and new standards to evaluate, design, build, and maintain thermal performance of the building envelope.

Course Goals & Objectives:

- To cover building enclosures and energy, solar energy and enclosure shading, solar characteristics, energy systems, green design and other topics relevant to thermal design.

Student Performance Criterion/a addressed:
A.11. Applied Research
B.3. Sustainability
B.8. Environmental Systems
B.10. Building Envelope Systems

Topical Outline:
3 design problems (30%)
3 out of 4 test grades (40%)
final exam (30%)

Prerequisites:
None

Textbooks/Learning Resources:
Simplified Design of HVAC Systems W. Bobenhausen Wiley
and the Sun Angle Calculator and various reading assignments.

Offered (semester and year):
Spring 2013

Faculty:
Prof. Erv Bales

Number & Title of Course (total credits awarded): Arch 544/545, Graduate Buildings System IV, 3 cr

Course Description:
This course provides an understanding of the basic principles and appropriate application of building service and environmental systems.

Course Goals & Objectives:

Today's buildings are expected to perform many functions other than their basic sheltering function. It is the role of the architect as a generalist to have a good understanding of these functions and to coordinate the services provided by the various engineers and consultants involved in a building project. The course teaches students about some of these functions and services with a focus on sustainability and an integrated approach to architecture.

Student Performance Criterion/a addressed:
B.8. Environmental Systems
B.11. Building Service Systems

Topical Outline:

Mid-Term Examination: 30%
Assignments: 10%
Projects 1 & 2: 15% each
Final Examination: 30%

Prerequisites:
Graduate Building Systems III

Textbooks/Learning Resources:

Offered (semester and year):
Spring 2012

Faculty:
Prof. Rima Taher

Number & Title of Course (total credits awarded): ARCH 548G, Graduate Building Systems VIII, 3 credits

Course Description (limit 25 words: This is an advanced course dealing with structural calculations that will conclude with rigorous case study investigations of hybrid and complex structural systems. The course covers the design of steel, wood and reinforced concrete structures. It follows a practical approach in structural design with a focus on the different architectural considerations relative to use, maintenance, aesthetics and possible ways of accommodating HVAC ductwork and other systems within the structural system.

Course Goals & Objectives (list):

- Students will learn how to design simple structural elements using traditional structural materials
- Students will apply the various design procedures to some practical problem solving exercises and a main project.
- Students are introduced to the use of some computer programs, such as REVIT and StruCalc 8.0 in structural applications.
- Case studies of complex modern buildings designed by well-known architects or architectural firms are covered.

Student Performance Criterion/a addressed (list number and title):

A.1. Communication Skills	A.2. Design Thinking Skills	A.3. Visual Communication Skills
A.5. Investigative Skills	A.7. Use of Precedents	A.11. Applied Research
B.9. Structural Systems	B.12. Building Materials and Assembly	C.1.Collaboration
C.3. Client Role in Architecture	C.7. Legal Responsibilities	C.9. Community and Social Responsibility

Topical Outline (include percentage of time in course spent in each subject area):
Lectures (60%)
Regular Assignments (25%)
Main Project (15%)

Prerequisites:
Graduate Building Systems V (ARCH 545G)

Textbooks/Learning Resources:
Simplified Engineering for Architects and Builders, 11th Edition, by James Ambrose and Patrick Tripeny, Wiley & Sons, 2011, ISBN # 978-0-470-43627-1
A list of reference is given on the syllabus.

Offered (semester and year):
Fall and summer

Faculty assigned (list all faculty assigned during the two academic years prior to the visit):
Rima Taher, PhD, PE, Senior University Lecturer

Number & Title of Course (total credits awarded): Arch 558, Professional Architectural Practice, 3 credits

Course Description: This course familiarizes students with the standard of practice in architectural firms today.

Course Goals & Objectives:

- Prepare students to recognize the responsibilities of leadership and ethical decision-making which design professionals uphold
- Equip students with an understanding of the unique multifaceted field of architectural practice that spans the worlds of business, art, science and engineering while residing within complex social, economic and environmental contexts.

Student Performance Criterion/a addressed:
C2 Human Behavior
C3 Client Role in Architecture
C4 Project Management
C5 Practice Management
C6 Leadership
C7 Legal Responsibilities
C8 Ethics/Professional Judgment

Topical Outline:
4 tests 60%
Final 20%
Project 20%

Prerequisites:
Co-requisite with Comprehensive Lab Studio

Textbooks/Learning Resources:
Professional Practice - A Guide to Turing Designs into Buildings, Paul Segal, FAIA
Published by W W Norton & Company ISBN 0-393-73180-4
Architects Handbook of Professional Practice – Student Edition 13th Edition
Edited by American Institute of Architects (AIA), Published by John Wiley & Sons
ISBN 0-471-176-72-9

Offered (semester and year):
Spring 2013

Faculty:
Mark Bess

Number & Title of Course (total credits awarded): Arch 563, Comprehensive Architectural Design Studio I, 5 cr

Course Description: In this studio, architectural investigations integrate critical thinking and the technical aspects of design, including building systems and materials.

Course Goals & Objectives:

•Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employ numerous techniques and software.

•Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.

• Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.

• Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.

• A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.

• Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.

Student Performance Criterion/a addressed (list number and title):

A.2. Critical Thinking and Representation: Design Thinking Skills
A.4. Critical Thinking and Representation: Technical Documentation
A.5. Critical Thinking and Representation: Investigative Skills
A.8. Critical Thinking and Representation: Ordering Systems Skills
A.9. Critical Thinking and Representation: Historical Traditions and Global Culture
B.2. Integrated Building Practices: Accessibility
B.3. Integrated Building Practices: Sustainability
B.4. Integrated Building Practices: Site Design
B.5. Integrated Building Practices: Life Safety
B.8. Integrated Building Practices: Environmental Systems
B.9. Integrated Building Practices: Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):

Research, Analysis and Design Concepts (teamwork and Individual work) (28%)
Schematic Design Development (individual work) (28%)
Design Development (individual work) (28%)
Presentation (individual work) (16%)

Prerequisites:

Arch 164; Arch 263-4; Arch 363;4, Arch 463; Structures (I-III); Construction (I-III); and History (I-IV). Comprehensive Studio Lab (ARC 565) must be taken concurrently with Comprehensive studio in either Arch 563 or Arch 564.

Textbooks/Learning Resources:

Frampton, Kenneth, *Studies in Tectonic Culture: The Poetics of Construction in the Nineteenth and Twentieth Century Architecture,* (MIT Press, 2001); Moneo, Rafael, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects.* (MIT Press, 2004); Zumthor, Peter, *Thinking Architecture* (Birkhauser, 2006).

Offered: Fall 2012

Faculty assigned: Roger Smith (Adjunct)

Number & Title of Course (total credits awarded): Arch 563, Comprehensive Architectural Design Studio I, 5 credits

Course Description: In this studio, architectural investigations integrate critical thinking and the technical aspects of design, including building systems and materials.

Course Goals & Objectives:
•Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employ numerous techniques and software.
•Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.
• Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.
• Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.
• A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.
• Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.

Student Performance Criterion/a addressed (list number and title):
A.2. Critical Thinking and Representation: Design Thinking Skills
A.4. Critical Thinking and Representation: Technical Documentation
A.5. Critical Thinking and Representation: Investigative Skills
A.8. Critical Thinking and Representation: Ordering Systems Skills
A.9. Critical Thinking and Representation: Historical Traditions and Global Culture
B.2. Integrated Building Practices: Accessibility
B.3. Integrated Building Practices: Sustainability
B.4. Integrated Building Practices: Site Design
B.5. Integrated Building Practices: Life Safety
B.8. Integrated Building Practices: Environmental Systems
B.9. Integrated Building Practices: Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):
Research, Analysis and Design Concepts (teamwork and Individual work) (28%)
Schematic Design Development (individual work) (28%)
Design Development (individual work) (28%)
Presentation (individual work) (16%)

Prerequisites:
Arch 164; Arch 263-4; Arch 363;4, Arch 463; Structures (I-III); Construction (I-III); and History (I-IV). Comprehensive Studio Lab (ARC 565) must be taken concurrently with Comprehensive studio in either Arch 563 or Arch 564.

Textbooks/Learning Resources:
Frampton, Kenneth, *Studies in Tectonic Culture: The Poetics of Construction in the Nineteenth and Twentieth Century Architecture,* (MIT Press, 2001); Moneo, Rafael, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects.* (MIT Press, 2004); Zumthor, Peter, *Thinking Architecture* (Birkhauser, 2006).

Offered: Spring 2013

Faculty assigned: I. Smith (Adjunct)

Number & Title of Course (total credits awarded): Arch 563, Comprehensive Architectural Design Studio (Garden State Studio: Petty Island), 5 credits

Course Description:

The Comprehensive Studio I project is expected to achieve a comprehensive design which integrates critical thinking and the technical aspect of design, including building systems and materials, at varying scales.

Course Goals & Objectives:

To prepare students to work as part of a team to create an atmosphere conducive to brilliant thinking, discussions about architecture and the critiquing of each other's projects and, above all, collegiality.

•Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employing numerous techniques and software.
•Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.
• Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.
• Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.
• A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.
• Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.
•This studio considers an information center and restaurant to be built on Petty Island, New Jersey, a former oil storage plant that is now owned by the New Jersey Land Trust.

Student Performance Criterion/a addressed:

B6 Comprehensive Design

Topical Outline:

Initial Review: Research, Analysis and Design Concepts (10%)
Midterm Review: Schematic Design (10%)
Penultimate Review: Design Development (10%)
Final Review (10%)
Collective Comprehensive Studio Faculty Review (30%)
Studio Assignments Within Each Studio (30%)

Prerequisites:

4th- and 5th-year student in good standing

Textbooks/Learning Resources:

- The Dirty Life by Kristin Kimball
- The Unsettling of America and Bringing it to the Table by Wendell Berry
- Assortment of texts related to the site, architecture, restaurant design, environment, education, and food
-

Offered (semester and year):

Fall 2012

Faculty:

Susan Bristol

Number & Title of Course (total credits awarded): Arch 563, Comprehensive I Studio, 5 cr

Course Description: Students engage in the conceptual development and professional documentation of the School's house design for the China Solar Decathlon 2013 international design competition.

Course Goals & Objectives):

- To develop innovative strategies that address a projected future need for the management and organization of water as a necessary resource, primarily through the design of topology or topography. This goal, while not overtly "sustainable," as in green architecture, is intended to encourage students to think performatively about how their design proposals can integrate with tidal areas, landscape, or infrastructure to meet this goal.
- To develop a technique-based relationship with software and process in support of architectural design. The newest suite of tools available to the School will be introduced and privileged in terms of how students are supposed to work. This may be a departure from design problems that have allowed for space-planned solutions.
- To encourage systematic thinking in the development of design proposals. This is not limited to "building systems" but how discrete components of proposals might be organized with respect to one another. A level of abstraction will be necessary to this end.
- To utilize performance criteria as a paramount factor in making design decisions, and to develop a conceptual idea of what "sustainable" exactly means.
- To introduce students to the FABLAB and continue the lab's research objectives, giving students the means to design and fabricate generative architectural assemblies that they could not produce otherwise.

Student Performance Criterion/a addressed:
B6 Comprehensive Design

Topical Outline:
Construction Documentation Submission **(70%)** consisting of the following: a single comprehensive BIM (20%); project manual (15%); integrated structural and MEP drawings (20%); print drawings from BIM (15%)
Computer-Animated Walkthrough **(10%)**
Class participation **(10%)**
Final **(10%)**

Prerequisites: Open to 4th and 5th year students in good standing.

Textbooks/Learning Resources:
Architectural Review, November 1993,Acornhouse:Lessons from the'complete dwelling'
2. Architectural Record, May 1950; Prefabrication:The Acorn house
3. Manuel DeLanda; Philosophies of Design: The Case of Modeling Software
4. Stan Allen; Diagrams Matter
5. Mario Carpo; Sustainable?
6. AIA Journal, September 1963, Carl Koch; Comprehensive architectural practice architecture and industrialization

Offered (semester and year): Fall 2012

Faculty: Richard Garber

Number & Title of Course (total credits awarded): Arch 563 and Arch 564, Comprehensive Architectural Design Studio I and II, 5 credits each

Course Description: In each of these studios, architectural investigations integrate critical thinking and the technical aspects of design, including building systems and materials. In ARC 564, a greater level of design resolution and technical drawing representation is expected.

Course Goals & Objectives:

- Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employing numerous techniques and software.
- Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.
- Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.
- Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.
- A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.
- Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.

Student Performance Criterion/a addressed (list number and title):

A.2. Critical Thinking and Representation: Design Thinking Skills
A.4. Critical Thinking and Representation: Technical Documentation
A.5. Critical Thinking and Representation: Investigative Skills
A.8. Critical Thinking and Representation: Ordering Systems Skills
A.9. Critical Thinking and Representation: Historical Traditions and Global Culture
B.2. Integrated Building Practices: Accessibility
B.3. Integrated Building Practices: Sustainability
B.4. Integrated Building Practices: Site Design
B.5. Integrated Building Practices: Life Safety
B.8. Integrated Building Practices: Environmental Systems
B.9. Integrated Building Practices: Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):

Research, Analysis and Design Concepts (teamwork and Individual work) (28%)
Schematic Design Development (individual work) (28%)
Design Development (individual work) (28%)
Presentation (individual work) (16%)

Prerequisites:

ARC 164; ARC 263-4; ARC 363;4, ARC 463; Structures (I-III); Construction (I-III); and History (I-IV). Comprehensive Studio Lab (ARC 565) must be taken concurrently with Comprehensive studio in either ARC 563 or ARC 564.

Textbooks/Learning Resources:

Frampton, Kenneth, *Studies in Tectonic Culture: The Poetics of Construction in the Nineteenth and Twentieth Century Architecture,* (MIT Press, 2001); Moneo, Rafael, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects.* (MIT Press, 2004); Zumthor, Peter, *Thinking Architecture* (Birkhauser, 2006).

Offered: Fall 2012 and Spring 2013

Faculty assigned: Fall 2012: Susan Bristol (Adj), Richard Garber (F/T), Thomas Navin (F/T), Tony Santos (F/T), Ira Smith (Adj), Roger Smith (Adj), Stephen Zdepski (F/T); Spring 2012: Susan Bristol (Adj), Richard Garber (F/T), Cleve Harp (F/T), Thomas Navin (F/T), Margaret Santos (Adj), Tony Santos (F/T), Stephen Zdepski (F/T), Josh Zinder (Adj).

Number & Title of Course (total credits awarded): Arch 563/Arch 564, Comprehensive Architectural Design Studio II, 5 credits each

Course Description: In this studio, architectural investigations integrate critical thinking and the technical aspects of design, including building systems and materials. In Arch 564, a greater level of design resolution and technical drawing representation is expected.

Course Goals & Objectives:

- Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employing numerous techniques and software.
- Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.
- Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.
- Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.
- A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.
- Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.

Student Performance Criterion/a addressed (list number and title):

A.2. Critical Thinking and Representation: Design Thinking Skills
A.4. Critical Thinking and Representation: Technical Documentation
A.5. Critical Thinking and Representation: Investigative Skills
A.8. Critical Thinking and Representation: Ordering Systems Skills
A.9. Critical Thinking and Representation: Historical Traditions and Global Culture
B.2. Integrated Building Practices: Accessibility
B.3. Integrated Building Practices: Sustainability
B.4. Integrated Building Practices: Site Design
B.5. Integrated Building Practices: Life Safety
B.8. Integrated Building Practices: Environmental Systems
B.9. Integrated Building Practices: Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):

Research, Analysis and Design Concepts (teamwork and Individual work) (28%)
Schematic Design Development (individual work) (28%)
Design Development (individual work) (28%)
Presentation (individual work) (16%)

Prerequisites:

Arch 164; Arch 263-4; Arch 363;4, Arch 463; Structures (I-III); Construction (I-III); and History (I-IV). Comprehensive Studio Lab (ARC 565) must be taken concurrently with Comprehensive studio in either Arch 563 or Arch 564.

Textbooks/Learning Resources:

Frampton, Kenneth, *Studies in Tectonic Culture: The Poetics of Construction in the Nineteenth and Twentieth Century Architecture,* (MIT Press, 2001); Moneo, Rafael, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects.* (MIT Press, 2004); Zumthor, Peter, *Thinking Architecture* (Birkhauser, 2006).

Offered: Fall 2012, Spring 2013

Faculty assigned: Tony Santos (F/T)

Number & Title of Course (total credits awarded): Arch 564, Comprehensive Architectural Design Studio II, 5 credits

Course Description: In this studio, architectural investigations integrate critical thinking and the technical aspects of design, including building systems and materials.

Course Goals & Objectives:

•Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employing numerous techniques and software.

•Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.

• Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.

• Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.

• A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.

• Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.

Student Performance Criterion/a addressed (list number and title):

A.2. Critical Thinking and Representation: Design Thinking Skills
A.4. Critical Thinking and Representation: Technical Documentation
A.5. Critical Thinking and Representation: Investigative Skills
A.8. Critical Thinking and Representation: Ordering Systems Skills
A.9. Critical Thinking and Representation: Historical Traditions and Global Culture
B.2. Integrated Building Practices: Accessibility
B.3. Integrated Building Practices: Sustainability
B.4. Integrated Building Practices: Site Design
B.5. Integrated Building Practices: Life Safety
B.8. Integrated Building Practices: Environmental Systems
B.9. Integrated Building Practices: Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):

Research, Analysis and Design Concepts (teamwork and Individual work) (28%)
Schematic Design Development (individual work) (28%)
Design Development (individual work) (28%)
Presentation (individual work) (16%)

Prerequisites:

Arch 164; Arch 263-4; Arch 363;4, Arch 463; Structures (I-III); Construction (I-III); and History (I-IV). Comprehensive Studio Lab (ARC 565) must be taken concurrently with Comprehensive studio in either Arch 563 or Arch 564.

Textbooks/Learning Resources:

Frampton, Kenneth, *Studies in Tectonic Culture: The Poetics of Construction in the Nineteenth and Twentieth Century Architecture,* (MIT Press, 2001); Moneo, Rafael, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects.* (MIT Press, 2004); Zumthor, Peter, *Thinking Architecture* (Birkhauser, 2006).

Offered: Spring 2013

Faculty assigned: Cleve Harp (Adjunct)

Number & Title of Course (total credits awarded): Arch 564, Comprehensive Architectural Design Studio II, 5 cr

Course Description: In this studio, architectural investigations integrate critical thinking and the technical aspects of design, including building systems and materials.

Course Goals & Objectives:

•Students will explore all forms of visual communication, from freehand drawing to digital renderings, and employing numerous techniques and software.

•Students will continue to hone their critical thinking skill set, analyzing the project's factors including cultural, environmental, context and site conditions and using a variety of analytic methods.

• Students will integrate the requirements of the building's programmatic organization in conjunction with structural and mechanical systems ordering and distribution.

• Students will employ both physical and digital modeling to explore building form and spatial conditions within the building.

• A student's tectonic thinking will be further clarified through their project in the consideration of materials, including the performative nature of the building skin and roof.

• Students will explore issues of sustainability and building resiliency, specific to the particular challenges of the site and building type of each studio.

Student Performance Criterion/a addressed (list number and title):

A.2. Critical Thinking and Representation: Design Thinking Skills
A.4. Critical Thinking and Representation: Technical Documentation
A.5. Critical Thinking and Representation: Investigative Skills
A.8. Critical Thinking and Representation: Ordering Systems Skills
A.9. Critical Thinking and Representation: Historical Traditions and Global Culture
B.2. Integrated Building Practices: Accessibility
B.3. Integrated Building Practices: Sustainability
B.4. Integrated Building Practices: Site Design
B.5. Integrated Building Practices: Life Safety
B.8. Integrated Building Practices: Environmental Systems
B.9. Integrated Building Practices: Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):

Research, Analysis and Design Concepts (teamwork and Individual work) (28%)
Schematic Design Development (individual work) (28%)
Design Development (individual work) (28%)
Presentation (individual work) (16%)

Prerequisites:

Arch 164; Arch 263-4; Arch 363;4, Arch 463; Structures (I-III); Construction (I-III); and History (I-IV). Comprehensive Studio Lab (ARC 565) must be taken concurrently with Comprehensive studio in either Arch 563 or Arch 564.

Textbooks/Learning Resources:

Frampton, Kenneth, *Studies in Tectonic Culture: The Poetics of Construction in the Nineteenth and Twentieth Century Architecture,* (MIT Press, 2001); Moneo, Rafael, *Theoretical Anxiety and Design Strategies in the Work of Eight Contemporary Architects.* (MIT Press, 2004); Zumthor, Peter, *Thinking Architecture* (Birkhauser, 2006).

Offered:

Spring 2013

Faculty assigned:

Margaret Santos (Adjunct)

Number & Title of Course (total credits awarded): Arch 565.101, Comprehensive Design Studio Lab, 1 cr

Course Description:
The course is designed to supplement the Comprehensive Design Studio by introducing the student to the various ways architectural design is translated from the schematic design phase into the design development phase.

Course Goals & Objectives:
The primary objective of this class is to assist the student in integrating structure, mechanical and building systems with their design. One way to ensure this integration is by linking design decisions to the established concept. Our role is to coach the student toward this end and hopefully to a successful final project.

Student Performance Criterion/a addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline:
Schematic Design Report 75%
1-on-1 discussions and project reviews 25%

Prerequisites:
Co-requisite with Comprehensive Design Studio

Textbooks/Learning Resources:
Building Construction Illustrated
Francis D.K. Ching
Published by John Wiley & Sons, Inc.

Architect's Studio Companion: Rules of Thumb for Preliminary Design
Edward Allen & Joseph Iano
Published by John Wiley & Sons

Offered (semester and year):
Fall 2012

Faculty:
Mark Bess

Number & Title of Course (total credits awarded): Arch 579G, Professional Architectural Practice, 3 cr

Course Description: This course familiarizes students with the standard of practice in architectural firms today.

Course Goals & Objectives:

- Prepare students to recognize the responsibilities of leadership and ethical decision-making which design professionals uphold
- Equip students with an understanding of the unique multifaceted field of architectural practice that spans the worlds of business, art, science and engineering while residing within complex social, economic and environmental contexts.

Student Performance Criterion/a addressed:
C2 Human Behavior
C3 Client Role in Architecture
C4 Project Management
C5 Practice Management
C6 Leadership
C7 Legal Responsibilities
C8 Ethics/Professional Judgment

Topical Outline:
4 tests 60%
Final 20%
Project 20%

Prerequisites:
Completion of M.Arch. core sequence

Textbooks/Learning Resources:
Professional Practice - A Guide to Turing Designs into Buildings, Paul Segal, FAIA
Published by W W Norton & Company
Architects Handbook of Professional Practice – Student Edition 13th Edition
Edited by American Institute of Architects (AIA), Published by John Wiley & Sons

Offered (semester and year):
Fall 2012

Faculty:
Mark Bess

Number & Title of Course (total credits awarded): ARCH 583-020, BIM & Structural Technology (elective), 3 cr

Course Description: The course explores the rising BIM technology with an emphasis on its structural applications as they relate to architectural design.

Course Goals & Objectives:

- This course is designed to help architecture students acquire and develop a more integrated approach to architecture using BIM tools.
- The course provides some hands-on training on the use of structural BIM tools and other structural analysis and design software. Various projects with different types of buildings are used in the computerized applications.
- Students receive some training on the use of REVIT 2013 in structural applications, and the use of some structural analysis and design programs, such as RISA and ROBOT which are designed to communicate with REVIT.

Student Performance Criterion/a addressed (list number and title):

A.2. Design Thinking Skills	A.3. Visual Communication Skills	A.5. Investigative Skills
A.11. Applied Research	B.1. Pre-Design	B.7. Financial Considerations
B.9. Structural Systems	C.1.Collaboration	C.2 Human Behavior
C.3. Client Role in Architecture	C. 5. Practice Management	C.7. Legal Responsibilities
C.9. Community and Social Responsibility		

Topical Outline (include percentage of time in course spent in each subject area):
Computerized Projects and Applications (80%)
Lectures (20%)

Prerequisites:
Structures I (ARCH 229) or Graduate Building Systems V (ARCH 545G)

Textbooks/Learning Resources:
BIM Handbook – A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers, and Contractors, by Eastman, Teicholz, Sacks, and Liston, 2nd Edition by Wiley & Sons, 2011, ISBN #978-0-470-54137-1.

Offered (semester and year):
Spring 2013

Faculty:
Rima Taher

Number & Title of Course (total credits awarded): ARCH 583-022, Building Design for Hazard Prone Areas (elective), 3 cr

Course Description: This course discusses the topic of building design for various hazards such as earthquakes, high winds/hurricanes and floods.

Course Goals & Objectives:

- This course is designed to help architecture students acquire and develop a better knowledge of the various hazards that can affect buildings and structures and how to better design for them.
- Students learn the design methods based on the latest codes and standards, and are introduced to some of the latest research findings in this field that can possibly be implemented in design.
- The course also teaches the students about safety assessment of buildings in the aftermath of disasters and the standard procedures used in safety evaluation.

Student Performance Criterion/a addressed (list number and title):
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.11. Applied Research
B.1. Pre-Design

Topical Outline:
Lectures and Video Programs (60%)
Applied Design Examples and Applications (40%)

Prerequisites:
Structures I (ARCH 229) or Graduate Building Systems V (ARCH 545G)

Textbooks/Learning Resources:

1. *Manual of Coastal Construction, Federal Emergency Management Agency (FEMA),* 2011
2. *The 2012-International Building Code (IBC)* published by ICC, International Code Council.
3. *Minimum Design Loads for Buildings and Other Structures,* ASCE 7-2010, by the American Society of Civil Engineers.
4. *State of California Safety Assessment Program – Evaluator Student Manual*, California Emergency Management Agency, American Society of Civil Engineers, April 2011
5. *Field Manual: Safety Evaluation of Buildings After Wind-Storms and Floods*, Applied Technology Council (ATC)
6. *Field Manual: Post-Earthquake Safety Evaluation of Buildings*, Applied Technology Council (ATC)

Offered (semester and year):
Spring 2013

Faculty assigned:
Rima Taher

Number & Title of Course (total credits awarded): ARCH 583-024, High-Rise Structures (elective), 3 cr

Course Description: This is an advanced course that focuses on the structural design and construction of high-rise buildings and towers. It covers the structural systems used in high-rise structures and the integration of all building systems including new materials and methods.

Course Goals & Objectives:

- To learn about structural systems, construction materials and methods, HVAC systems, vertical transportation and fire safety in the context of high-rise construction
- To cover a large number of cases studies to explain the various design concepts
- To apply some of the course material in the main project which consists in the design of a free-standing tower

Student Performance Criterion/a addressed (list number and title):
A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.11. Applied Research
B.3. Sustainability
B.8. Environmental Systems
B.9. Structural Systems
B.10. Building Envelope Systems
B.12. Building Materials and Assembly
C.1.Collaboration
C.3. Client Role in Architecture
C.7. Legal Responsibilities
C.9. Community and Social Responsibility

Topical Outline (include percentage of time in course spent in each subject area):
Lectures and Video Programs (70%)
Main Project (20%)
Field Trip (10%)

Prerequisites:
Structures I (ARCH 229) or Graduate Building Systems V (ARCH 545G)

Textbooks/Learning Resources:
- *Steel, Concrete and Composite Design of Tall Buildings*, 2nd Edition, by Bungale S. Taranath, McGraw Hill, ISBN # 0-07-062914-5
- *Mechanical and Electrical Equipment for Buildings*, 11th Edition, by Stein, Reynolds, Grondzik, Kwok, Wiley & Sons, 2010, ISBN # 978-0-470-19565-9
A list of reference is given on the syllabus.

Offered (semester and year):
Spring 2013

Faculty:
Rima Taher

Number & Title of Course:
ARCH 583, Fundamentals of Urban Design, 3 cr

Course Description:
An introductory level seminar that traces the historical evolution of cities and towns and examines some of the architectural and urban design theories that influenced their development.

Course Goals & Objectives:

- That students learn the patterns and elements of urban form that have historically shaped the urban environment.
- That students learn the theories and issues that influence the shaping of the contemporary urban environment.

Student Performance Criterion/a addressed:
A. 1. Communication Skills
A. 5. Investigative Skills
A. 9. Historical Traditions and Global Culture
A.10. Cultural Diversity

Topical Outline:
Participating in faculty presentations of course material and subsequent class discussions (50%) Reading assigned reading material in preparation for and/or in review of class presentations (40%) Taking two quiz's relative to the course material (10%)

Prerequisites:
Second Year Standing

Textbooks/Learning Resources:

THE CITY SHAPED / Spiro Kostof / 1991 / Bulfinch Press
THE CITY ASSEMBLED / Spiro Kostof / 1992 / Thames & Hudson
URBAN DESIGN FOR AN URBAN CENTURY / Brown, Dixon and Gilllham / 2009 / Wiley
THE URBAN PATTERN: CITY PLANNING AND DESIGN / Gallion and Eisner / 1963 / Van Nostrand
THE URBAN DESIGN READER / Larice and Macdonald, Eds. / 2007 / Routledge
NEW TOWNS: ANTIQUITY TO THE PRESENT / Ervin Galantay / 1975 / Braziller
THE ORIGINS OF MODERN TOWN PLANNING / Leonardo Benevolo / 1967 / The MIT Press
COURT & GARDEN / Michael Dennis / 1986 / The MIT Press
THE ARCHITECTURE OF COMMUNITY / Leon Krier / 2009 /Island Press
ON STREETS / Stanford Anderson, ed. / 1986 / The MIT Press
TOWNSCAPE / Gordon Cullen / 1961 / The Architectural Press (Reinhold)
COLLAGE CITY / Colin Rowe and Fred Koetter / 1978 / The MIT Press
DESIGN OF CITIES / Edmund N. Bacon / 1976 / Penguin Books
THE CITY SQUARE: A HISTORICAL EVOLUTION / Michael Webb / 1990 / Thames & Hudson
MAIN STREET: THE FACE OF URBAN AMERICA / Carole Rifkind / 1977 / Harper & Row
CHARTER OF THE NEW URBANISM / Leccese and McCormick, eds. / 2000 / McGraw-Hill
THE ENGLISH TOWN: A HISTORY OF URBAN LIFE / Mark Girouard / 1990 / Yale University Press
THE NEW CITY: ARCHITECTURE AND URBAN RENEWAL / Arthur Drexler, ed. / 1967
MOMA THE IMAGE OF THE CITY / Kevin Lynch / 1960 / The MIT Press

Offered:
Fall 2012

Faculty:
Timothy Wood, University Lecturer

Number & Title of Course (total credits awarded): ARCH 583, Case Studies in Community & Urban Design, 3 cr

Course Description: An in-depth investigation of real-world problems in urban community design via the examination of presentations by selected community groups, designers, developers and government agencies.

Course Goals & Objectives:

- Students will analyze selected approaches to problems of community urban design (i.e. emerging green initiatives).

- Students will gain an understanding of various historic and existing strategies that respond to different cultures and individuals.

Student Performance Criterion/a addressed:

A.1 Communication Skills
A.3 Visual Communication Skills
A.5 Investigative Skills
A.9 Historic Traditions/Global Cultures
A.10 Cultural Diversity
B.3 Accessibility
C.1 Collaboration
C.2 Human Behavior
C.9 Community/Social Responsibility

Topical Outline:

Investigation and Documentation – (60%)
Presentations – (40%)

Textbooks/Learning Resources:

Civics and Cities: Lauri Olin; The Immigrant Advantage: Claudia Kolker; The Living City: Roberta B. Gratz, and selected Websites

Offered (semester and year):

Spring 2013

Faculty:

Sandy Moore

Number & Title of Course (total credits awarded): Arch 583.003 ST: Building and Nature, 3 cr

Course Description:
The seminar explores the fundamental relationship between the built environments we create and the landscapes we create to surround them. Through a more integrated practice of architecture and landscape, the built environment is being seen as linked interactive systems.

Course Goals & Objectives:
- Students will hone their skills in critical thinking and presentation, to be used throughout their professional careers.
- Students will lead discussions of assigned readings, enhancing skills in the processing of information and the ability to convey these findings to others.
- Students will investigate case studies of site and building strategies, both seminal works and current projects. In addition to background research, the case study team will visit the case study to have a direct experience with it and be able to better evaluate stated intentions versus actual results.
- Students will consider how these case studies serve to advance our thinking about how to achieve a landscape tradition specifically American in character, responsive to the American culture and the diverse regions of the United States.
- Students will select and pursue an independent topic to research and explore, culminating in a paper and visual presentation to the rest of the class.

Student Performance Criterion/a addressed: *Ability*
A.1. Communication Skills
A.2. Design Thinking Skills
A.5. Investigative Skills
A.6. Fundamental Design Skills
A.7. Use of Precedents
A.8. Ordering Systems Skills
A.9. Historical Traditions and Global Culture
A.10.Cultural Diversity
A.11. Applied Research

Topical Outline:
Reading Assignments (10%)
Case Study Investigations (teamwork) (20%)
Independent Topic Research and Preparation of a Paper (35%)
Participation in Class Discussions (25%)
Presentations (including preparations) to the Class (10%)

Prerequisites:
N/A

Textbooks/Learning Resources:
Balmori, Diane and Sander, Joel, *Groundwork: Between Landscape and Architecture* (Montacelli Press, 2011)
Other select readings from: Duany A., Plater-Zyberk, L. (*Suburban Nation*), Jackson, J.B. (*The Necessity for Ruins and Other Topics*), Hayden, Dolores (*Building Suburbia: Green Fields and Urban Growth 1820-2000*), Jacobs, Jane (*The Death and Life of Great American Cities*), Mumford, Lewis (*The City in History*), Stein, C.S. (*Toward New Towns for America*), Stern, Robert A.M. (*Anglo-American Suburb*), Treib, Marc (*Modern Landscape Architecture: A Critical Review*) and Wilson, Alexander (*The Culture of Nature*).

Offered:
Fall 2012

Faculty assigned:
Thomas Navin, AIA, ASLA (F/T)

Number & Title of Course:
ARC 583.004 Tectonic Performance, 3 credits.

Course Description:
This theory seminar will examine tectonics as the design of relationships between a building's constructive parts and its architectural whole in both theory and practice.

Course Goals & Objectives:
☐Students will explore the concept of tectonics as a complex web of performative relationships used to construct specific correspondences between architecture's material substrate and its effects.
☐Students will gain knowledge of historical models and genealogies that shaped the "scope of the tectonic" during the 20th century via 'close-read' analysis of seminal texts and buildings.
☐Students will gain knowledge of contemporary tectonic theories and practices via 'close-read' analysis of key contemporary writings and buildings.
☐Students will focus on key intersections of ideas, technologies, and buildings as they are related to two key disciplinary concerns of the 21st century: the digital and ecological.
☐Students will evaluate and interpret traditional material, structural, surface, and detail typologies.
☐Students will evaluate and interpret new advances in materials, fabrication, assembly, and systems.
☐Students will develop an appreciation and ability to conduct scholarly research on design.
☐Students will apply their research to a specific, "real-world" design problem.
☐Students will learn to bridge the traditional divide between design thinking and construction practices.

Student Performance Criterion/a addressed:
A.1.Communication Skills, A.2 Design Thinking Skills, A.3.Visual Communication Skills, A.4 Technical Documentation, A.5 Investigative Skills, A.6 Fundamental Design Skills, A.7 Use of Precedents, A.8 Ordering Systems Skills, A.9 Historical Traditions and Global Culture, A.10 Cultural Diversity, A.11 Applied Research, B.3 Sustainability,10 Building Envelope Systems, B.12 Building Materials and Assemblies, C.1 Collaboration.

Topical Outline:
Building Case Study Analysis (50%)
Reading + Writing + Discussion (20%)
Research Project (15%)
Design Project (15%)

Prerequisites:
N/A

Textbooks/Learning Resources:
Full database of course readings (35) issued online via Moodle, selected resources are:
Borden + Meredith, ed. *Matter: Material Processes in Architectural Production.* (Routledge, 2012)
Braham + Hale, ed. *Rethinking Technology: A Reader in Architectural Theory.* (Routledge, 2007)
Frampton, Kenneth. *Studies in Tectonic Culture.* (MIT Press, 1995)
Reiser + Umemoto. *Atlas of Novel Tectonics.* (Princeton Architectural Press, 2006)

Offered:
Fall 2010, Spring 2013

Faculty assigned:
Matt Burgermaster (F/T)

Number & Title of Course (total credits awarded): Arch583 Special Topics in Architecture, 3 cr

Course Description: This seminar provides students an opportunity to investigate new materials, innovative material practice and expand their overall knowledge of material properties and capacities for design.

Course Goals & Objectives:

- Students will develop an understanding of material pedagogy and the role material matters play in contemporary architectural design, theory and praxis.
- Students will be investigating emerging areas of architectural design, specifically enabled by material innovations in building technologies and construction methodologies
- Students will be required to demonstrate the ability to read, write, speak effectively in support of critically reasoned points of view, and develop technical drawings to verify and support them.
- Students will be required to demonstrate the ability to gather, record, evaluate, and apply relevant information in architectural coursework.

Student Performance Criterion/a addressed:

A.1. Communication Skills
A.2. Design Thinking Skills
A.3. Visual Communication Skills
A.4. Technical Documentation
A.5. Investigative Skills
A.7. Use of Precedents

Topical Outline:

Pedagogical Readings, Discussion, and Papers (20%)
Investigative Research, Analysis + Documentation (25%)
Case Study Research Project (25%)
Material Research Project (30%)

Prerequisites: Instructor Approval

Textbooks/Learning Resources:

Braham + Hale	*Rethinking Technology: a reader in architectural theory* (Routledge, 2007)
Brownell, Blaine E.	*Transmaterial: a catalog of materials that redefine our physical environment*
Brownell, Blaine E.	*Transmaterial 2: a catalog of materials that redefine our physical environment*
Brownell, Blaine E.	*Transmaterial 3: a catalog of materials that redefine our physical environment* (Princeton Architectural Press, 2006, 2008, 2010)
Borden + Meredith, ed.	*Matter: Material Processes in Architectural Production* (Routledge, 2012)
Frampton, Kenneth edited by John Cava	*Studies in Tectonic Culture: the Poetics of Construction in 19th and 20th Century* (Graham Foundation For Advanced Studies and MIT Press 1995)
Garcia, Mark, ed.	*The Diagrams of Architecture: AD Reader* (Wiley and Sons Ltd., 2010)
Gissen, David, ed.	*Territory: Architecture Beyond Environment:AD (*Wiley and Sons Ltd., 2010)
Kieran + Timberlake	*Manual: The Architecture of KieranTimberlake* (Princeton Architectural Press, 2002)
Kieran + Timberlake	*refabricating architecture* (McGraw-Hill, 2004)
Lally, Sean, ed.	*Energies: New Material Boundaries: AD* (Wiley and Sons Ltd., 2009)
Schropfer, Thomas ed.	*Material Design: Informing Architecture by Materiality* (Birkhäuser, 2011)
Spuybroek, Lars	*The Architecture of Variation* (Thames and Hudson Ltd, 2009)
Thomas, Katie Lloyd ed.	*Material Matters: architecture and material practice* (Routledge, 2007)

Offered: Fall; annually

Faculty: Thomas Ogorzalek, University Lecturer (F/T)

Number & Title of Course (total credits awarded): Arch 583.018, Everyday Life in the Public Realm, 3 cr

Course Description:
A significant portion of everyday life takes place in the public realm of streets, parks, transit stations, governmental and commercial buildings and cultural institutions. This course will focus on an analysis of the usage of a variety of public spaces and proposals for change.

Course Goals & Objectives):
- Students will identify and examine various public spaces and multiple usages within selected venues: urban, suburban and rural contexts.

- Students will gain an understanding of various historic and emerging approaches that respond to multiple cultures and individuals.

Student Performance Criterion/a addressed:
A.1 Communication Skills
A.3 Visual Communication Skills
A.10 Cultural Diversity
B.3 Accessibility
C.1 Collaboration Skills
C.2 Human Behavior

Topical Outline:
Collaboration Skills - (30%)
Investigation and Analysis – (60%)
Presentations – (20%)

Prerequisites:
N/A

Textbooks/Learning Resources:
Course Reader; Tomorrow's Cities, Tomorrow's Suburbs: William H. Lucy and David L. Phillips; True Urbanism: Mark Hinshaw; Qualitative Analysis for Planning & Policy: John & Sharon Gaber, and Selected Websites

Offered (semester and year):
Spring 2012

Faculty:
Sandy Moore

Number & Title of Course (total credits awarded): Arch 583.019 Exploring Urban Gardening and the Impact on the Built Environment (Fall 2012), 3 cr

Course Description:
Urban farming is an emerging trend to promote access to healthy and affordable food for people in diverse communities. This course explores a variety of urban systems that assist in the growth, process, marketing and distribution of farm produce.

Course Goals & Objectives:
- Students will focus on the "roots" and "renaissance" of urban farming and its relationship to the "green revolution".
- Students will explore sustainability as a byproduct of collaborations among several design disciplines.
- Students will review the above ventures as they attempt to address urban as well as global needs to feed a growing population on a shrinking planet.

Student Performance Criterion/a addressed:

A.1	Communication Skills	B.2	Accessibility
A.2	Design Thinking Skills	B.3	Sustainability
A.3	Visual Communication Skills	B.4	Site Design
A.5	Investigative Skills		
A.7	Use of Precedents		
A.10	Cultural Diversity		

Topical Outline:
Investigation and Documentation – (60%)
Presentations – (40%)

Textbooks/Learning Resources:
Urban Farming: Thomas J. Fox; True Urbanism: Mark Hinshaw; Green Roofs: Ecological Design and Construction: Leslie Hoffman; American Grown: Michelle Obama; Farming Inside Cities: Jerome L. Hoffman; Inquiry by Design Revised Edition: John Zeisel; Vertical Farming: Gilbert E. Bailey; and Selected Websites

Offered (semester and year):
Fall 2012

Faculty:
Sandy Moore

Number & Title of Course (total credits awarded): Arch 583.027, Glass in the Chinese Landscape, 3 cr

Course Description:
This seminar will cover three interrelated phases that are invested in the development of sustainable housing plans in China and the College's work on the 2013 China Solar Decathlon.

Course Goals & Objectives:

- Students first worked at the macro or community scale, specifically analyzing the team's plan for Maozuizhen before investigating the current work being proposed in the Solar Decathlon.
- Students worked in teams to present a series of case studies of existing and proposed sustainable community plans in China with a main focus on housing and land use of natural resources, particularly the use of water in new development plans.
- In the next phase, students again worked in teams in assessing the design impact of the 1,347,000 m^2 plan the Solar Decathlon team developed to set the stage for our work in that competition.

Topical Outline:

Phase one	*Sustainable Planning*	15%
Phase two	*Maozuizhen Analysis*	25%
Phase three	*Decathlon Marketing*	45%
	Class Participation	15%

Prerequisites:
Arch 363

Offered (semester and year):
Fall 2012

Faculty:
Richard Garber

Number & Title of Course (total credits awarded): Arch 583, Prospecting for Urban Gems, 3 cr

Course Description:
Students will explore designated areas of the urban environment in an effort to identify the various types of oft-neglected “urban gems.”

Course Goals & Objectives:
- To sharpen observation skills and assess assumptions about the built environment
- To consider what is deemed valuable and invaluable and by whom
- To communicate and defend aesthetic and cultural choices

Prerequisites:
4th and 5th years students in good standing

Textbooks/Learning Resources:
Inquiry by Design, John Zeisel; True Urbanism, Mark Hinshaw; Qualitative Analysis for Planning &Policy, John and Sharon Gaber; Redesigning Cities, Jonathan Barnett, and selected websites

Offered (semester and year):
Spring 2013

Faculty:
Sandy Moore

Number & Title of Course (total credits awarded): Arch 583G Emergent Typologies, 3 cr

Course Description:
A critical review of architecture in the 21st century through the lens of a series of investigations into the social, economic and aesthetic network of contemporary society as evidenced in certain important building types.

Course Goals:
To have the student understand recent history
To have the student see the interconnections of social, economic and aesthetic factors in the creation of our environment.

Student Performance Criteria:

Topical Outline:
Reading and discussion 40%
Research and Presentation 60%

Prerequisites:
History sequence

Textbooks/Learning Resources:
Architecture in Crisis: Century 21 (ms) Michael Mostoller

Offered:
Fall 2011

Faculty:
Michael Mostoller

Number & Title of Course (total credits awarded): Arch 583, Honors Seminar, 3 credits

Course Description:
Analyzing modes of perception, design strategies, and personal identity in concepts of creativity

Course Goals & Objectives:
The seminar will be divided into three portions: one deals with the principles of perception; one deals with the theory of Gnostic architecture; ending with the writing of “Gluing the Self” term paper & appendix commentary on Eric Owen Moss.

Prerequisites:
Upper level students in good standing

Offered (semester and year):
Spring 2013

Faculty:
Prof. Don Wall

Number & Title of Course: Arch 662, Envisioning Newark, 3 credits

Course Description: This field seminar elective course examines Newark as a springboard for a broader investigation of the theory and practice of urban development.

Course Goals & Objectives:

- Understand the social and economic dynamics that underlie Newark's history;
- Become familiar with Newark's physical structure – its neighborhoods, its districts and infrastructure – as well as its institutions and municipal leaders.
- Gain insight into the process of urban development through the example of Newark's urban systems.
- Develop students' own perspectives on Newark by conducting a personal research project.

Student Performance Criteria addressed:

A. 1. Communication Skills
A. 5. Investigative Skills.
A. 10. Cultural Diversity
C. 2. Human Behavior
C. 9. Community and Social Responsibility

Topical Outline:

Field visits: 50%
Classroom seminar: 50%

Prerequisites:

None

Textbooks:

Gillespie, Andra. *The New Black Politician: Cory Booker, Newark, and Post-Racial America* (2012).
Tuttle, Brad R. *How Newark Became Newark: The Rise, Fall, and Rebirth of an American City* (2009).

Offered:

bi-annually

Faculty assigned:

Anthony Schuman, Associate Professor

Number & Title of Course (total credits awarded): Arch 662, Roadscape/Landscape, 3 cr

Course Description:
This seminar examines the highway and the car in architectural and urban discourse from the 1960s to the present, looking at how changing notions of "automobility" informed theory, practice, and criticism.

Course Goals & Objectives:

- Students will develop critical skills for understanding contemporary urban/suburban (metropolitan) settlements and built landscapes, particularly those designed at the scale of the automobile.
- They will examine cities and diverse urban forms using maps and other forms of representation, both visual and text-based.
- They will learn to question the supposed neutrality of maps and other documentary and representational systems and will begin to develop their own strategies for gathering and organizing urban information.
- Students will sharpen their analytical skills in both verbal and written forms.
- Through directed research, reading, and discussion, students will come to a critical understanding of the morphology of suburbia and will sharpen their analytical skills with respect to the everyday landscape.

Student Performance Criterion/a addressed:

Topical Outline:
• Completion of weekly readings and participation in discussions, 15% of final grade [cumulative]
• Car Codes: Lessons for Understanding the Roadscape I & II (1500-2000 word essay), 30% of final grade
• Roadscape Project Analysis (1500 word essay), 25% of final grade
• Driving Documentation Notation/Analysis (presentation & submission), 30% of final grade

Textbooks/Learning Resources:
Readings include texts by H.D. Thoreau, Kenneth Jackson, Reyner Banham, Michel de Certeau, Victor Gruen, Rem Koolhaas, et al.

Offered (semester and year):
Spring 2013

Faculty: Prof. Gabrielle Esperdy

Arch 662 G – Elevational Strategies (3 cu)

Course Description: Historical, theoretical and technological examination of the building elevation, architectural design methods, and the development of the façade in architectural discourse ranging from the Renaissance to the Contemporary.

Course Goals & Objectives:

- Reading and discussing critical texts related to the history façade design
- Graphic study of the formal ordering systems used by architects in façade design
- Understanding of the role of technology and its relation to ornament, decoration, poche and structure
- In-depth case study of a single façade system (1845 – 2009)

Student Performance Criterion/ addressed:

- Critical Thinking Skills
- Graphics Skills
- Research Skills
- Formal Ordering Systems
- Fundamental Design Skills
- Western Traditions
- National and Regional Traditions
- Use of Precedents
- Human Behavior
- Human Diversity
- Building Envelope Systems

Topical Outline:
Assigned Reading discussion (45%)
Analytical in class sketch problems (15%)
Digital modeling of case study facades (groups) (40%)

Prerequisites:
None: elective

Textbooks/Learning Resources:
Ackerman, James "The Facade of San Lorenzo in Florence."In *The Architecture of Michelangelo.* pp. 53-68.
Borsi, Franco and Paolo Portughesi. "The Language of Horta," In *Victor Horta*. pp. 21-35.
Colquhoun, Alan. The Hotel in 18th century French Architecture
Eisenman, Peter. A Critical Analysis: Andrea Palladio. pp. 50-65.
Frampton, Kenneth. The Text -Tile Tectonic, pp. 124-149.
Kipnis, Jeffrey. "The Cunning of Cosmetics." *El Croquis* 84 (1997): 22-29.
Lynn, Greg. "Architectural Curvilinearity: The Folded, the Pliant, and the Supple." Architectural Design 63, no. 3-4 (1993): 8-15.
R. MaCormac, Froebel's Kindergarten Training and the Early Work of FLW. pp. 99-123.
Mertins, Detlef. "Transparency: Autonomy and Relationality." In *Modernity Unbound*, pp 70 - 87.
Mumford, Mark. Form Follows Nature: The Origins of American Organic Architecture. pp. 26-37.
Norberg-Schulz, Christian. Guarino Gaurini, Towards Synthesis and Systemization, pp.182-237
Schulz, Anne. The Principle of Layering Precedents
Wittkower, Rudolf. 5. "Palladio and the Problem of Harmonic Proportions." Principles of Palladio's Arch. II.

Offered (Spring 13):
Spring only

Faculty assigned:
Rhett Russo Spring 13 (F/T)

Number & Title of Course (total credits awarded): Arch 662.004 3 cr

Course Description: Beginning with an examination of some basic principles of spatial and temporal organization in Japanese culture, this course reviews the historical underpinnings of Japanese architecture**.**

Course Goals & Objectives:

- To consider the great cultural infusion that transformed Japanese court culture during the T'ang dynasty, the fortress architecture of the Sengoku Jidai, or Warring States period, and the subsequently tightly controlled -- but nonethless continuous -- process of the diffusion of Western learning and technologies from the tiny island of Dejima in Nagasaki during the Tokugawa Bakufu
- To understand the historical context that led to Japan's headlong rush to transform its public face in a more western aspect, while traditional Japanese arts and crafts including furniture, prints, screens, sculpture, lacquerware, and the like were creating a sensation of their own in the West, known to French trendsetters as "le Japonisme"
- To learn about one of Japan's less commonly studied print artists: Yoshitoshi, whose use of perspective and overall sheet composition, vibrant colors and sure lines that crackle with action, and psychologically complex depictions of violent and disturbing subject matter
- To consider mutual eastern and western influence of this early modern period, looking at key western figures such as Morse, LaFarge, Adams, Fennellosa, Wright, and most importantly, Antonin Raymond, who served as the living link between this period and the full flowering of a series of alternative moderisms in Japan

We will conclude with a series of student presentations on the relationship between these precursors and 20th Century and contemporary Japanese architects, bringing our survey up to the present.

Student Performance Criterion/a addressed:
N/A

Topical Outline:

1.	Participation & Esprit de Corps	15%
2.	Quizzes	20%
3.	Midterm Boards	15%
4.	Final Boards	50%

Prerequisites:
N/A

Textbooks/Learning Resources:
Crafting a Modern World: The Architecture and Design of Antonin and Noemi Raymond, eds. Kurt G.F. Helfrich and William Whitaker, Princeton Architectural Press, 2006.
In the Dojo: A Guide to the Rituals and Etiquette of the Japanese Martial Arts, Dave Lowry, Weatherhill, Boston & London, 2006.
The Soul of a Tree: A Master Woodworker's Reflections, George Nakashima, Kodansha USA, 2012.

Offered (semester and year):
Spring 2013

Faculty:
Frederick Little

Number & Title of Course (total credits awarded): Arch 662G, Project Japan China Rising, 3 cr

Course Description:
A study of the post world war II Metabolist movement in Japan followed by a study of recent Chinese architecture and urbanism.

Course Goals and Objectives:

- To help us understand the architecture and culture of a society with *different origins* than our "western" roots and history, that of the Japanese.
- To help us understand the *interaction* between different traditions.
- To see how *architectural design* works in this 'other' culture.
- To see how *action* initiated by architects – social, intellectual, political – is related to design ideas.
- To understand therefore the meaning of a *movement* in architecture.
- To understand what is the meaning of *project*.
- To follow a movement's *trajectory* from inception to conclusion.
- To question whether a *similar conjuncture* is occurring in China.
- To ask ourselves if a movement with a project is necessary now in our culture.
- To have the student participate and share in an intellectual endeavor of research, analysis, criticism and projection.

Student Performance Criteria:
N/A

Topical Outline
Reading and discussion 40%
Research and presentation of results 60%

Prerequisites
History sequence; graduate standing; undergraduates must have a GPA of 2.8 or higher or permission of instructor

Textbooks/Learning Resources
Project Japan/Metabolism Talks, Rem Koolhaus and Hans Ulrich Obrist

Offered:
Fall 2012

Faculty Assigned:
Michael Mostoller

Number & Title of Course (total credits awarded): ARCH 662, BIM and ECS, 3 cr

Course Description: Introduction to BIM technology and its role with Environmental Control Systems (ECS), sustainable design, and life cycle analysis. The principal software taught is Autodesk Revit.

Course Goals & Objectives (list):

- Students will be prepared for basic office-level architectural BIM implementation or for advanced studies in computer information modeling.
- Students will learn the skills and knowledge to use Autodesk Revit effectively within all disciplines of design.
- Students will learn and utilize BIM technology in performance-based conceptual design and green building design topics.
- The course exercises and projects are designed to enrich the students' understanding of the potential BIM technology has on both practical and theoretical levels.

Student Performance Criterion/a addressed (list number and title):
A.4. Technical Documentation
B.8. Environmental Systems

Topical Outline (include percentage of time in course spent in each subject area):
BIM Modeling Basics, Workflow, and Theory (40%)
ECS and Sustainability (40%)
BIM Conceptual Design and Representation (20%)

Prerequisites:
None

Textbooks/Learning Resources:
Krygiel , Eddy. *Autodesk Revit Architecture 2013 Essentials.* (Sybex. 2012.)
Krygiel , Eddy. *Mastering Autodesk Revit Architecture 2013.* (Sybex. 2012.)

Offered (semester and year):
Fall 2012

Faculty:
Jennifer Switala

Number and Course Name: Arch 664, Indoor Environmental Quality, 3 cr

Course Description:
This course will relate the various aspects of holistic sustainable design to the Indoor Environmental Quality (IEQ) topic areas as identified in the LEED™ New Construction rating system.

Course Goals & Objectives:

- To expose students to LEED™ for New Construction that was developed by the US Green Building Council
- To introduce students to other guidelines and practices in the creation of healthy indoor spaces including but not limited to Feng Shui, Bau-biologie®, Color Theory, Green Seal, and GreenGuard™.

Topical Outline:
Class Participation 10%
Presentations 25%
Homework/ In-class essays/ Quizzes 30%
Final essay 35%

Prerequisites:
Arch 523G

Textbooks/Learning Resources:
The New Natural House Book, Creating a Healthy, Harmonious, and Ecologically-sound Home Environment by David Pearson; Environmental Law Institute (ELI) Research Report, Healthier Schools, A review of State Policies for Improving Indoor Environmental Air Quality, January 2002 (Posted on Pipeline); Environmental Protection Agency internet research on indoor air quality http://www.epa.gov/iaq/ best practices and design guide tools; ASHRAE Standard 55 & 62, 2007; Whole Building Design Guide, Daylighting Design http://www.wbdg.org/resources/daylighting.php

Offered (semester and year):
Spring 2013

Faculty:
Jason Kliwinski (adjunct)

Number & Title of Course (total credits awarded): Arch 665, Sustainable Design of Energy Efficient Buildings, 3 cr

Course Description:
The course will relate the various aspects of energy efficient design to the Energy and Atmosphere (EA) topic areas used for credits in the Leadership for Energy and Environmental Design (LEED™) Green Building Design & Construction (GBDC) –Version 3.

Course Goals & Objectives:
The course will relate the various aspects of energy efficient design to their place in the Energy and Atmosphere (EA) topic areas used for credits in the Leadership for Energy and Environmental Design (LEED™) Green Building Design & Construction (GBDC) –Version 3 as developed by the US Green Building Council (www.usgbc.org) as listed below

- Familiarize students with the nationally accepted standard and metric of sustainability in buildings, the LEED™ rating system
- Demonstrate to students how LEED™ connects the often disparate elements of site planning, water efficiency, energy conservation, material and resource use, and indoor environmental quality to create a holistic building guide and rating system for the 21st Century

Student Performance Criterion/a addressed:
N/A

Topical Outline:
Drawing and other representational techniques (60%)
Presentation skills (40%)

Prerequisites:
Arch 523G

Textbooks/Learning Resources:
Cradle to Cradle, William McDonough & Michael Braungart; Energy Efficient Buildings: Architecture, Engineering, & Environment, W.W. Norton, 2002; NJ Clean Energy Program Guide to Commissioning, Section 3; Energy Modeling Software Research http://apps1.eere.energy.gov/buildings/tools_directory/; : "World Changing, a user's guide for the 21st century" pgs 11-47, 74-198, 225-265, 307-316, 379-389, 397-403, 502-521; www.worldchanging.com

Offered (semester and year):
Fall 2012

Faculty:
Jason Kliwinski (adjunct)

Number & Title of Course (total credits awarded): Arch 666, Sustainability and Green Buildings Resources, 3 cr

Course Description:
This course covers the fundamentals of natural resources to build a sustainable practice in design and construction.

Course Goals & Objectives:
- Students will learn about the following topics:
- Ecosystems and ecoservices
- Resource availability and depletion
- Building materials
- Operations and maintenance
- Life cycle assessment
- Construction waste management
- Deconstruction
- Design for Durability
- Erosion and sediment control
- Hydrological cycle and storm water management
- Low-impact design

Student Performance Criterion/a addressed (list number and title):
N/A

Topical Outline (include percentage of time in course spent in each subject area):
Homework assignments (20%)
Tests, best 3 of 4 (50%)
Selected topic essay (30%)

Prerequisites:
Arch 523G

Textbooks/Learning Resources:
Various readings and speakers

Offered (semester and year):
Spring 2013

Faculty :
Prof. Erv Bales

Number & Title of Course: MIP/ARCH 652, Geographical Information Systems, 3 cr

Course Description: This course trains students in the use of commercial GIS software. It is designed to meet the programmatic needs of Infrastructure Planning and Architectural students.

Course Goals & Objectives:

- Students will undertake computer laboratory exercises to master the software,
- Students will develop a class mapping project to apply the knowledge and skills gained in the course to a case study.

Student Performance Criterion/a addressed:
A.1. Communication Skills
A.3. Visual Communication Skills

Topical Outline:

Laboratory Exercises:	60%
Project Design:	10%
Final Project:	30%

Prerequisites:
Course or working knowledge of CADD or permission of instructor

Textbooks/Learning Resources:
Tim Orsby. Getting to Know ArcGis Desktop. Basics of ArcView, ArcEditor, and ArcInfo. Second Edition Updated for ArcGIS 10. ESRI Press, 2010

Offered (semester and year):
Fall only; annually

Faculty assigned:
L. Nicolas Ronderos Gaitan (adjunct)

Number & Title of Course (total credits awarded): MIP 601: Urban Age, 6 cr

Course Description: This studio will design new urban housing and community types that not only allow people to age in place, but that co-evolve and support residents over the course of an entire lifetime.

Course Goals & Objectives:

- to broaden students architectural and cultural knowledge through the development of one semester-long project
- To develop research and analytic skills and integrate them in the design process
- To encourage large-scale design thinking
- To develop ability to design comprehensively
- To learn to respond to the needs of particular user groups
- To explore the relationship between time and architecture
- To develop team and interdisciplinary skills

Topical Outline:
Phase I (Modeling Urban Organization): 30%; Phase II (Designing Urban Infrastructures): 70%

Offered (semester and year):
Fall 2012

Faculty:
Prof. Georgeen Theodore

IV 3 – FACULTY RESUMES AND FACULTY MATRIX

Name: Silva Ajemian, Adjunct

Courses Taught (Two academic years prior to current visit):
• ARCH 263 Architecture Studio I, Fall 2010
• ARCH 264 Architecture Studio II, Spring 2011
• ARCH 263 Architecture Studio I, Fall 2011
• ARCH 264 Architecture Studio II, Spring 2012
• ARCH 363 Architecture Studio III, Fall 2012
• ARCH 364 Architecture Studio IV, Spring 2013

Educational Credentials:
• Bachelor of Environmental Design Studies, Dalhousie University School of Architecture, 1993
• Master of Architecture, Dalhousie University School of Architecture, Halifax, 1996

Teaching Experience:
• Adjunct Professor, Dalhousie University School of Architecture, 1994 – 1995
• Visiting Professor, Kamla Raheja Vidyanidhi Institute for Architecture and Environmental Design Studies, Mumbai, India,1999
• Adjunct Professor, NJIT, 2006-present

Professional Experience:
• Intern, Gagnier & Gagnier Architects, Montreal, QC, 1992
• Intern, James Bodnar Architect, New York, NY, 1994
• Intern, Michael Sorkin Studio, New York, NY, 1994
• Architectural Designer, Platt Byard Dovell Architects, New York, NY, 1996-1999
• Architectural Designer, Vito Acconci Studio, New York, NY, 2000
• Architectural Designer, William Fegan Architects, New York, NY, 2000-2001
• Architectural Designer, Howell Belanger Castelli Architects, New York, NY, 2001-2003
• Project Architect, Dean Maltz Architects | Shigeru Ban Architects, New York, NY, 2006-2007
• Founding Co-Director, First Street Green, Inc., New York, NY, 2008-present
• Principal, TODO DA, New York, NY, 2003-present

Selected Publications of TODO DA's work and Recent Research:
• "Proposal for the design of a new town SAN JUAN Narino Colombia." *Tuns Press*. 1995. Print.
• "Studying and documenting a place TUMACO Narino Colombia." *Tuns Press*. 1995. Print.
• Ajemian, Silva. "Contested Space." *Ararat Magazine*. Spring 2006: 40. Print.
• Lind, Diana. "Kitchen & Bath Portfolio: A young architecture firm thoughtfully renovates a New York City bathroom." *Architectural Record*. July 2006: 196. Print.
• "Grace Duo." *Dish Magazine*. 2007. Print.
• "Grace Duo." *LE Magazine*. No.35 2007: 54. Print.
• "Meshoush screen." *Contact Magazine*. June/July 2007: 42-43. Print
• "Meshoush Screen." *Canadian Interiors*, Sept./Oct 2007: 104. Print.
• "Grace Duo" *Premio Vico Magistretti 'living simplicity in furniture design'*." Designboom & De Padova. 2007: 77. Print
• "Parachute Park." *Coney Island the Parachute Pavilion Competition*. Van Alen Institute Princeton Architectural Press, 2007: 92. Print
• "Grace Duo." *Palermo Design Week 2007 Exhibition Catalog*. ICOD. 2008: 70. Print.
• McIntyre, Linda "A Billboard Lovely as a Tree: Design for enhancements wins an award." *Landscape Architecture*. Oct. 2008: 44. Print.
• "Pubblicita Verde." *Casamica.* Dec.2008: 32. Print.
• "Grace Duo." *The Independent Design Guide: Innovative Products from the New Generation.* Laura Houseley. USA: Thames & Hudson, 2009: 110. Print.
• "Chelsea Loft." *Boston Home. Magazine* March 2009: 105. Print.
• "Tribeca Loft." *International Interior Design Yearbook*. 2010: 166-167. Print.

Name: Ersin Altin, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 263 Architecture Studio I, Fall 2011
AD 161 History of Art + Design I, Fall 2011
ARCH 264 Architecture Studio II, Spring 2012
AD 162 History of Art + Design II, Spring 2012
ARCH 263 Architecture Studio I, Fall 2012
AD 161 History of Art + Design I, Fall 2012
ARCH 264 Architecture Studio II, Spring 2013
AD 162 History of Art + Design II, Spring 2013

Educational Credentials:
B.Arch., Anadolu University, 1999
MArch., Yildiz Technical University, 2003
Ph.D. Candidate, Urban System, Rutgers University, NJIT and UMDNJ

Teaching Experience:
Lecturer, NJIT, 2009-2010
Adjunct Professor, NJIT, 2011-Present

Professional Experience:
Architect/Project Manager, Arx Design Group, Istanbul, 2000-2002.
Editor, Arredamento Mimarlik, (architecture/design magazine), Istanbul, 2002-2006.

Licenses/Registration:

Selected Publications and Recent Research:
Editor, Architecture and City Series: A Guide to Contemporary Architecture, Boyut Publishing Group, 2002-2005.

"Turkish Pavillion at 1939 New York World Fair" *Sedad Hakki Eldem II: Retrospective*, Istanbul: Ottoman Bank Archive and Research Center, 2009, pp. 81-83.
"Neighborhood," "Anarchy," and "Minority," *Becoming Istanbul: An Encyclopedia,* Garanti Gallery and Deutsches Architekturmuseum (DAM), 2008.
"An Article That Is Not Stating Its Object," *Doxa,* no: 1, January 2006, pp. 40-45.
"From Japan to World: Manga and Manga Culture," in *Arredamento Mimarlik,* September 2005/100+83, pp. 112-115.
"Karim Rashid: 'I Want to Change the World'," in *Arredamento Mimarlik,* February 2005/100+77, pp. 116-122.

Professional Memberships:
Bursa Chamber of Architects, Section of UIA (International Union of Architects)

Name: Erv Bales, Research Professor

Number & Title of Course (total credits awarded
Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
ARCG 543 Design of Enclosures
ARCH 663 Introduction to Sustainable Design and Green Buildings
ARCH 666 Sustainability and Green buildings Resources

Educational Credentials:
Education:
BS U of South Carolina, 1957
MS Bradley University, 1962
PhD University of Illinois, 1966

Teaching Experience:
Associate Professor, Stevens Institute of Technology, 1966 – 1978
New Jersey Institute of Technology, School of Architecture
Research Professor, 1980 – present
Professional Experience:
United Technology – Research, 1957 – 1960
Caterpillar Tractor Co. – 1960 – 1966
HLW architectural firm – 1979

Professional Membership:
American Society of Heating Refrigeration Air conditioning Engineers – Life Member
American Solar Energy Society – Life member

Name: Thomas Barry, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 155 Modes of Design Communication
ARCH 163 Introduction to Design
ARCH 164 Introduction to Design

Educational Credentials:
B.Arch., Syracuse University, 1997
M. Arch. II, Harvard University, 2005

Teaching Experience:
Adjunct Professor, NJIT, 2011-2013
Adjunct Professor, Cornell University, 2010
Adjunct Professor, New York Institute of Technology, 2007

Professional Experience:
Principal, OPerA Studio, New York. 2011 to present
Managing Partner, Archi-Tectonics New York, 2007 – 2010
Project Architect, Archi-Tectonics New York, 2005 – 2007
Project Architect, Davis Brody Bond Architects, New York, 2000 – 2002
Design Architect, Fox and Fowle Architects, New York, 1997 - 2000

Licenses/Registration:
Registered Architect, New York
LEED Accredited Professional

Name: Vincent Benanti, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 227 ECS 1
ARCH 323 Construction 2
ARCH 327 ECS 2
ARCH 337 B.I.M.

Educational Credentials:
B.S. Arch., The Catholic University of America 1976
M.Arch. The Catholic University of America 1978

Teaching Experience:
Assistant Professor, Bergen Community College 2009-present
Adjunct Professor, Bergen Community College, 1986-2009
Adjunct Professor, NJIT 2008-present

Professional Experience:
Roe Associates, Oradell NJ 1978-1981
Rotwein & Blake, Union NJ 1981-1984
Architects DeGeronimo, Paramus NJ 1984-1988
Consultant, Vatche Simonian Designs, Morristown NJ 1988-2009
Principal – Vincent Benanti R.A.,P.A. 1987-present

Licenses/Registration:
New York
New Jersey
Connecticut

Name: Mark E. Bess, University Lecturer

Courses Taught (Two academic years prior to current visit):

ARCH 558	Professional Architectural Practice
ARCH 579G	Professional Architectural Practice
ARCH 565	Comprehensive Studio Lab
ARCH 327	Environmental Control Systems 2
ARCH 547G	Building Systems VII Case Study

Educational Credentials:
B.Arts., Rutgers College, New Brunswick, NJ 1982
B.Arch., Pratt Institute, Brooklyn, NY 1988

Teaching Experience:
University Lecturer, NJITSOA, 2006-present
Adjunct Instructor New York City Technical College, 1999-2001

Professional Experience:
Project Specifier, Project Architect, HLW International, New York, NY 1996-2002
Chief Architect, EI Associates, Cedar Knolls, NJ 2002-2004
Principal, MBA Architects, Montclair, NJ 2004-2011
Vice President, Netta Architects, Mountainside, NJ 2011-present

Licenses/Registration:
New York
New Jersey

Professional Memberships:
The American Institute of Architects (AIA)
National Organization of Minority Architects (NOMA), Vice President, NJ Chapter
National Council of Architectural Registration Boards (NCARB); Certificate Holder
Construction Specifications Institute (CSI); CDT Certified

Name: William Bobenhausen, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Arch 583/665
Arch 583/664

Educational Credentials:
City College of New York, School of Architecture, 1973

Teaching Experience:
Assistant Professor, NJIT, 1993-1998
City College of New York
Pratt Institute

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Simplified Design of HVAC Systems
Co-author of the updated 3rd edition of the classic *American Building: The Environmental Forces that Shape It, 1999*

Professional Memberships:
Served as a member of the AIA's National Committee on the Environment (COTE) Advisory Committee
Chair of the Greening the AIA Documents, Sub-committee, 2003
Chairman, NY chapter, US Green Building Council

Name: Christopher Booth, Adjunct

Courses Taught:
ARCH 155 Modes of Design Communication, fall 2007
ARCH 156 Modes of Design Communication, spring 2008-present
ARCH 555G Graduate Architecture Graphics, fall 2008-present
ARCH 163 Intro to Design Studio, 2009, 2012
ARCH 164 Intro to Design Studio, 2009, 2010, 2013
ARCH 263 Architecture Studio, 2011
ARCH 264 Architecture Studio, 2010, 2012
ARCH 563 Special Options Studio, 2008
ARCH 300 Digital Fabrication Seminar, 2012
ID 217 Manufacturing and Prototyping, 2008, 2010
AD112 Intro to Digital Modeling, 2011

Educational Credentials:
B.Arch., New Jersey Institute of Technology, 2005
M.S. Advanced Architecture Design, Columbia University of New York, 2007

Teaching Experience:
Adjunct Professor, NJIT, 2007-present

Professional Experience:
Intern, Richard Rigolo Architects, NJ 2004
Intern, Urban Office Architecture, NY 2004
Design Consultant, Imrey Culbert Atelier, NY 2010-2011
Director, SALTarch., collaborative research and consultancy lab 2008-present
clientlist:D+U architecture, Radical Media, nan.ko.studo, XAtelier, StudiosGo, Imrey Culbert Atelier, GRO architects, Salient architects

Licenses/Registration:
n/a

Selected Publications and Recent Research:
NJIT IdeaFactory University Researcher 2010-present
D3 Natural Systems, exhibition, NY 2012
Evolo Design, Skyscrapers for the Future, NY 2011
Archeography Project Series, Greece 2009
Proxy Log, NY 2009
Volume Magazine13, NY 2008
KazGASA, Academy of Leading Architecture and Civil Engineering, Kazakhstan 2007
SIGGRAPH, Digital Tectonics, project selection by Jabi,Wassim Proceedings of ACADIA, CA 2004

Professional Memberships:
n/a

Name: Susan Pikaart Bristol, Adjunct

Courses Taught:
Comprehensive Studio, Fall 2012: Arch 563 & 564
Comprehensive Studio, Spring 2013: Arch 563 & 564
Second Year Studio, Spring & Fall 2011: Arch 263
Graduate Options Studio, Fall 2010: Arch 505, 506, 507

Educational Credentials:
Master of Architecture, University of Virginia, 1986
Post-degree Summer Semester (UVa), Vicenza, Italy, 1982
Bachelor of Science (Architecture), University of Virginia, 1982

Teaching Experience:
Adjunct Instructor, NJIT 2002-2013
Adjunct Professor, UVa, Vicenza Summer Semester, 1986
Guest Critic (1986 to Present): University of Virginia, Princeton Univ., Rider Univ., Rutgers Univ.

Licenses/Registration:
Registered NJ Architect, (since 1988); Registered NJ Professional Planner & LEED AP

Selected Publications and Recent Research:
A Guide to Historic Preservation - Rocky Hill, NJ (Produced with a grant from the Somerset County Planning Board), Dec. 2004
Environment & Art Letter "Schematic Design: In the Beginning was the Concept" Article, illustrations and text, 1996
MSM Quarterly, June 1993, "Redesigning the Suburbs: Turning Sprawl into Centers"
Progressive Architecture Award: Citation of Merit, Disney Swan and Dolphin Hotels, MGA, 1989
New Jersey Monthly, Magazine, March 1991, Great Renovations Issue,
"Borrowed Space: A Garage Makes Room for Living" Featured project
Architecture New Jersey, NJSA publication, "Building in the City of Industrial
Artifacts: Paterson, NJ", 1993 & Urban Design Adaptive Reuse Study, PRO, 1986

Professional Memberships:
Rocky Hill Citizens for Responsible Growth, Co-founder (A non-profit planning organization)
Smart Plan NJ (formerly MSM Regional Council) a regional Planning organization
NJ AIA Homeland Security Committee
Save Barnegat Bay, Ocean County, NJ
Preservation New Jersey

Name: Matt Burgermaster, Assistant Professor

Courses Taught (Two academic years prior to current visit);:
ARCH 263 Undergraduate Architecture Studio, Fall 2011
ARCH 423 Construction 3, Fall 2011
ARCH 264 Undergraduate Architecture Studio, Spring 2011
ARCH 583/662 Detail, Envelope, Environment (seminar), Spring 2011
ARCH 661 H-001 Sustainable Systems (Independent Study), Spring 2011
ARCH 423 Construction 3, Fall 2012
ARCH 463 Special Topics Studio, *Im/material Worlds*, Fall 2012
ARCH 156 Modes of Communication, Spring 2012
ARCH 464 Special Topics Studio, *Precast Recast: The PCI Architectural Design Studio*, Spring 2012
ARCH 493-013 Alternative Material Practices for Sustainable Design (Independent Study), Spring 2012
ARCH 464 Special Topics Studio, *Plasticity + Resilience: The PCI Architectural Design Studio*, Spring 2013
ARCH 583 Tectonic Performance (seminar), Spring 2013

Educational Credentials:
B. Arch., Syracuse University, 1997
M.S. Advanced Architectural Design, Columbia University, 2004

Teaching Experience:
Assistant Professor, Syracuse University, 2000-2004
Adjunct Assistant Professor, Rensselaer Polytechnic Institute, 2006-2008
Visiting Critic, Fachoschule Potsdam, Potsdam, Germany, summer 2007
Assistant Professor, New Jersey Institute of Technology, 2008-present

Professional Experience:
Junior Architect, Kohn Pederson Fox Associates PC, New York, NY, 1997-98
Project Designer, Peter Gluck and Partners, Architects + AR/CS Construction Services, New York, NY, 1998-2000
Project Architect, Joeb Moore + Partners Architects, Greenwich, CT, 2004-08
Principal, MABU Design, Brooklyn, NY, 2008-present

Selected Publications and Recent Research:
"More Almost Nothing," Architectural Strategies in Contemporary Art: A Strange Utility*, (*Ashgate Publishing, 2013)
"Faculty Design Award," Architectural Education Awards 2012, (ACSA Press*,* 2012)
"Digital Details," Digital Aptitudes, (ACSA Press, 2012)
"After Seam Stress: Patterns of Performance," Where Do You Stand?, (ACSA Press. 2011)
"Integrating Integration," In the End/Beginning, (University of Nebraska/Lincoln, 2011)
"From Seam Stress to Distributed Details," Flip Your Field, (University of Illinois at Chicago, 2010)
"Ice Cycle House: From Functional Accessory to Performative Envelope," Journal of Architectural Education, (2010)
"Digital Mock-ups," Assembling Architecture, (Building Technology Educators Society, 2010)
Material Evidence: New Designs for Architectural Practice, (AIA-New Jersey, 2010)
Grant, *The PCI Architectural Design Studio at NJIT* (amount: $65,000)
Award, 2011-12 *ACSA Faculty Design Award* (Ice Cycle House)
Award (Honorable Mention), *2009 McKinley Competition*, American Institute of Architects, (Ice Cycle House)

Name: John Cays, Associate Dean

Courses Taught
FRSH SEM: Freshmen Honors Seminar (for Architecture and Design students)
AD 490: Life Cycle Assessment for Designers (for Architecture and Design students)

Educational Credentials:
B. Sci. Arch., University of the Arts, 1990
M.Arch, Princeton University, 1994

Teaching Experience:
Adjunct Instructor, NJIT, Parsons New School 2001 - 2005
Associate Dean, New Jersey Institute of Technology, 2005 - present

Professional Experience:
GRADE Architecture and Interior Design, Co-Founder, New York, NY 2001-2007
Robert A.M. Stern Architects, Project Manager, New York, NY 1997-2002
Cays Contracting – Manager and project designer, Stroudsburg, PA 1994 -1997
Walsh Estimating – Project quantity take off and assistant estimator, Marshall's Creek, PA 1990
Hydrusko Surveyors – Surveyor and documenter, 1989

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:
Successfully Transitioning Design Students from Two-Year Programs to the Professions in the Digital Age, Tri-State Best Practices Conference: The Community College as a Place of Transition, Secaucus, NJ, 2013
Evolving Libraries: People and Technology Building Design Communities, Art Documentation Vol. 31, No. 2, 2012
The Kepler System: Outcome Assessment in Architecture, Art and Design Schools, M.U.S.E. Conference, 2009 Savannah, GA
Currently writing book on Life Cycle Assessment for Designers and Consumers.

Professional Memberships:
American Institute of Architects (AIA New York) since 2004
Licensed Architect in New York 2003 and New Jersey 2005
National Council of Architectural Registration Boards (NCARB) since 2003
Bergen County (NJ) Technical Schools – Member of Professional Advisory Board 2010-present
Morris County (NJ) Technical Schools – Member of Professional Advisory Board 2007-present
Essex County (NJ) College – Member of Professional Advisory Board 2006-present
Building Technology Educators Society – peer reviewer for 2013 conference papers
New Jersey Council of Vocational-Technical Schools – Collaborator on Sustainable Design Pathway curriculum development 2011-present

Name: Dr. Zeynep Celik, Distinguished Professor

Courses Taught (Two academic years prior to current visit):
On sabbatical and family leave for two years

Educational Credentials:
B.Arch., Istanbul Technical University, 1975
M.Arch., Rice University, 1978
PhD, University of California, Berkeley, 1984

Teaching Experience:
Distinguished Professor, NJIT, 2005—current; Professor, NJIT, 1996—2005; Associate Professor, NJIT, 1991—1996. Visiting Professor, Barnard College, Spring 1999. Visiting Associate Professor. Graduate School of Design, Harvard University, Fall 1992. Associate Professor. Graduate School of Architecture, Planning, and Preservation, Columbia University, 1990-1991; Assistant Professor, Columbia University, 1986- 1990. Visiting Aga Khan Assistant Professor of Architecture, MIT, 1988-1989.

Selected Publications and Recent Research:
Scramble for the Past: A Story of Archaeology in the Ottoman Empire, 1753-1914, Istanbul: SALT Publications, 2011 (co-editor with Zainab Bahrani and Edhem Eldem).
Walls of Algiers: Narratives of the City through Text and Image (co-edited with Julia Clancy-Smith and Frances Terpak), Seattle and London: University of Washington Press/Los Angeles: Getty Publications, 2009.
Empire, Architecture, and the City: French-Ottoman Encounters, 1830-1914, Seattle and London: University of Washington Press, 2008. [Society of Architectural Historians Spiro Kostof Book Award, 2010]
Urban Forms and Colonial Confrontations: Algiers under French Rule, Berkeley, Los Angeles, and London: University of California Press, 1997.
Streets: Critical Perspectives on Public Space, Berkeley, Los Angeles, and London: University of California Press, 1993; paperback edition 1996 (co-editor with Diane Favro and Richard Ingersoll).
Displaying the Orient: Architecture of Islam at Nineteenth Century World's Fairs, University of California Press, Berkeley, 1992.
The Remaking of Istanbul: Portrait of an Ottoman City in the Nineteenth Century, Seattle and London: University of Washington Press, 1986; paperback edition by University of California Press, Berkeley, 1993. [Institute of Turkish Studies Book Award, 1987]

Selected Fellowships:
National Endowment for the Humanities, 2012; American Council of Learned Societies Fellowship, 2011, 2004, and 1993; John Simon Guggenheim Memorial Foundation Fellowship, 2004; Graham Foundation, 1997; Social Science Research Council, 1994.

Professional Memberships:
Society of Architectural Historians; Middle East Studies Association; American Institute of Maghrib Studies; Turkish Studies Association.

Editorial and Advisory Boards:

International Journal of Middle East Studies, 2012—current; *Ankara Araştırmaları Dergisi* (Ankara), 2012-current; *Perspective: La Revue de l'Institut National d'Histoire d'Art* (Paris), 2005—current; *Muqarnas,* 1996--current.

Name: Frederick Cooke, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Arch 156, Arch 163, Arch 263/264

Educational Credentials:
M.Arch, Yale University, 2000
BFA, Mason Gross School of the Arts, Rutgers, 1997

Teaching Experience:
Adjunct, New Jersey Institute of Technology

Professional Experience:
- Principal and Co-Founder of C+C Architecture, a multi-faceted design firm specializing primarily in architecture. The work extends to urban planning, furniture design, and (2006-Current)
- Designer, Hiller (2001-2006)
- Administrative, Buttrick, White & Burtis (1992-1997)
- Administrative, Richard Meier & Partners 1990-1992)
- Administrative, Michael Graves Architect (1989-1990)

Licenses/Registration:

Selected Publications and Recent Research:
NJ Biz: 2010 March 29, “Sharing Space to Save a Dime”

The New York Times, Metro Section: 2007 May 6
“Not Hot Just Yet, But Newark Is Starting to Percolate”

Start Ledger, Metro Desk: 2007 May 6
“Buyers Respond as Builders Take a Chance on Newark”

Professional Memberships:
Sons of the Revolution
Leadership Newark
La Casa De Don Pedro

Name: Abigail Coover, Adjunct

Courses Taught:
Arch 155/156 (coordinator)

Educational Credentials:
M.Arch Yale University, School of Architecture, 2006
BS,Architecture, University of Virginia, 2001

Teaching Experience:
New Jersey Institute of Technology, 2008
Yale School of Architecture, 2006-
Intro and Advanced Digital Modeling, Yale School of Architecture, 2006
Teaching Assistant for Architectural Form, Yale School of Architecture, 2006

Licenses/Registration:
N/A

Selected Publications and Recent Research:

Professional Memberships:
The American Institute of Architects

Name: Thomas G. Dallessio, Adjunct

Courses Taught (Two academic years prior to current visit):
MIP 655 Land Use Planning
MIP 673 Infrastructure Planning in Practice
MIP 675 Elements of Infrastructure Planning

Educational Credentials:
B.A., Rutgers College, 1982
M.A., Rutgers University 1983
M.C.R.P., Rutgers University 1984

Teaching Experience:
Adjunct Instructor, NJIT, Newark, 2006-Present

Professional Experience:
State of New Jersey, Department of the Treasury, General Services Administration, Trenton, 1985-7
State of New Jersey, Department of the Treasury, Office of State Planning, Trenton, 1987-98
State of New Jersey, Office of the Governor, Trenton, 1998-2002
Regional Plan Association, New Brunswick, 2002-7
Leadership New Jersey, Trenton, 2007-11
New Jersey Institute of Technology, Newark, 2012-Present

Licenses/Registration:
Professional Planner, New Jersey
American Institute of Certified Planners

Selected Publications and Recent Research:
"Resilient Design: Creating Buildings that Can Survive the Next Superstorm*," New Jersey State League of Municipalities Magazine*, February 2013

Professional Memberships:
American Planning Association

Name: Aris Damadian Lindemans, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 382 Architectural History

Educational Credentials:
B.A., Rutgers University, 2002
MArch, New Jersey Institute of Technology, 2006
M.S. Engineering, New Jersey Institute of Technology, 2006
Ph.D. Urban Ssytems (Architectural History), New Jersey Institute of Technology, projected 2013

Teaching Experience:
Adjunct Professor, NJIT, 2008-2012

Professional Experience
Architect, Gwathmey Seigel & Associates Architects , New York, NY 2006-2007
Architect, Aram Damadian, AIA, Manasquan, NJ 2005-present

Licenses/Registration:
New Jersey

Selected Publications and Recent Research:
Review of Paula Lupkin's *Manhood Factories: YMCA Architecture and the Making of Modern Urban Culture* (Minneapolis: University of Minisota Press, 2010) and Jessica Ellen Sewell's Women and the Everyday City: Public Space in San Fransisco, 1890-1915 (Minneapolis, University of Minisota Press, 2010) Journal of Arcitectural Education, Volume 65, issue 1 (October 2011), p. 88-90.

2011"Cultural Conflict and Resistance: The Importance of Space in Urban Schools" co-authored with Alan Sadovnik, Review of Maryann Dickar, Corridor Cultures: Mapping Student Resistance at an Urban High School (New York: New York University Press, 2008) Public Administration Review, v. 71, no.1 January, 2011

Completing PhD dissertation: *Amusement, Morals, and Religion: The Late Nineteenth Century Seaside Resort Towns of Asbury Park and Ocean Grove*

Professional Memberships:
The American Institute of Architects
Society of Architectural Historians (SAH)
Vernacular Architecture Forum (VAF)
American Studies Association (ASA)
American Culture Association (ACA)
Nineteenth Century Studies Association (NCSA)
Asbury Park Historical Society

Name: James Dart, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011 on-leave):
ARCH 364 Architecture Studio IV and ARCH 382 History of Architecture IV;
ARCH 363 Architecture Studio III and ARCH 583 Emergent Typologies;
ARCH 364 Architecture Studio IV and ARCH 593 Independent Study;

Educational Credentials:
BA cum honorius, Rhodes College, 1976
MArch, University of Pennsylvania, 1981

Teaching Experience:
Adjunct Professor, University of Pennsylvania, 1988-1989
Adjunct Professor, Drexel University, Philadelphia, 1988-1996
University Lecturer, NJIT, Newark, 1995-present

Professional Experience:
Project Architect, Davis, Brody and Associates, New York City, 1983-1988
Senior Associate, BLT Architects, Philadelphia, 1988-1995
Principal, DARCH, New York City, 1995-present

Licenses/Registration:
Pennsylvania
Louisiana
North Carolina
New York
New Jersey
NCARB certification

Selected Publications and Recent Research:
NEW ORLEANS UNDER RECONSTRUCTION: the Crisis of Planning, contributor, Verso Press: 2013
BEYOND SHELTER Architecture + Human Dignity, contributor, Metropolis Press: 2011
“Doing Right by the Genius Loci” World Architecture News, editorial: Dec 2009
“Prospect.1 Biennial” review, JAE Journal: Spring 2009

Professional Memberships:
The American Institute of Architects (Local, State, National)
Fellow, Institute for Urban Design
Society of Architectural Historians
ACSA

Name: Martina Decker, Assistant Professor

Courses Taught:
New Jersey Institute of Technology, Newark, USA Fall 2012 - Present: Assistant Professor:
- *Course: Arch 464 Option Studio | Emergent & Smart Materials in Reactive Environments*
- *Course: AD 463 Collaborative Design Studio | Circus*

Cornell University, Ithaca, USA Fall 2011: Visiting Critic:
- *Course: Arch 4101/4102/5101 & 7912 Studio | Smart Materials in Interactive & Reactive Architectures*
- *Course: Arch 4605/6609 Seminar | Nanoarchitecture | Special Topic in Construction*
- *Course: Arch 8912 Independent Design Thesis*

Educational Credentials:
Dipl. Ing. (FH) Architektur | FHM Munich University of Applied Sciences, Germany, 2004
Vordiplom in der Architektur | FHM Munich University of Applied Sciences, Germany, 2000

Teaching Experience:
Assistant Professor, NJIT, 2012-Present
Visiting Critic, Cornell University, Ithaca, USA Fall 2011
Part-time Faculty, Rhode Island School of Design, Providence, USA, Spring 2011
Part-time Faculty, Parsons, The New School for Design, New York, USA, Fall 2008

Professional Experience:
Partner, Decker Yeadon LLC, New York City, USA, 2006-Present
Project Leader, Kohn Shnier architects, Toronto, Canada, 2004 – 2006
Partner, Decker + Yeadon, Germany/USA, 2002 – 2004
Intern Architect, ARCABI Associates, Florence, Italy, 2000
Intern Architect, Architekturbüro Prenntzell, Munich, Germany, 1999 + 2001 + 2002

Selected Publications and Recent Research:
- Decker, Martina. “Emergent Futures: Nanotechology and Emergent Materials in Architecture” | BTES CONFERENCE 2013 – Tectonics of Teaching (in peer-review)
- Decker, Martina. “New Material Compositions”, Ng, Rashida and Patel, Sneha ed., Performative Materials in Architecture and Design, Bristol, UK: Intellect Ltd. (upcoming)
- Decker, Martina. “nBots – Sustaining Nanorobotic Environments,” Joachim, Mitchell and Silver, Michael ed., Post Sustainability: Blueprints for a Green Planet, New York: Metropolis Books/ D.A.P. (upcoming)
- Dahl, Richard. “Cooling Concepts”, RTP, North Carolina: Environmental Health Perspectives, National Institute of Environmental Health Sciences (2013)
- Premier, Allessandro. “Linee di sviluppo”, Superfici dinamiche. Le schermature mobili nel progetto di architettura, Milan, Italy: FrancoAngeli (2012)
- Monoian, Elizabeth and Ferry, Robert ed. Public Art of the Sustainable City: The Land Art Generator Initiative, UAE Singapore: Page One Publishing (2012)
- Ng, Rashida and Patel, Sneha. “Engineering Phase Change Material” in Convergence + Confluence, Toronto: Building Technology Educators Society (2011)
- Borden, Gail Peter and Meredith, Michael ed. Matter: Material processes in architectural production, New York: Routledge (2011)

Name: Angus Guthrie Eade, Adjunct

Educational Credentials:

M.Arch., Harvard University, Graduate School of Design, 2003
B.Arch., University of California at Berkeley, 1995

Teaching Experience:

Associate Professor, New Jersey Institute of Technology, NY, 2011 – present
Courses taught at NJIT
Fall 2011, Arch 463
Spring 2012, Arch 264
Fall 2012, Arch 263, Arch 155
Spring 2013 Arch 264, Arch 156

Studio Professor, Harvard University Graduate School of Design, Spring 2011
Courses Taught at Harvard
Spring 2011, GSD 1102

Diploma Research Director (sixth year students), Moscow Architecture Institute, 2008 – 2009
Studio Instructor, Harvard University Graduate School of Design, Spring 2003

Professional Experience:

Founder & Creative Director, ANTHEM, New York City, NY, 2009 - present
Project Architect, Project Manager, Project Designer, Construction Administration Manager, Leddy Maytum Stacy Architects, San Francisco, CA, 2004 – 2008
Branding, Strategy, and ID Designer, IDEO, 2003 – 2004
Designer, Harvard Planning and Real Estate, 2000 - 2002
Designer Machado and Silvetti, Boston, MA, 2000
Structural Team, Ove Arup & Partners, San Francisco CA, 1999
Designer, Holt Hinshaw Architects, San Francisco, CA, 1998 – 1999
Designer, Fisher Friedman Associates, San Francisco, CA, 1996 – 1998

Awards:

Master Mason – first place, NJIT, 2013
Master Mason – first place, NJIT, 2012
James Templeton Kelley Thesis Prize, Harvard GSD 2003
Araldo Cosutta Core Prize for Design Excellence, Harvard GSD 2001

Selected Publications and Recent Research:

Dwell August 2011: La Mesa de Venn
Arch Moscow 2003: Catalogue of Exhibited Work
Harvard Studio Works
2000
2001
2002
2003
Harvard GSD PLATFORM
2011

Name: Dr. Gabrielle Esperdy, Associate Professor

Courses Taught (Two academic years prior to current visit):
ARCH 251 History of Architecture I
ARCH 252 History of Architecture II
ARCH 381 History of Architecture III
ARCH 382 History of Architecture IV
ARCH 662 Roadscape/Landscape
USYS 702 Evolution of American Metropolis
USYS 788 Methods of Urban and Architectural History
USYS 788 Issues in Contemporary & Architectural Pedagogy

Educational Credentials:
B.A. Smith College, 1987
Ph.D. City University of New York, 1999

Teaching Experience:
Adjunct Assistant Professor, Pratt Institute, 1995-2001
Assistant Professor, NJIT, 2001-2007
Associate Professor, NJIT, 2007-present

Professional Experience
Editor, *SAH Archipedia* [online resource] 2010-present
Associate Editor, *Buildings of the United State* [book series], 2008-present
Associate Editor, *Journal of Architectural Education*, 2008-12
Editorial Board Member, *Journal of Architectural Education*, 2006-8, 2012-present
Advisory Committee Member, Beverly Willis Architecture Foundation, 2008-present
Board and Collective Member, DesignInquiry, 2009-present

Selected Publications and Recent Research:
"Mainstream & Marginal: Situating the American Roadside Photographs of John Margolies," *Buildings and Landscapes* (2012).
"The Incredible True Adventures of the Architectress in America," *Places* (2012).
"Flatbush Start to Finish," *UrbanOmnibus* (2012).
"Discovering America in Reyner Banham's Rear View Mirror," *Places* (2012).
"OpArch: The Once and Future Past," *Journal of Architectural Education* (2011).
"Women in North American Architecture," Dictionnaire des Créatrices (Editions des Femmes, 2011).
"Précis for a Field Guide to Joy," *DesignInquiry* (2011).
"Driven to Joy," *Core77* (2010).
"Designing Less from Bau to BIM," *DesignInquiry* (2010).
"Less is More Again-a Manifesto," *Design Observer* (2009).
Modernizing Main Street: Architecture and Consumer Culture in the New Deal (Chicago: 2008).
"*I am a Modernist*: Morris Lapidus and his Critics," *Journal of the Society of Architectural Historians* (2007).

Architecture & Autopia: Imagining the Commercial Landscape since World War II [book manuscript in preparation]
Formalists' Revenge: Tags, Buildings and Doing Architectural History Online," College Art Association [2013].
"The Street, the Strip & the Freeway: On the Legibility of Place in the Territories of the Car," Harvard Graduate School of Design Cambridge Talks VII [2013].
"Ugly America & the Shopping Mall: A Time-Life View of the 50s & 60s," Society of Architecture Historians [2013].
"Roadside Metropolis: Automobility and Urbanism in the 1960s," *Urban History Association* [2012].
"The Intellectual vs. the Suburbs," *Society for American City and Regional Planning History* [2011].
"Retail Values: Architecture & Shopping from Gruen to Koolhaas," *Dallas Architecture Forum* [2010].

Name: Emilia F. Ferri, Adjunct

Courses Taught:
ARCH 163 Introduction to Design I
ARCH 164 Introduction to Design II
ARCH 155 Modes of Design Communication I
ARCH 156 Modes of Design Communication II

Educational Credentials:
B.Arch., Syracuse University, School of Architecture, 2000
M.S. Architecture and Urban Design, Columbia University GSAPP, 2004

Teaching Experience:
Adjunct Instructor, NJIT College of Architecture and Design, 2008-present
AIA NY, Architecture Registration Exam Instructor, Spring 2010-present
Teaching Assistant, Columbia University GSAPP, Summer 2006

Professional Experience:
Architect, Emilia Ferri Design, Greenwich, CT 2008-present
Intermediate Architect, Robert A.M. Stern Architects, NY, NY, 2006-2008
Intermediate Architect, Hillier Architecture, NY, NY, 2004-2006
Intern Architect, Fletcher Thompson Inc., Shelton, CT 2000-2003

Licenses/Registration:
New York
Connecticut

Selected Publications:
Project. ***Emerging Urban Futures in Land Water Infrastructures–South East Queensland***
(Published by Columbia University Graduate School of Architecture,
Planning and Preservation in collaboration with the University of Queensland, 2009)
Book includes complete design project and written context.
Project. ***Designing Patch Dynamics***
(Published by Columbia University Graduate School of Architecture,
Planning and Preservation, 2008).
Book includes excerpts and graphics from design studio project
Project. ***Constellations: Constructing Urban Design Practices***
(Published by Columbia University Graduate School of Architecture,
Planning and Preservation, 2007).
Book includes excerpts and graphics from multiple design studio projects.
Project. ***Absolutely Public, Crossover: Art and Architecture***
(Images Publishing, 2005).
Book includes a selection of work from entry to the Art and Architecture competition sponsored by the Brisbane City Council, Southbank Corporation, Australia.

Professional Memberships:
AIA CT Chapter, member
NCARB Certification
USGBC, LEED Accredited Professional, Building Design and Construction
NAR, National Association of Realtors, member
CAR, Connecticut Association of Realtors, member

Name: Julio Figueroa, University Lecturer

Courses Taught:

Fall 2011 and 2012	ARCH 155 Modes of Communication
	ARCH 263 Undergraduate Design Studio
Spring 2012 and 2013	ARCH 156 Modes of Communication
	ARCH 264 Undergraduate Design Studio

Educational Credentials:
Architectural Study Abroad, Rome, Italy 1986
B.Arch., Pratt Institute, 1988

Teaching Experience:
Adjunct, NJIT 1999-2007
2nd Year Undergraduate Studio Coordinator, NJIT, 2008-present
University Lecturer, NJIT, 2008-present

Professional Experience:
Intern to Partner, Gran Associates, New York, NY 1987-2004.
Principal, JGF Architects, LLC, Clifton, NJ 2004-present.

Product Design: Mr. Figueroa participated on the design and sold all legal rights of the original stretched fabric bowls to Ray Bowls. The bowls, produced and manufactured by Sandy Chilewich, sold in the NY Museum of Modern Art store in 2002.

Panelized Housing: Mr. Figueroa developed a modular and panelized system of construction for pre-manufactured housing. The system incorporates the re-use of industrial wooden pallets widely used in the forklifting and trade of industrial, produce and other goods. A prototype single-family residence was built upstate New York in 1998.

Licenses/Registration:
New York
New Jersey

Professional Memberships:
The American Institute of Architects, Northern New Jersey Chapter
National Council of Architectural Registration Boards (NCARB)

Name: Dr. Karen A. Franck, Professor

Courses Taught (In 2011-2012; on sabbatical 2012-2013)
USYS 788-001 Architectural Perspectives in Urban Research
ARCH 662-005 Design and Use of Public Space
USYS 788-102 The Good City
ARCH 662-006 Memorials and the Making of Meaning

Educational Credentials
Ph.D. Environmental Psychology 1979 City University of New York
B.A Psychology 1970 Bennington College

Teaching Experience

Professor	New Jersey Institute of Technology	1998-present
Joint appointment	College of Science and Liberal Arts	1992-present
Associate Professor	New Jersey Institute of Technology	1984-1998
Assistant Professor	New Jersey Institute of Technology	1981-1984
Special Lecturer	New Jersey Institute of Technology	Spring 1981

Professional Experience
Not applicable

Licenses/Registration
Not applicable

Selected Books
Q. Stevens and K.A. Franck. *Spaces of Engagement: Memorial Design, Use and Meaning* (Routledge, Forthcoming 2014)

K.A. Franck and T. von Sommaruga Howard, *Design through Dialogue: A Guide for Clients and Architects* (Wiley, 2010) (Published in China 2012)

K. A. Franck and Q. Stevens (Eds), *Loose Space: Possibility and Diversity in Public Life.* (Routledge, 2007)

K.A. Franck and B. Lepori, *Architecture from the Inside Out: From the Body, the Senses, the Site and the Community* (2nd edition) (Wiley-Academy, 2007)

K.A. Franck (Ed), *Food + the City*. (Issue of *Architectural Design*) (Wiley-Academy, 2005)

K.A. Franck. (Ed), *Food + Architecture*. (Volume 72 of *Architectural Design*) (Wiley-Academy, 2002)

Professional Memberships
Environmental Design Research Association
Association of American Geographers

Name: Gabriel Fuentes, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 161 Intro to Design 1
ARCH 162 Intro to Design 2
ARCH 262 Architectural Design Studio 2

Educational Credentials:
B.Art, Florida International University, 2002
M.Arch, Florida International University, 2005
M.S.AUD, Columbia University, 2010

Teaching Experience:
Adjunct Professor, NJIT, 2008-present
Adjunct Assistant Professor, NYIT, 2008-2012
Adjunct Professor, Florida International University, 2005-2008
Adjunct Professor, Miami-Dade College

Professional Experience:
Founder + Director, DA | S, New York, NY, 2010-present
Project Manager + Designer, CKA, Brooklyn, NY, 2008-2009
Project Designer, Zyscovich Architects, Miami, FL, 2004-2008
Intern, Gresham, Smith, and Partners, Ft. Lauderdale, FL, 2002-2004

Licenses/Registration:
N/A

Selected Publications and Recent Research:
In The Making: Gen Z's Architectural 'Real (Paper presented at 2013 NCBDS)
Absorb, Analyze, Design…Repeat! (Paper presented at 2013 NCBDS)
The Real New Urbanism: Engaging Developing World Cities (JOSS, 2013)
Between History and Modernity: Searching for Lo Cubano in Modern Cuban Architecture (SUNY Press, 2011)
Thinking Forward: Preserving Havana Through Design (Paper presented at 2011 ACSA Fall Conference)
ReFORMing Type: A Mixed-Use Cultural Center, Old Havana, Cuba (Project presented at 2011 ACSA Fall Conference)
Mumbai_Shift: Strategies for Dynamic Urban Development (Project presented at 2011 International Conference on Humane Habitat, Mumbai, India)

Professional Memberships:
The American Institute of Architects

Name: Richard Garber, Associate Professor

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Fall 2011 ARCH 463/563 Solar Decathlon, Washington, DC
Spring 2012 ARCH 464 China Solar Decathlon / Wuhan Planning studio
Fall 2012 ARCH 563 China Solar Decathlon Design Development
Spring 2013 ARCH 464/564 China Solar Decathlon Construction Documentation / Comp II
Spring 2012-13 ARCH 483 Honors Seminar
Fall 2012 ARCH 582 Glass in the Chinese Landscape

Educational Credentials:
B.S. Building Sciences, Rensselaer Polytechnic Institute, 1994
B.Arch., Rensselaer Polytechnic Institute, 1995
M.S. A.A.D., Columbia University, 1998

Teaching Experience:
Associate in Architecture, Columbia University, 1999-2003
Adjunct Assistant Professor, Columbia University, 2003
Adjunct Faculty, NJIT, 2002-2005
Assistant Professor, NJIT, 2005-2011
Associate Professor (tenured), NJIT, 2011-present
Principal, GRO Architects, PLLC, New York, NY 2005-present
Project Architect, SHoP Architects, New York, NY 1999-2003
Project Designer, Greg Lynn FORM, Venice, CA 1998-1999

Licenses/Registration:
New Jersey
New York
Maryland

Selected Publications and Recent Research:
Books:
Garber, Richard; Closing the Gap: Information Models in Contemporary Design Practice: Architectural Design (John Wiley & Sons, Academy Editions, 2009). ISBN-13: 978-0470998205
Garber, Richard; Design BIM: Realizing the Creative Potential of Building Information Modeling (John Wiley & Sons, 2014)
Conferences:
Garber, Richard; “Use of Precast Concrete in the High-Performance Design of Sustainable Housing”; 2012 PCI Convention and National Bridge Conference, Nashville, TN
Grants:
Wuhan Planning and Design Institute (WPDI), 2013-2014; $63,800 USD; Principal Investigator
China Solar Decathlon, Datong, China, 2012-2013; $100,000 USD; Principal Investigator
PCI Design Studio Program, Chicago, IL, 2012-2014; $44,000 USD; co-Principal Investigator
PSE&G Energy Technology Demonstration Grant Program, 2010-2011; $500,000 USD; co-Principal Investigator
US Department of Energy Solar Decathlon, Washington, DC, 2009-2011; $100,000 USD; Principal Investigator
Total funding, this period: $807,800 USD
Professional Memberships:
The American Institute of Architects, Architectural League of New York

Name: Dean Urs P. Gauchat, Professor

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Arch 569G

Educational Credentials:
M.Arch., Harvard University, Graduate School of Design, 1967
B. Arch. University of Sydney, Australia, 1966
East Sydney Technical College, studied sculpture under L. Dadswell, 1962

Teaching Experience:
Dean and Professor of Architecture, NJIT, 1991-present
Visiting Professor, Swiss Federal Institute of Technology, Zurich, 1983
Associate Professor, Harvard University, Graduate School of Design, 1977-83
Assistant Professor of Architecture, Harvard University, Graduate School of Design, 1971-77
President, Boston Architectural Center, 1973-77
Instructor, Boston Architectural Center, 1971-81
Lecturer, Boston Architectural Center, 1968-70

Steering Committee for the Valencia Forum (the scientific portion of the U.N.World Congress on Ageing), Spain/U.S.
Co-Chair, U.N. "Caring Communities for the 21st Century*: Imagining The Possible*." Sponsored by ICCC and U.N., New York, NY.

Licenses/Registration:
Australia

Selected Publications:
- "The $300,000/Year Architect," AD March/April 2009, 32-37.
- *Housing in Disaster Prone Countries: A Global Perspective,* 1980 (with D.L.Schodek)
- *Faculty Housing at Harvard: Strategies for the Sacramento-Garfield Site,* 1980 (with R. Wesley)
- *Housing in Disaster Prone Countries: Policies for Shelter Continuity,* Proceedings, International Conference on Housing Planning Financing, Construction in North Central, South American and Caribbean Countries, Florida International University, 1979 (with D.L.Schodek)

Professional Memberships:
Honorary Member, American Institute of Architects, 1998-present
Honorary Member, Boston Architectural Center, 1980-present
Member, Royal Australian Institute of Architects, 1966-present
Member, Royal Sydney Yacht Squadron, 1963-present

Name: Matthew Gosser, Adjunct

Courses Taught (Two academic years prior to current visit):
AD 111 – Traditional Modes of Communication
AD 463 – Collaborative Design Studio
ARCH 155 – Modes of Design Communication I
ARCH 164 – Introduction to Design II

Educational Credentials:
B.Arch., NJ School of Architecture, 1997
M Infrastructure Planning., NJ School of Architecture, 2003

Teaching Experience:
Adjunct Instructor, NJIT, 2000-present
Special Instructor, Kids in Business, 1996-1997

Professional Experience:
Project Manager, Lee Levine Architects, Hoboken, NJ 1998-2007
Gallery Curator, CoAD Gallery, NJIT 2006-present

Licenses/Registration:
None

Selected Publications and Recent Research:
None

Professional Memberships:
Newark Preservation and Landmarks Committee, Vice-President, 2010-present
Jewish Museum of New Jersey, Board member, 2009-present

Name: Henry Grosman, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
ARCH 264 Undergraduate Design Studio
ARCH 263 Undergraduate Design Studio
ARCH 504g Graduate Design Studio
ARCH 583/661-04 Seminar: Parametric Design & Theory
ARCH 301 Seminar: Digital Modeling and Fabrication

Educational Credentials:
B.A., Columbia College, Columbia University, 1997
M.ARch., Graduate School of Architecture, Planning & Preservation Columbia University, 2005

Teaching Experience:
Adjunct Professor, NJIT, 2007-2013
Adjunct Professor, Columbia University, 2006
Adjunct Professor, Parsons, The New School for Design, 2011, 2013
Adjunct Professor, Cornell, 2011

Principal, BanG studio, Brooklyn 2010-present
Project Architect, Leeser Architecture, Brooklyn 2009-2011
Project Manager, Gauthier Architects/SYSTEMarchtiects, NYC 2008
Designer, Smith-Miller + Hawkinson Architects, NYC 2005-2008

Selected Publications and Recent Research:
Users - AIANJ Fall Symposium - AIA Press (forthcoming)
MARK, "Notice Board," no. 29. Dec. 2010/Jan 2011
Material Evidence - AIANJ Anual Symposium - AIA Press (2010)
DAMNMagazine, no. 26 "The Sheltering Sky," Anna Jenkinson (October - December, 2010)
The Architectural Review, Nov. 2010, 1365 Vol. CCXXVIII "Delight: 600 Architects Compete to Design a Sukkah," Zöe Blackler
The Jewish Review of Books, "Temporary Measures," Shari Saiman, No. 3, Fall 2010
Architecture & Art, "Contemporary Sukkah," Vol. 30 No 12
USA Today, "A Tiny Shelter for Inspiration," Wendy Kock. (24 September, 2010)
New York Magazine, "Sukkah vs. Sukkah" Justin Davidson. (September 20, 2010)
The New York Times, "A Harvest of Temporary Shelters" Fred Bernstein. (16 September, 2010)
Hong Kong Biennale of Architecture & Urbanism - Refabricating City Exhibition and Catalogue (2008)
Die Stadt Als Event: Zur Konstruktion Urbaner Erlebnisräume - Bittner, Regina (ed.) (2001)

Name: Greta Hansen, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Arch 263, Studio III

Educational Credentials:
M.Arch., Columbia University, 2009
B.S., Architecture, University of Cincinnati, 2006

Teaching Experience:
Adjunct, New Jersey Institute of Technology, 2012
Adjunct, University of St. Joseph, Macau, China, Winter 2011
Design Instructor, Center for Architecture, 2008-10

Licenses/Registration:
None

Selected Publications and Recent Research:
TRANS SIBERIA: tracing communism through administrative buildings, Moscow to Beijing. Through creative partnership W.E.Research travel culminating in photographs and drawing series. Exhibition March 26 - April 16 2010 at Studio X New York.
Exhibitions published in Brooklyn Rail (April 2010) and Design Observer (March 2010) as well as “Trans Siberia.” The Studio-X New York Guide to Liberating New Forms of Conversation. GSAPP Books: 2010. Edited by Gavin Browning, with afterward by Mark Wigley. Interactive article “Frontier Facades” published through Triple Canopy’s online publication, issue 11.

Professional Memberships:
None

Faculty Name: Cleve Harp, University Lecturer

Courses Taught:

Spring 2013	ARCH 563	Pre-Comprehensive Studio
	ARCH 564	Comprehensive Studio
Fall 2012	ARCH 263	Architecture Studio I
	ARCH 251	History of Architecture I
Summer 2012	ARCH 505G	Graduate Arch Design V
	ARCH 531H	Aspects of Urban Form
	ARCH 662	Aspects of Urban Form
Spring 2012	ARCH 506G	Graduate Arch Design VI
	ARCH 507G	Graduate Arch Design VII
	MIP 631	History & Theory of Infrastructure Planning
Fall 2011	ARCH 563	Pre-Comprehensive Studio
	ARCH 564	Comprehensive Studio
	ARCH 251	History of Architecture I

Educational Credentials:
M Arch, Harvard Graduate School of Design
B Arch, Georgia Institute of Technology School of Architecture

Teaching Experience:
University Lecturer, NJIT School of Architecture, 2009-present
Adjunct, NJIT School of Architecture, 1987-1990, 2005-2008

Professional Experience:
Cleveland Harp Architecture & Design, New York
HLW Strategies, New York
Cooper Robertson & Partners, New York
Studio for Architecture, New York
Kohn Pedersen Fox, New York
Massachusetts General Hospital Planning Office, Boston
Benjamin Thompson & Associates, Cambridge

Licenses/Registration:
New York
Georgia
NCARB

Selected Publications and Recent Research:
New York Spaces Dec 2011
Architectural Digest Aug 1994, July 1993, Nov 1984
AD100 1991
Architecture Jan 1990
Washington Post Dec 1989
Metropolis July-Aug 1987
Oculus Feb 1987
New York Times Dec 1983
AD Japan March 1983
Les Halles Di Parigi Mostra Dei Controprogetti, March 1981
L'Architecture d'Aujourd'hui Apr 1980

Name: Anthony Harrington, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 163 Introduction to Design I
ARCH 164 Introduction to Design II
ARCH 263 Architecture Studio I
ARCH 364 Architecture Studio IV

Educational Credentials:
B.S in Architecture, the University of Michigan, 2000
M. Arch, Rice University, 2005

Teaching Experience:
Adjunct Professor, NYIT, 2009-2011
Adjunct Professor, NJIT, 2011-present
Teaching Artist, BHSVA / the Center for Urban Pedagogy, 2008
Instructor, Wonderworks / the University of Houston, 2005
Instructor, Duke University TIP Program, 2005
Teaching Assistant, the University of Houston Summer Discovery, 2004

Professional Experience:
Architectural Designer, DeStefano + Partners, Chicago, IL 2000-2002
Architectural Designer, Grunsfeld Shafer Architects, Chicago, IL 2002
Architectural Designer, Collins Architects, Houston, TX 2003-2004
Project Architect, Ryall Porter Sheridan Architects, New York, NY 2005-2009
Vice President, pHdesign, Brooklyn, NY 2008-present

Licenses/Registration:
New York
Illinois (inactive)
Texas (inactive)

Selected Publications and Recent Research:
306090: 08, Autonomous Urbanisms*, House in the Hills (PA Press, 2005)*
306090: 12, Dimension*, Office Tower Infestation (PA Press, 2009)*
Apartment Therapy's Big Book of Small, Cool Spaces*, 3-in-1 Studio* (Crown, 2010)

Professional Memberships:
The Architectural League of New York

Name: Robert S. Hutchinson, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 569G – Building and Development
ARCH 650 – Economy of Building
MIP 618 – Public and Private Finance of Infrastructure

Educational Credentials:
B.S. Science, Technology & Society, New Jersey Institute of Technology, 1995
M.S. Environmental Policy Studies, New Jersey Institute of Technology, 1998
M.I.P., New Jersey Institute of Technology, 1998
MBA, Baruch College, City University of New York, 2006

Teaching Experience:
Adjunct Professor, NJIT, 2008-present

Professional Experience:
NJTPA, Acting Senior Planner, Newark, NJ 1998-1999
The Berger Group, Planner, East Orange, NJ 1999-2002
MTA Metro-North Railroad, New York, NY 2002-2005
Dornoch Management, Rahway, NJ 2006-2007
Cushman & Wakefield, New York, NY 2008-2009
DWH Strategic Advisors, New York, NY 2009-Present

Licenses/Registration:
AICP 2002-2006

Selected Publications and Recent Research:
2003 The Louis Berger Group, East Orange, NJ
"Evaluating the Performance of Environmental Streamlining: Phase II"
Data Collection Study Design
Citation: http://environment.fhwa.dot.gov/strmlng/baseline/phase2rpt.htm#5

2000 The Louis Berger Group, East Orange, NJ
"Evaluating the Performance of Environmental Streamlining: Development of a NEPA baseline for Measuring Continuous Performance"
Final Report (Phase I): http://environment.fhwa.dot.gov/strmlng/baseline/index.htm
Citation: http://environment.fhwa.dot.gov/strmlng/baseline/section6.htm
Lead data collection design, execution, and analysis.

1999 North Jersey Transportation Planning Authority Newark, NJ
Brownfields Economic Redevelopment: Preparing Modern Intermodal Freight Infrastructure to Support Brownfields Economic Redevelopment
Participated in study design and consultant selection.
Final Document: http://njtpa.org/planning/brownfields/BERfinalreport.html

Recent and Current Engagements:
Ongoing Privately financed solar development and energy efficient reals estate retrofits
Ongoing Transit Oriented Development consulting
2012 Amtrak High Speed Rail, Northeast Corridor
2012-13 Penn Station Visioning, Financial Impact Modeling of Real Estate Decisions
2012 Solar Development in Massachusetts: Privately funded municipal 3 MW solar farm
2010-2012 Financial and Development Consulting – Private University client in PA

Name: Jason Kliwinski, Adjunct

Courses Taught:
Arch 664 Indoor Environmental Quality

Educational Credentials:
B.Arch., New Jersey Institute of Technology, 1994

Teaching Experience:
New Jersey Institute of Technology, Newark, NJ

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:

Professional Memberships:
The American Institute of Architects of New Jersey
US Green Building Center – NJ, cofounder, LEED Fellow

Name: Brent Klokis, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
ARCH 163 Introduction to Design
ARCH 155 Modes of Communication I
ARCH 156 Modes of Communication II
AD 112 Digital Communication in Art & Design Digital
Media

Educational Credentials:
B.Arch., NJIT College of Architecture + Design, 2010

Teaching Experience:
Adjunct Instructor, NJIT, 20112013
Project Designer, Wilkes Architects, Hillsborough, NJ 20052009
Project Designer, GRO Architects, New York, NY 2010present

Licenses/Registration:

SelectedPublications and Recent Research:

Professional Memberships:

Name: Daniel Kopec, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 163 Introduction to Design I
ARCH 164 Introduction to Design II
ARCH 227 Environmental Control Systems I
ARCH 327 Environmental Control Systems II

Educational Credentials:
B. Arch, New Jersey Institute of Technology 1999
M. Arch, Yale University 2001

Teaching Experience:
Adjunct, New York Institute of Technology
Adjunct, New Jersey Institute of Technology 2008-Present

Professional Experience:
Project Architect, Perkins + Will 2001-2005
Architectural Staff, Santiago Calatrava 2005-2006
Project Architect, Guerin Glass Architects 2006-2009
Research Architect, Center for Building Knowledge at NJIT, 2009-2012
Principal, Daniel Kopec Architects LLC 2013-present

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:
Kopec, Daniel. Review of Bandyopadhyay, Soumyen, Jane Lomholt, Nicholas Temple, and Renée Tobe, eds. *The Humanities in Architectural Design: A Contemporary and Historical Perspective*. Oxford: Routledge, 2010. in the *Journal of Architectural Education* – JAE 65:2.

Kopec, Daniel and Gabriel Fuentes. *Absorb, Analyze, Design, Repeat*. 29th National Conference on the Beginning Design Student. Temple University. 2013.

Professional Memberships:
USGBC, LEED Accredited Professional, 2009-present

National Institute of Building Sciences / Building Enclosure Technology & Environment Council (BETEC) Education Sub-committee Member, 2010-present

Society of Building Science Educators, 2012

Name: Ersela Kripa, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 263 Architecture Design Studio I
ARCH 264 Architecture Design Studio II

Educational Credentials:
B.Arch., New Jersey Institute of Technology School of Architecture, 2002
M.A.A.D., Columbia University Graduate School of Architecture, Planning, Preservation, 2006

Teaching Experience:
Adjunct Assistant Professor, NJIT, 2011-current
Visiting Assistant Professor of Architecture, Washington University Graduate School of Architecture, St. Louis, 2012-current
Instructor, Sustainable Urban and Architectural Design Workshop, Universita degli Studi di Roma 'La Sapienza', Rome, 2011
Instructor, Malta Frugal Architecture Design Workshop, Malta, 2011
Instructor, Fourth International Design Workshop, American Association of Colleges and University Programs in Italy, Rome, 2010

Professional Experience:
Founding Partner, AGENCY Architecture LLC, 2009-current
Architect, 1100 Architect, NY, 2006-2009

Licenses/Registration:
New York
Missouri
Albania

Selected Publications and Recent Research:
Elements of a Tactical Urbanism, Forthcoming (ORO Editions)
Skyfill Land Art Generator, Regenerative Infrastructures (Prestel, 2013)
Critical Conditioning – Managing Crisis in the Design Imaginary, Global Crisis and Design (I:M NY, 2012)
Superlevee Urban Farm, My Green City – Back to Nature with Attitude and Style (Gestalten, 2011)
Hackable Infrastructures, UNPLANNED Research and Experiments at the Urban Scale (SUPERFRONT LA, 2010)
Commuter City, KCFree Press Urbanism Essays (KCFree Press, 2010)
Nation Building Esthetics, Volume 14 Unsolicited Architecture (Archis-AMO-CLab 2008)

Professional Memberships:
NCARB
SUPERFRONT Board Member

Name: Mark Kroeckel, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 504G Grad Design IV

Educational Credentials:
B.Arch. and B. Science, Honors College, Ball State University, 1992
M. Arch., Rice University, 1996

Teaching Experience:
Adjunct Lecturer, Peking University Graduate Center of Architecture, 2001-2002
Adjunct Assistant Professor of Architecture, The Cooper Union, 2003-2004
Adjunct Assistant Professor of Architecture, Barnard + Columbia Architecture, 2007-2011
Adjunct Assistant Professor of Architecture, Columbia University GSAPP, 2009-present
Visiting Lecturer, University of Pennsylvania, 2012
Adjunct Assistant Professor of Architecture, NJIT, 2013

Professional Experience:
Designer, Ratio Architects, Indianapolis, IN, 1993-1994
Designer, Gensler and Associates, Houston, TX, 1994-1995
Project Designer and Architect, Kirksey Architects, Houston, TX, 1997-1999
Project Designer and Architect, The Moderns, New York, NY, 1999-2001
Partner, Openshop, New York, NY, 2001-present
Partner, Openshop Architecture, New York, NY, 2009-present
Partner, Massive Architecture and Planning, Shanghai, PRC, 2012-present

Licenses/Registration:
New York

Selected Publications and Recent Research:
AIA New York – Winner of New Practices New York 2008 competition, 2008
I.D. Magazine Annual Design Review - Honorable Mention in Environments for Hive Loft, 2007
MoMA/PS1 - Nominated for Young Architects Program, 2007
American Institute of Architecture, Houston - Design Award for Housing for House 2045, 2006
2005
ACEC of New York - Silver Award for Engineering Excellence for Apartment 259.B, 2005
Queens Museum of Art – Winner of first Mini-Commission Architecture Series, 2002
Greenhouse - Opera House Competition, Finalist - Beijing, PRC, 2001

Name: Keith Krumwiede, Associate Professor

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
ARCH 505G Advanced Design Option I
ARCH 506G Advanced Design Option II
ARCH 507G Graduate Architectural Design VII

Educational Credentials:
B.A. Architecture & Minor in History of the Built Environment, University of California, Berkeley, 1986
M.Arch., Southern California Institute of Architecture, 1994

Teaching Experience:
Studio Instructor, Otis College of Art and Design, 1994-1996
Wortham Teaching Fellow, Rice University, 1996-1997
Caudill Visiting Lecturer, Rice University, 1997-1999
Caudill Visiting Lecturer, Rice University, 1999-2003
Visiting Assistant Professor, Konstfack College of Art and Design, 1999
Assistant Professor, Yale University, 2003-2009
Assistant Dean, Yale University, 2004-2012
Associate Professor, Yale University, 2009-2012
Associate Professor, NJIT, 2012-present
Director, Graduate Architecture Programs, NJIT, 2012-present

Professional Experience:
Design Review Consultant, Department of Planning, City of Oakland, CA, 1990-1992
Project Designer, Smith-Miller + Hawkinson Architects, Los Angeles, CA, 1994-1996
Partner, StandardLA, Los Angeles, CA, 1992-1996
Principal, StandardTX, Houston, TX, 1996-2004
Principal, StandardNY, New York, NY 2004-present

Licenses/Registration:

Selected Publications and Recent Research:
"Supermodel Homes," in *Cite Number 58* (2002)
National Endowment for the Arts Design Grant, "Housing the Fifth Ward" (2003)
"Tactical Urbanism," in *Domus Number 880* (2005)
Hines Research Fund for Advanced Sustainability in Architecture Grant, "The Post Bubble Dwelling: Studies in High Density Wood Dwellings, Yale University (2009)
"[A]Typical Plan[s]" in *Perspecta 43: Taboo* (The MIT Press, 2010)
Top Ten Finalist, *Foreclosed: Rehousing the American Dream*, Museum of Modern Art / P.S. 1 (2011)
"Bauhaus Tweets" in *Log 22* (Anyone Corp., 2011)
"Freedomland" in *306090: Making a Case* (Princeton Architectural Press, 2011)
"Freedomland: Speculations on Another American," in *Praxis: On Narrative* (2013)

Professional Memberships:

Name: Dr. Jesse LeCavalier, Assistant Professor

Courses Taught (Two academic years prior to current visit):
ARCH 163 Introduction to Design I
ARCH 164 Introduction to Design II

Educational Credentials:
Dr.Sc., ETH Zurich, 2012
M.Arch., University of California, Berkeley, 2003
B.A., Brown University, 1999

Teaching Experience:
Assistant Professor, NJIT, 2012-
Walter B. Sanders Fellow, University of Michigan, 2010-2011
Junior Faculty, Marc Angélil / ETH Zurich, 2005-2010

Professional Experience:
Senior Researcher, ETH Future Cities Laboratory, Module VI: Territorial Organization, Singapore, 2012
Design team, agps.architecture, Los Angeles, CA, 2003-2005
Intern, Leger Wanaselja Architecture, Berkeley, CA, 1999-2001

Selected Publications and Recent Research:
"Walmart's Geographical Architecture," forthcoming in *Architecture and Geography*, eds. Stephen Cairns and Jane M. Jacobs (Routledge, 2014).
"Robert Owen's Utopian Machine," forthcoming in *Collectivize!*, eds. Marc Angélil and Rainer Hehl (Ruby Press, 2013).
"Test Bed Urbanism," forthcoming in *Public Culture*, Volume 25:2 (Spring 2013), with Orit Halpern, Nerea Calvillo, and Wolfgang Pietsch.
"Walmart and the Architecture of Logistics" to be presented at the 66th Annual Conference of the Society of Architectural Historians, Buffalo, NY, April, 2013.
"Walmart Store #5861" in *JAE*, Volume 67:1 (March 2013), 154-155.
"The Restlessness of Objects," in *Cabinet 47: Logistics* (Fall 2012), 90-97.
"Walmart's Catalytic Urbanism" in *AD: City Catalyst: Architecture in the Age of Extreme Urbanization*, (September/October 2012), 26-35.
"BMW Stiftung Spotlight: Poiesis Fellow Interview" for the BMW Foundation Website, November 2011.
"Entrevista" in *ARQA: Arquitectura e Arte* (September / October 2011), 36-38.
Milgram 01. Newspaper published through the Poiesis Fellowship, Institute for Public Knowledge, New York University, 2011.
"Networks of Architecture: Keedoozle and Walmart" in *MAS Context 09: Networks* (Spring 2011), 110-23.
"Let's Infratecture!" in *Infrastructure as Architecture: Designing Composite Networks*, eds. Katrina Stoll and Scott Lloyd (Jovis Verlag, 2010), 100-111.
"DC on Wheels" in *Pidgin 09* (Princeton Architectural Press, 2010), insert.
"All Those Numbers" in *Places: Forum of Design for the Public Realm*, May 2010.
"DC on the High Seas" in *306090 13: Sustain and Develop* (Princeton Architectural Press, 2010), 246-48.
"Beans or Butterflies" in *Cities of Change: Addis Ababa,* eds. Marc Angélil and Dirk Hebel (Birkhäuser 2009), 176-181.
Standpunkte One: This Will ___ This (Standpunkte, 2009), with John Harwood & Guillaume Mojon.
"The Mormon Church's Infrastructure of Salvation" in MONU 10: Holy Urbanism (March, 2009), 82-89.
"Location, Location, Location: Wal-Mart's Quest to Conquer Vermont" in *Architecture & Property* (Winter 2008), 7-9.
Deviations: Designing Architecture, A Manual, eds. Marc Angélil and Dirk Hebel (Birkhäuser, 2008), contributing author.
"Interview with William Correll, Architect of Wal-Mart" in *archithese* (November/December 2007), 32-37.

Name: Joshua Lindemans, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
ARCH 163 Introduction to Design I
ARCH 164 Introduction to Design II

Educational Credentials:
B.S. B.A., University of Richmond, 2001
M. Arch., NJIT, 2010

Teaching Experience:
Adjunct Professor, NJIT, 2012-2013
Teaching Assistant, NJIT, 2008-2010

Work Experience:
Architectural Associate, K. Hovnanian Companies, Red Bank, NJ 2003-2007
Assistant Project Manager, Minno + Wasko Architects Lambertville 2011-present

Professional Memberships:
The American Institute of Architects - Associate
LEED-AP
Society of Architectural Historians

Name: Dr. Frederick Alan Little, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Japanese Architecture
Japanese Combatives

Educational Credentials:
B.A., UC-Santa Cruz, 1986
M.F.A., Columbia University -- School of the Arts, 1990
Ph.D., Rutgers-Newark – Division of Global Affairs, 2012

Chuden Menjo, Toda-ha Buko-Ryu Naginata-jutsu, 2011
Keppan, Takamura-ha Shindo Yoshin Ryu, 2011

Teaching Experience:
Adjunct Professor, William Paterson University, 1990-92
Adjunct Professor, NJIT, 2003-present
Professor, University of Illinois, Chicago, 2006-present

Selected Publications and Recent Research:
Lost in Translation: The Anglo-Japanese Productions of Minakata Kumagusu (2011)
The Complete English Publications of Minakata Kumagusu, with critical and biographical introductions by the editor. (forthcoming, Fall 2013)
Paradise with Misdirections: New York Foundation for the Arts Fellowship, Non-Fiction, 1991-2
Paperclip: Winner of the Ina May Coolbrith Prize in Poetry, University of California, 1986.

Name: Brian Loughlin, Adjunct

Courses Taught (Two academic years prior to current visit):
Arch 363

Educational Credentials:
B.S., Architecture, Catholic University, 1993
M.Arch, Columbia University, GSAPP, 2002

Teaching Experience:

Adjunct: New Jersey Institute of Technology, Newark, NJ
Adjunct Assistant Professor: Columbia University, GSAPP

Professional Experience:
Chief Architect, Jersey City Housing Authority

Name: Andrew Mailloux, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 155 - Modes of Design Communication
AD 112 - Communication in Art and Design – Digital Media

Educational Credentials:
B.Arch., New Jersey Institute of Technology, 2012

Teaching Experience:
Adjunct Instructor, New Jersey Institute of Technology, 2012-2013

Professional Experience:
Intern, The Longo Partnership, New Providence, NJ 2007-2010
Project Manager, GRO Architects, New York, NY 2011-present

Name: Ernesto Martinez, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Arch 163

Educational Credentials:
M.Arch., Pratt Institute

Teaching Experience:
Adjunct, NJIT, 2010-present
Teaching Assistant, International Center of Photography, New York

Principal, E.Lo.Ma Designs
Memorial Design Competition Director: Remember the Triangle Fire Coalition

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Nidhip Mehta, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 155 Modes of Design Communication I
ARCH 156 Modes of Design Communication II
ARCH 164 Introduction to Design II

Educational Credentials:
B.Arch., New Jersey Institute of Technology, 1998
M.S.Arch. (History and Theory), New Jersey Institute of Technology, 2013

Teaching Experience:
Adjunct Faculty, NJIT, 2008, 2012-13
Visiting Faculty, School of Planning and Architecture, New Delhi, 2009-11
Visiting Faculty, National Institute of Fashion Technology, New Delhi, 2010-11

Professional Experience:
Project Architect, Marchetto Higgins Stieve, Hoboken, NJ 1998-2007
Project Architect, Nastasi Architects, Hoboken, NJ 2007-2009
Principal, Nidhip Mehta Architect, New Milford, NJ (and New Delhi, India) 2007-present

Licenses/Registration:
New Jersey

Name: Leah Meisterlin, Adjunct

Courses Taught (Two academic years prior to current visit):
Architecture Studio III (Arch 363)

Educational Credentials:
B.A., Architecture and Urbanism, Smith College, 2002
M.S. ,Urban Planning, Columbia University, 2006
M.Arch, Columbia University, GSAPP, 2009

Teaching Experience:
Knowing Cities | Columbia University GSAPP | Spring 2013; **Advanced GIS: Seminar in Spatial Analysis** | Columbia University GSAPP | Spring 2013; **Introduction to GIS Methods** | Barnard College Urban Studies Program | Spring 2013; **Architecture Options Studio: Public Housing Post-Sandy** | with Brian Loughlin | New Jersey Institute of Technology CoAD | Spring 2013; **Introduction to GIS** | Columbia University GSAPP | Fall 2012; **Architecture Studio III** | with Brian Loughlin | New Jersey Institute of Technology CoAD | Fall 2012; **MS Real Estate Development Envisioning Studio** | with Brian Loughlin | Columbia University GSAPP | Summer 2012; **Ethnographic Mapping in Tourism Areas in the Dominican Republic: HIV Transmission in Sosua** | with Vincent Guilamo-Ramos, PhD, LCSW | New York University Silver School of Social Work | Summer 2011

Professional Experience:
Intersticity | New York, NY & Jersey City, NJ | 2012 - present | *Partner*; **Columbia University Graduate School of Architecture, Planning, and Preservation** | New York, NY | 2012 - present | *Adjunct Assistant Professor*; **Barnard College Urban Studies Program** | New York, NY | 2013 - present | *Adjunct Assistant Professor*; **New Jersey Institute of Technology College of Architecture and Design New Jersey School of Architecture** | Newark, NJ | 2013 - present | *Adjunct Instructor*; **Temple Hoyne Buell Center for the Study of American Architecture**, Columbia University | NYC | 2009 - 2013 | *Adjunct Associate Research Scholar*

Selected Publications and Recent Research:
Guilamo-Ramos, V., Jaccarda, J., McCarthy, K., Quinones, Z., Lushina, V., Skinner-Day, M., Padilla, M., **Meisterlin, L.**, "Taxonomy of Caribbean tourism alcohol venues: Implications for HIV transmission." *Drug and Alcohol Dependence*. (in press); **Meisterlin, Leah** Ed. *Comments on* Foreclosed. New York: The Temple Hoyne Buell Center for the Study of American Architecture, 2013. [Preface by Reinhold Martin]; Guilamo-Ramos, V., Padilla, M., **Meisterlin, L.**, McCarthy, K., Lotz, K. "Tourism ecologies, alcohol venues, and HIV: Mapping spatial risk." *International Journal of Hispanic Psychology*, 2012, 5(2).; **Meisterlin, Leah**. "Foreclosed." *Metropolis Magazine: Point of View.* 15 March 2012; Martin, Reinhold, **Leah Meisterlin**, and Anna Kenoff. *The Buell Hypothesis: Rehousing the American Dream.* New York: The Temple Hoyne Buell Center for the Study of American Architecture, 2011; Browning, Gavin, ed. *The Studio-X New York Guide to Liberating New Forms of Conversation*. New York: The Graduate School of Architecture, Planning, and Preservation at Columbia University, 2010; Kottas, Dimitris. *Contemporary Digital Architecture: Design and Techniques* Barcelona: Links, 2010; Hurley, Amanda. "New Practice, Un-Practice." *Architect*. February 2010: cover, 44-49; Holl, Steven. *Urbanisms: Working with Doubt*. New York: Princeton Architectural Press, 2009. [maps contributed]; The Temple Hoyne Buell Center for the Study of American Architecture. *Public Housing: A New Conversation*. New York: The Trustees of Columbia University in the City of New York, 2009; **Meisterlin, Leah**, et al. "The Stimulus Studio." *Urban*. Spring 2009: 7-9; Davis, Aaron and **Leah Meisterlin**. "Upset Ethics." *Crisis, Urban China Bootlegged by C-Lab for Volume.* February 2009.

Name: Dr. Sandy Moore, Associate Professor

Courses Taught
- Everyday Life in the Public Realm (Spring 2013)
- Case Studies in Community & Urban Design (Spring 2013)
- Exploring Urban Gardening and the Impact on the Built Environment (Fall 2012)
- Pop-Up Architecture: A Global Trend (Fall 2012)
- Thinking Outside the Box (Spring 2012)
- Diversity in Design: A Sense of Place (Fall 2011)
- Many Faces of Architecture (2007 – 2012)

Educational Credentials:
PhD, Harvard University
MED (Architecture), Yale University
BA (Architecture), Tuskegee Institute

Teaching Experience:
- Associate Professor, NJIT
- 1st Associate Dean/Associate Professor, NJIT
- 1st Assistant Dean/Assistant Professor, Florida A&M University
- Faculty, Boston Architectural Center
- Assistant Professor, Massachusetts College of Arts
- Assistant Professor, Architecture, University of Wisconsin – Milwaukee
- Visiting Critic, Architecture, University of Wisconsin - Milwaukee

Professional Experience:

- Intern (Tennessee Valley Authority, Knoxville: McKissack & McKissack, Nashville TN; Bellante, Clauss, Miller & Nolan, Philadelphia, PA; Clauss & Nolan, Trenton, NJ

- Consultant with Carol R. Johnson, Cambridge, MA; Alexander Cooper and McCullard Associates, NYC; National Endowment for the Arts & National League of Cities, Washington, DC; NJ State Council on the Arts; Administrator, Department of Housing Presentation and Development, NYC

Licenses/Registration:
N/A

Selected Publications and Recent Research:
Sr. Producer, Video Production: NCTIP's Outreach, Abington Ave. School's Gifted Program; "Black Women in Architecture: A Sense of Place" (copyrighted with NJIT); Co-Editor, "Many Faces of Architecture, NJ Society of Architects; Learning Thorough the Built Environment, Journal of Arch Education; Update: Black Women in Architecture (in-progress); Selected Student Work (1970's to 1980's): and Profile of the Gifted Experiencing Pre-College Architecture (in-progress)

Professional Memberships:
N/A

Name: Michael Mostoller, Distinguished Professor

Courses Taught
Spring 2013: Arch 106G, Design Studio; Arch 529G, History II
Fall 2012: Arch 101G, Design Studio; Arch 583G, Seminar – Project Japan/China Rising (elective)
Spring 2012: Arch 102G, Design Studio; Arch 529 G, History II
Fall 2011: UG Second Year Studio; Arch 583 G, Seminar – Emerging Typologies (elective)

Educational Credentials
BS Arch: Rensselaer Polytechnic Institute 1960
BArch: Rensselaer Polytechnic Institute 1964
MArch: Graduate School of Design, Harvard University, 1969

Teaching Experience
Assistant Professor: Rensselaer, 1965-1968
Assistant Professor: Harvard University, 1969-1972
Associate Professor: Harvard University, 1972-1974
Associate Professor: Columbia University, 1974-1983
Special Lecturer, NJIT, 1983-1984
Associate Professor, NJIT, 1984-1986
Professor, NJIT, 1986-1995
Distinguished Professor, NJIT, 1995-Present

Professional Experience
Michael Mostoller Architect, 1969-Present

Licenses, Registration
New Jersey
New York (inactive)

Selected Architectural Practice, Research
Graduate Student Housing Complex, Princeton University, 230 units, 2005
Housing Complex, Princeton, NJ, 120 units (in progress)
Architecture in Crisis, essays, 2005-2013

Professional Membership
American Institute of Architects FAIA,

Name: Dr. Taro Narahara, Assistant Professor

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
AD-150, Color and Composition
DD-275, History of Games
DD-364, Digital Design Studio II
AD-490, ST: Computational Design & Digital Interaction
AD-490, ST: Extreme Fabrication: Robotics for Architects and Designers

Educational Credentials:
B.S. in Mathematics, Waseda University, 1994
M.Arch. Washington University, 1997
S.M.Arch.S. (Master of Science), MIT, 2007
D.Des. (Doctor of Design), Harvard University, 2010

Teaching Experience:
Teaching Assistant, MIT, 2006–2007.
Research Fellow, Harvard University, 2008-2007.
Teaching Fellow, Harvard University, 2008-2010.
Assistant Professor, NJIT, 2010-Present.

Professional Experience:
Architectural Designer, Skidmore Owings and Merrill LLP, NY 1997 - 2000
Project Architect, Gluckman Mayner Architects, NY 2000 - 2005

Licenses/Registration:
New York
NCARB Certification Qualified (Completed Intern Development Program (IDP))

Selected Publications and Recent Research:
Narahara, T. 2013. (in press)." The Computer as a Tool for Creative Adaptation: Biologically Inspired Simulation for Architecture and Urban Design" in Computation for Humanity—Information Technology to Advance Society (1st edition), Justyna Zander and Pieter Mosterman (Ed.), Boca Raton, Florida: CRC Press, Taylor & Francis Group, LLC.

Narahara, T. 2013. "Adaptive Growth using Robotic Fabrication," Proceedings of The Association for Computer-Aided Architectural Design Research in Asia (CAADRIA) 2013, National University of Singapore, Singapore, May 15–18. Proceedings.

Narahara T. 2010. Design for constant change: Adaptable growth model for architecture, International Journal of Architectural Computing (IJAC), 8, 1, 29–40.

Narahara, T. 2012. "Self-organizing Strategy: An Adaptable Growth Model for Architecture," ACSA 100th Annual Meeting (The Association of Collegiate Schools of Architecture): "Digital Aptitudes", Boston, MA, (Host School: Massachusetts Institute of Technology), March 1-4, 2012. pp. 76 – 84.

Narahara, T. 2007 "Enactment Software: Spatial Designs Using Agent-based Models," AGENT 2007: Conference on Complex Interaction and Social Emergence. Sponsored by Argonne National Laboratory and Northwestern University, Northwestern University, Norris Center, Evanston, November 15-17. Proceedings .

Professional Memberships:
NYC ACM SIGGRAPH

Name: Thomas Navin, University Leturer

Courses Taught (Two academic years prior to current visit):
ARCH 503 G Architectural Design III (Fall 2011)
ARCH St: 583-007 Advanced Landscape Architecture (Fall 2011)
ARCH 264 Undergraduate Design Studio (Spring 2012)
ARCH 536-002 Landscape and the American Culture (Spring 2012)
ARCH 563/564 Comprehensive Studio I and II (Fall 2012)
ARCH St: 583-003 Building and Nature (Fall 2012)
ARCH 563/564 Comprehensive Studio I and II (Spring 2012)
ARCH 563/564 Comprehensive Studio I and II (Fall 2013

Educational Credentials:
B.F.A. Architecture, Rhode Island School of Design, 1975
M. Arch, University of Virginia, 1979

Teaching Experience:
Visiting Professor, University of Miami, Coral Gables, Florida, 1986-1987
University Lecturer, College of Architecture and Design, NJIT, 1987- present
Coordinator, Undergraduate Comprehensive Design Studios (ARCH 563 and 564), 2012-present

Professional Experience:
Thomas Navin Architect, 1987-present
Project Designer, Kohn Pedersen Fox Associates, 1981-1986

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:

"Architecture as a Conciliator: Toward a Unifying Principle in Architectural Education*,"* co-author (*Journal of Architectural Education,* May 1992 issue)

Design Accessible America, design brief co-author (*National Institute for Architectural Education*, 1993)

It's Our Champs Elysees: The LIE [Long Island Expressway] (*Newsday* "Viewpoints" vol. 58, no. 48, 1997)

L'Or Vert de Manhattan (Ulysee, No. 62, September/October issue, 1998)

Tremont House Sketch, commissioned by the Cooper Hewitt National Design Museum for their exhibition catalog, *New Hotels for Global Nomads* (Merrell / Cooper Hewitt, National Design Museum, 2001)

Book review of John Dixon Hunt's *"The Venetian City Garden: Place, Typology, and Perception, (Journal of Architectural Education*, March 2010 issue)

Professional Memberships:
The American Institute of Architects
The American Society of Landscape Architects
NCARB
Alpha Rho Chi

Name: Susan Nowicki, Adjunct

Courses Taught:
Arch 251 and Arch 252 – 2012, 2013

Educational Credentials:
Ph.D., **The Graduate Center, The City University of New York,** 2008
M.A., **The University of Chicago**, Chicago, IL, 1992
B.A., **College of the Holy Cross,** Worcester, MA, 1989

Teaching Experience:
Adjunct Professor, Part-Time, Raritan Valley Community College, Branchburg, NJ, spring 2012
Adjunct Professor, Part-Time, Hunter College, New York City, New York, 2010-2011
Lecturer, Drew University, Madison, NJ, spring 2004

Presentations:
"To Sprawl or Not: Nineteenth-Century Suburban Development in Essex County, NJ," New Jersey History Society Lecture Series, January 2004

"Gates's Keeper: The George Washington Maher House, Montclair, New Jersey"
Society of Architectural Historians 60th Meeting, Pittsburgh, PA, April 2007

"Alexander Jackson Davis and the Gothic Revival, Montclair, NJ"
Victorian Society, Montclair, NJ, April 16, 2012

Publications:
Susan Nowicki, "Washington Irving Lincoln Adams and Frank Wallis: The Path to Irvingcroft," *19th Century*, Fall 2011.

Name: Thomas Ogorzalek, University Lecturer, University Lecturer

Courses Taught:
ARCH 464 Options Studio II: Upper Level Design Studio (SP2012, SP2013)
ARCH 463 Options Studio I: Upper Level Design Studio (F2011, F2012)
ARCH 282 Structures I: Structures (SP2012, SP2013)
ARCH 583 Special Topics Seminar: Material Matters For Design (F2012)
ARCH 583 Special Topics Seminar: Material Innovations (F2011)
ARCH 593 Independent Study: Alternative Material Practices For Sustainable Design (SP2012)
ARCH 493 Independent Study: Architectural Identity (SP2013)

Educational Credentials:
Masters in Architecture, Rensselaer Polytechnic Institute, Troy, New York, 1990
Bachelors of Arts – Major in Architecture, Washington University in St.Louis, St. Louis, Missouri, 1986

Teaching Experience:
University Lecturer, NJIT, 2007- Present
Special Lecturer, NJIT, 2003-2007
Adjunct, NJIT, 2000-2002

Selected Academic Work and Service:
University Committees
- Strategic Planning Middle States Self-Study Group-2, 2010-2012
College of Architecture and Design Committees:
- NJSoA Curriculum Committee 2012- present
- Materials Research Library Committee 2012- present
- Excellence in Teaching Committee 2009- present
- Design Research Committee 2009- present
- Scholarship and Awards 2005- present
College of Architecture and Design Academic Work:
- Interdisciplinary Design Studio: Jackson Township and DCA, State of New Jersey 2012
- Development Design/Build Curriculum Arch264 in collaboration with the New Jersey Masonry Contractors and the International Masonry Institute 2004-2012

Recent Research:
Current Papers/Publications: Interdisciplinary Design Studio Jackson Township (2012)
Book Development: A Building Pedagogy: Masonry Design/Build Studio Catalogue (2013)
Professional Experience:
Principal and Co-Founder of Continuum Design Studio, LLC, 1997-Present
Ungers-Kinslow Architects 1990-1993

Licenses/Registration:
N/A

Professional Memberships:
U.S. Green Building Council (USGBC)
The Masonry Society (TMS)

Honors and Awards:
University Excellence in Teaching Award in the category of
University Lecturer/Program Director 2008-2009, NJIT
Albert B. Dorman Honors Teaching Excellence Award 2009, NJIT
New Jersey Masonry Contractors: Teaching Excellence (2005), NJIT
Architects Student Union Award: Excellence in Teaching (2003), NJIT
Architects Student Union Award: Excellence in Teaching (2002), NJIT

Name: Sabrina Pagani, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 363 and 364 Architecture Studio III

Educational Credentials:
B.A in Art History, Dartmouth College, 1993
M.Arch, Graduate School of Design, Harvard University, 2001

Teaching Experience:
Adjunct Professor, NJIT, 2008-2012

Professional Experience:
Principal, Sabrina Pagani Design 2008-present
Senior Interior Designer/Project Manager, Rockwellgroup, 2007-2008
Senior Interior Designer, Saladino Group, 2006-2007
Designer/Project Manager, Ike Kligerman Barkley, 2005-2006
Designer, Bruce Nagel Architect, 2003-2005
Designer, D'Aquino Monaco, 2002-2003
Intern, Munkenbeck and Marshall (London), 2000

Editorial Assistant, *Gourmet Magazine*, 1993-1995
Curatorial Intern, Smithsonian Institution 1991
Chief Intern/Collection Tour Guide, Peggy Guggenheim Collection, 1991

Licenses/Registration:
Registered Architect, New York
Certified Interior Designer, New York State
NCIDQ certificate no. 28884
LEED AP, Commercial Interiors

Professional Memberships:
The American Institute of Architects
NCIDQ

Name: Matthew Peckham, Adjunct

Courses Taught:
Arch 223, Construction I
Arch 323, Construction II
Arch 541G, Introduction to Building Technology I
Arch 542G, Introduction to Building Technology II

Educational Credentials:
M.Arch, NJIT, 1997
Boston Architectural Center, 1990-92
B.A., Geography, Columbia College, 1979

Teaching Experience:
New Jersey Institute of Technology

Professional Experience:
Rogers Marvel Architects New York 2000-Present
Howard Spivak Architects New York 2000
The Kouzmanoff Partnership Architects New York 1995-1999
Resource Capital Group Cambridge MA 1991-1993
Laratro Construction Corporation New York 1989-1991
Tishman Realty & Construction, New York 1986-1989

Licenses/Registration:
N/A

Awards:
New Jersey Institute of Technology, School of Architecture Medal
New Jersey Institute of Technology, School of Architecture Distinguished Teaching Award 2008

Professional Memberships:
N/A

Name: Jorge Prado, Adjunct

Courses Taught (Two academic years prior to current visit):

- ARCH 155/156 Modes of Communications, Fall 2010 through Spring 2013
- ARCH 363 Architecture Studio III, Fall 2010
- ARCH 164 Introduction to Design II, Spring 2011
- ARCH 363 Architecture Studio III, Fall 2011
- ARCH 364 Architecture Studio IV, Spring 2012
- ARCH 503G Architectural Design III, Fall 2012
- ARCH 264 Architecture Studio II, Spring 2013

Educational Credentials:

- Bachelor of Arts, New York University, New York, 1985
- Master of Architecture, NJIT School of Architecture, Newark, 1998

Teaching Experience:

- Visiting Professor, Kamla Raheja Vidyanidhi Institute for Architecture and Environmental Design Studies, Mumbai, India1999
- Adjunct Professor, NJIT, 2007-present

Professional Experience:

- Founding Co-Director, First Street Green, Inc., New York, NY, 2008-present
- Principal, TODO DA, New York, NY, 2003-present
- Project Architect, Peter Gluck & Partners, New York, NY, 2005-2007
- Project Architect, Voorsanger Architects, PC, New York, NY, 2000-2005
- Architectural Designer, Vito Acconci Studio, Brooklyn, NY, Summer 2000
- Architectural Designer, Platt Byard Dovell Architects, New York, NY, 1998-1999
- Intern, Paul Rudolph, Architectural Designer, New York, NY, Summer1995

Licenses/Registration:

- New York

Selected Publications of TODO DA's work and Recent Research:

- Lind, Diana. "Kitchen & Bath Portfolio: A young architecture firm thoughtfully renovates a New York City bathroom." *Architectural Record*. July 2006: 196. Print.
- "Grace Duo." *Dish Magazine*. 2007. Print.
- "Grace Duo." *LE Magazine*. No.35 2007: 54. Print.
- "Meshoush screen." *Contact Magazine*. June/July 2007: 42-43. Print
- "Meshoush Screen." *Canadian Interiors*, Sept./Oct 2007: 104. Print.
- "Grace Duo" *Premio Vico Magistretti 'living simplicity in furniture design'*." Designboom & De Padova. 2007: 77. Print
- "Parachute Park." *Coney Island the Parachute Pavilion Competition*. Van Alen Institute Princeton Architectural Press, 2007: 92. Print
- "Grace Duo." *Palermo Design Week 2007 Exhibition Catalog*. ICOD. 2008: 70. Print.
- McIntyre, Linda "A Billboard Lovely as a Tree: Design for enhancements wins an award." *Landscape Architecture*. Oct. 2008: 44. Print.
- "Pubblicita Verde." *Casamica.* Dec.2008: 32. Print.
- "Grace Duo." *The Independent Design Guide: Innovative Products from the New Generation.* Laura Houseley. USA: Thames & Hudson, 2009: 110. Print.
- "Chelsea Loft." *Boston Home. Magazine* March 2009: 105. Print.
- "Tribeca Loft." *International Interior Design Yearbook*. 2010: 166-167. Print.
- Prado, Jorge, "Why We Draw, or Prehistory in Architectural Discourse." In J. Balmer & C. Beorkrem (Eds.), *Made: Design Education & the Art of Making*. *26th National Conference on the Beginning Design Student.* Paper presented at COAD, University of North Carolina at Charlotte, 18-21 March 2010 (pp. 303-309). Charlotte, NC: SOA UNC at Charlotte. Print.
- Prado, Jorge, "A Review of Remains Connected: The Bridge at Ani." *Ararat Magazine.* AGBU, 11 August 2010. Web.

Name: Nina Prantis, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 419, ARCH 619 Architectural Photography

Educational Credential
BFA in photography 1976, Pratt Institute, Brooklyn, NY

Teaching Experience:
Adjunct Professor, New York University, 1991-2002
Visiting Instructor, Pratt Institute, 1979-1990
Instructor, International Center of Photography, 1980-1994
Adjunct Professor, New Jersey Institute of Technology, COAD 1987
Instructor, Il Chiostro Workshops, Italy, 2000-2009

Licenses/Registration:
New York: Staten Island Board of Realtors, NYSAR

Selected Publications and Recent Research:
Flatiron The World's First Steel Frame Skyscraper, Kreitler Collection (Sorgente Group, 2007)
Flatiron, Kreitler Collection (AIA Press,1991)
Interview in *"Helen Levitt, First Documentary,"* Tanya Sleiman, 2011

Selected Collections:
Kreitler, "Flatiron Photographs" Pacific Palisades, CA.
Gracie Mansion Conservancy, NY, NY
Brooklyn Union Gas Co. Brooklyn, NY
Credit Suisse Bank, NY, NY
Morgan Stanley Co., NY, NY

Professional Memberships:
Founding Member, New York Photographers Salon 1980

Name: William Prince, Adjunct

Courses Taught (Spring 2013, Fall 2012):
ARCH 263, ARCH 264

Educational Credentials:
M.Arch.with Distinction, Harvard University, 2000
M.Arch with Chairman's Commendation, Ohio State University, 1997
B A Applied Mathematics, Clemson University, 1994

Teaching Experience:
Visiting Professor, NJIT, 2012-13
Studio Professor/Lecturer, Parsons the New School for Design, New York NY, 2007-12
Instructor, Technical University of Delft, Netherlands, 2000-2002

Work Experience:
Principal, Planning Architecture Research Curatorial (PARC) Office, New York NY, 2009-Present
Senior Associate, Rockwell Group, New York NY, 2003-2009
Project Architect, Office for Metropolitan Architecture, Rotterdam Netherlands, 2000-2003
Intern, Bernard Tschumi Architects, New York NY, 1997

Licenses/Registration:
AICP (Licensed Planner)

Selected Publications and Recent Research:
“Long Division,” Designing Suburban Futures, June Williamson ed., Island Press
Lydia Parafianowicz, “Museo Gucci,” Frame Magazine, February 2012
Molly Heintz, “Space Smarts,” The Architects Newspaper, February 15, 2012
Shareen Pathak, “PARC + BMD Designs the ‘Coolest Wine Bar Ever’,” Creativity, December 29, 2011
Maria Luisa Frisa, “Gucci Museo”, Domus, October 2011

Professional Memberships:
The American Institute of Architects, Associate Member
American Planning Association

Name: L. Nicolas Ronderos Gaitan, Adjunct

Courses Taught:
Arch 472 - Architectural Programming and Project Development
MIP 652 - Geographic Information Systems

Educational Credentials:
B.A. Los Andes University, 1998
M.S. New School University, 2002

Teaching Experience:
Adjunct Professor, NJIT, 2009-Present
Instructor, Rutgers University, 2005-2009

Professional Experience:
Director, Regional Plan Association, 2009-Present
Senior Planner, Regional Plan Association, 2006-2008
Associate Planner, Regional Plan Association, 2002-2005

Licenses/Registration:
N/A

Selected Publications and Recent Research:
A Review of “Displacement by Development: Ethics, Rights and Responsibilities”, Journal of the American Planning Association (Routledge Winter 2013):

Professional Memberships:
American Planning Association
Urban Land Institute
International Economic Development Council

Name: Rhett Russo, Associate Professor

Courses Taught (Two academic years prior to current visit):

502g Design Studio, First Year graduate design studio,	Spring	2013
ARCH 662 Elevational Strategies, elective course	Spring	2013
505g Design Studio, Graduate Options Studio	Fall	2012
500g Computer Aided Design	Fall	2012
504g Design Studio, Second year graduate design studio,	Spring	2012
501g Design Studio, First Year graduate design studio,	Fall	2011
ARCH- 662 The Design of Parametric Space, elective course	Fall	2011

Educational Credentials:
Bachelor of Environmental Design, Texas A&M University, 1991
Master in Architecture, Columbia University Graduate School Of Architecture Planning and Preservation 1995

Teaching Experience:
Visiting Professor, Cornell University, 1996-1997
Visiting Professor, Pratt Institute, 2000-2007
Adjunct Professor, Columbia University 2000-2009
Assistant Professor, Penn Design, 2005-2009
Associate Professor, NJIT, 2009-current

Professional Experience:
Design Partner, Specific Objects Inc, 1998 – present,
Project Leader, 2001 –2004, RUR Architecture PC, Reiser + Umemoto. NYC,
Project Designer, Project Manager 1998- 2001. Hanrahan & Meyers Architects. NYC.
Designer, 1995-97.Bernard Tschumi Architects. NYC,
Designer, 1992-93.CRSS Architects Inc. Houston, TX.

Licenses/Registration:
none

Selected Publications and Recent Research:

Book chapters
- ***Post-Sustainable: Blueprints for a Green Planet,*** *Embodied Energy and the Hidden Complexities of Granular Matter,* Metropolis Books, Forthcoming 2013.
- ***Via Dirt,*** Via Books*,* Furjan & Crosby Eds. *Orbigraphia,* Penn Design & MIT Press, 2012.
- ***Matter: Material Processes in Architectural Production,*** *Alternative Forms of Malleability,* Routledge, 2011.
- ***Meander - Variegating Architecture****, Wild Cards & Stacked Decks,* Bentley Institute Press*,* 2010.
- ***Users: Architecture & Post Occupancy: New Designs for Architectural Practice****,* AIANJ / NJIT, 2012.
- ***Material Evidence: New Designs for Architectural Practice****, Information Cascades*, pp 16-19, 2010.
- **306090 Models.** *The Sensation of Deep & Cryptic Models: The Widmanstätten Pattern.* 2008.

Peer reviewed conference papers
ACSA 2013 **"Six Facets of Matter: Material Futures for the Architectural Object"**
ACSA 2012 "**Flies in the Ointment: Reconsidering Detail in a Physiochemical / Chemiophysical Paradigm"**
Ambience '11 **"Textiles: Alternative Forms of Malleability"** School of textiles, Boras Sweden
ACADIA 2010 **"Information as Material: Data Processing & Digital Fabrication Technologies"**
ACSA 2010 **"Versioning Matter: Recipes for Architectural Ceramic,"**
ACSA 2008 "**Natural Models: The Cultivation of Material Intelligence"**

Professional Memberships: The Architectural League of New York**,** ACADIA**,** ACSA

Name: António de Sousa Santos, Professor

Courses Taught (two academic years prior to current visit):
Arch 563 Comprehensive Architectural Design Studio
Arch 564 Comprehensive Architectural Design Studio
Arch 528G Graduate History of Architecture I

Educational Credentials:
B.Arch. (Distinction), University of Cape Town, 1966
M.Arch., University of Pennsylvania, 1968
M.C.P., University of Pennsylvania, 1968

Teaching Experience:
Studio Master and Lecturer, University of Cape Town, 1968-72
Visiting Professor, Harvard University, 1972-73
Associate Professor, Rice University, 1973-77
Arthur Q. Davis Visiting Professor, Tulane University, 1976
Professor, Rice University, 1977-1981
Professor, University of Toronto, 1981-1993
Visiting Professor, University of Texas (Austin), 1986
Visiting Professor, Eduardo Mondlane University, Mozambique, 1989
Visiting Professor, University of the Witwatersrand, 1990
Visiting Professor, University of Pennsylvania, 1991
Professor, New Jersey Institute of Technology, 1993-present
Visiting Professor, University of Cape Town, 2006

Professional Experience:
Principal, A+A de Souza Santos, Cape Town, 1968-72
Principal, Interstudio, Houston, Texas, 1974-79
Consultant, United Nations Development Programme, 1977-79
Principal, MAS, Athens, 1980-81
Principal, Santos Associates, 1982-94
Consultant, World Bank, 1986-1990
Consultant, CIDA, 1992-93
Principal, Santos Studio, 1994-present

Licenses/Registration:
Texas
New Jersey

Selected Publications and Research:
''A+A de Souza Santos: The Cape Town Work, a Monograph", (OH14, 1912)
"An African Paradigm", in *"José Forjaz, Recent Works",* (Uzina, 1913)

Name: Margaret O. de Souza Santos. Adjunct

Courses Taught (2011-present)

Arch 564 Comprehensive Studio (spring 2013): Arch 463 Option Studio (fall 2012)
Arch 563 and 564 Comprehensive Studio (spring 2012): Arch 563 and 564 Comprehensive Studio (fall 2011)
Arch 564 Comprehensive Studio (spring 2011)

Educational Credentials:

BA, Comparative Literature and Art History, Fordham University, 1972
M.Arch, Rice University, 1979

Teaching Experience:

Visiting critic at various schools of Architecture in Canada, US, Southern Africa
Adjunct Professor, Tyler School of Art and Architecture, Temple University, 1993-2007
Adjunct, CoAD, NJIT, 2007-present

Professional Experience:

*Reference www.santosarch.com Santos Associates and Santos Studio built work and projects.
Margaret Olin de Souza Santos and Antonio de Souza Santos, 1980-present

National Housing Directorate, Government of Mozambique, Maputo, Mozambique: Urban redevelopment, informal settlement planning and housing strategies, 1978-80
Saudi Royal Commission, Al Sabek Associates, Athens, Greece. Housing designs for Yanbu, Saudi Arabia, a new 'desert' city, 1980-81
*Santos Associates, Partner, Toronto, Canada, 1982-1993
CIDA, UNDP, NORAD, The World Bank: Urban development, housing design and prototypes in Angola, Mozambique, Lesotho, Swaziland, and Zimbabwe, 1986-93
*Santos Associates, Partner, Princeton, NJ, 1993-2007
*Santos Studio, Partner, Santa Fe, NM and Newark, NJ, 2008-present
Selected Competitions: Mississauga City Hall, Canada; Souks of Beirut, Lebanon (Award); Atlantic City Housing, NJ (1st prize)

Selected Publications and Recent Research:

'Building the Landscape': A method of 'land design' inspired by geography, environment and site: 'Three houses, built and unbuilt'. 2006-present
Contemporary Portuguese Architecture 1974-2012; present research
ALPHABET Housing Design Systems Manual for Angola, CIDA 1993
Urban Design and Housing Strategy Manual, Atlantic City, CRDA 1997
Television Documentary Subject 'Collectors', CBC, 1993

Name: Anthony W. Schuman, Associate Professor

Courses Taught:

Arch 363	Architecture Studio III
Arch 364	Architecture Studio IV
USYS 788	The Good City
Arch 662	Envisioning Newark
Arch 672	Architecture and Social change

Educational Credentials

B.A.	Wesleyan University, 1965 (French)
M.A.	Columbia University, 1966 (French)
M.Arch	Columbia University, 1970

Teaching Experience

Associate Professor, NJIT	1988-present
Visiting Assoc. Prof. Princeton	Spring 2003
Visiting Assoc. Prof. Columbia	Fall 1995, Spring 1998
Visiting Assoc. Prof. Rutgers	Fall 1990
Assistant Professor, NJIT	1981-1988
Special Lecturer, NJIT	1979-1981
Adjunct Professor, NJIT	1978-1979

Professional Experience

Private Practice 1977-1994
Project Architect Urban Deadline Architects, New York, N.Y. 1974-1978
Architectural Director, Bureau of Purchased Social Services for Adults,
N.Y.C. Human Resources Administration, 1973-1974
Architectural Designer, Giovanni Pasanella, Architect, New York, N.Y. 1972-1973

Licenses/Registration

New York

Selected Publications and Recent Research

"People Planning Newark", creation of first ever physical model of entire city of Newark, NJ, for display in City Hall as part of exhibit on public participation in planning.

"Design with the Other 90%: Cities", review of exhibit at Cooper-Hewitt National Design Museum, Journal of the Society of Architectural Historians (JSAH), 72/1/March/2013

"Community Engagement: The Evolution of Architecture's Social Vocation in Schools of Architecture" in *Architecture School: Three Centuries of Educating Architects in North America*, ed. J. Ockman (MIT Press/ACSA, January 2012).

"ghetto," in *L'Aventure des Mots de la Ville: Á Travers le Temps, les Langues, les Sociétés*, ed. Christian Topalov et. al. (Paris: Éditions Robert Laffont, 2010), 529-534.

Awards

2013 one of "30 most admired educators in design professions", *DesignIntelligence* magazine
2011 Charles Cummings Award, Newark Preservation and Landmarks Committee (for efforts to preserve and celebrate Newark's social and cultural history).
2012 ACSA Distinguished Professor (Association of Collegiate Schools of Architecture)
2006 NJIT Board of Overseers Foundation Award for Institute and Public Service

Name: Jae Shin, Adjunct

Courses Taught:
ARCH 364 Architecture Studio IV

Educational Credentials:
Master of Architecture, Princeton University, Princeton, NJ 2008 – 2011
BFA in Painting and Art History Concentration
Rhode Island School of Design, Providence, RI
Liberal Arts Studies, Brown University, Providence, RI 1997 – 2001

Professional Experience:
Jae Shin Studio, Newark, NJ, Current
Architectural, exhibition, publication, and community design.
Recent work includes:
Plan It Newark! 2012
Project Director for exhibition developed with City of Newark Planning Office and NJIT College of Art and Design including a large-scale city model, community design workshops, and educational video and collateral city's planning and development history.
Urban Design Studies for City of Newark, 2011 – 12
Street frontage strategies and urban design proposals developed with the City of Newark Planning Office.
Anyang Public Art Project, 2010
Playground and community classroom design developed as a part of an international public art project series in South Korea.
Athens Biennial, 2009
Exhibition design and writing on the island of Psyttalia, Greece's largest sewage treatment plant.

Center for Architecture, Urbanism, and Infrastructure,
Princeton University, NJ, 2009 – 2010
Urban design analysis and writing work with Prof. Mario Gandelsonas towards developing regional green infrastructure for New Jersey.

Selected Publications and Recent Research:
Fellowship, The MacDowell Colony, Peterborough, NH
Fellowship, Virginia Center for Creative Art, Sweet Briar, VA

Name: Joy W. Siegel, University Lecturer

Courses Taught:
ARCH 363 Architecture Studio III
ARCH 364 Architecture Studio IV
ARCH 156 Modes of Communication II

Courses Coordinated:
ARCH 363 Architecture Studio III
ARCH 364 Architecture Studio IV

Educational Credentials:
B.Arch., Syracuse University, 1982

M.Arch., Harvard University, 1985

Programs in Architecture
Institute for Architecture and Urban Studies, New York, NY
Florence Program, Syracuse University Abroad, Florence, Italy
Wave Hill Center for Environmental Design, Riverdale, NY

Teaching Experience:
University Lecturer, New Jersey Institute of Technology, Newark, NJ, 2011-present
Adjunct Instructor, NJIT, New Jersey Institute of Technology, Newark, NJ, 1991-2011

Assistant to the Dean, New York Institute of Technology, Old Westbury, NY, 1989-1990
Associate Professor, New York Institute of Technology, Old Westbury, NY, 1989-1990
Adjunct Associate Professor, New York Institute of Technology, Old Westbury, NY, 1987-1989, 1990-1991

Professional Experience:
Owner, Joy W. Siegel Architect, New York, NY, 1990-1996, Millburn, NJ, 1996-present

Project Architect, Fox and Fowle Architects (Currently: FxFowle) New York, NY, 1987-1989, 1993
Project Designer, Fox and Fowle Architects (Currently: FxFowle) New York, NY, 1986-1987

Designer, Skidmore, Owings and Merrill Architects (SOM), Houston, TX, 1982-1983
Designer, Skidmore, Owings and Merrill Architects (SOM), New York, NY, 1984,1985-1986

Licenses/Registration:
Registered Architect: New York State, 1987-present, # 020649
Registered Architect; New Jersey, 1996-present, #136079

Leadership in Energy and Environmental Design Accredited Professional, LEED AP, 2009-present

Selected Publications and Recent Research:
“Loop House Project”, Joy W. Siegel Architect, sketches published and project referenced in: “Design Through Dialogue: A Guide for Clients and Architects”, Wiley, 2010
“New Schools for New York, Plans and Precedents for Small Schools”, Princeton Architectural Press, 1992

Professional Memberships:
Member, American Institute of Architects, New York City Chapter, 1990-1997
Member, Downtown Millburn Design Alliance, Design Review Committee, 1997-2004

Name: Ira Smith, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
Arch 563, Comp I

Educational Credentials:
M.Arch., Harvard University, Graduate School of Design
B.Arch.,Columbia University, GSAPP

Teaching Experience:
Adjunct, NJIT, 2004-present

Principal, Smith Maran Architecture, 1997- present
Chairman, Montclair Historic Preservation Commission, 2009-2012

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Roger Smith, Adjunct

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
ARCH 364 - Architecture Studio IV, Spring 2013
ARCH 563 - Pre-Comprehensive Studio, Fall 2012
ARCH 464 - Options Studio II / MIP 601 & 602, Spring 2012
ARCH 163 - Intro To Design I, Fall 2011

Educational Credentials:
The Institute for Architecture and Urban Studies, 1983
Bachelor of Arts, Oberlin College,1985
Master of Architecture, University of Pennsylvania, 1997

Teaching Experience:
Adjunct Professor, University of Pennsylvania, GSFA, Philadelphia, PA 1997-2001
Adjunct Professor , New Jersey Institute of Technology, NJSOA, Newark, NJ, 2006-current
Guest Studio Critic: University of Pennsylvania, Philadelphia, PA; University of the Arts, Philadelphia, PA; Hampshire College, Amherst, MA
Michael Graves Architect, Senior Designer , 1987 - 1994
Richardson Smith Architects, Senior Design Associate, 1997 -2001
RMJM Hillier, Associate Principal , 2001 -2008
IDC, Partner [2008 - 2011]
The Global Design Collaborative, Founding Principal [2011 - current]

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Darius Sollohub, Associate Professor

Courses Taught (Spring 2013, Fall 2012, Spring 2012, Fall 2011):
(Spring 2013): ARCH 483 Project Based Seminar; **(Fall 2012):** ARCH 463 Habitat Studio **(Spring 2012):** ARCH 483 New Jersey: Culture | History | Architecture **(Fall 2011):** ARCH 463 Habitat Studio

Educational Credentials:
B.A. Architecture, Columbia University, 1983
M.Arch, Columbia University, 1983

Teaching Experience:
Associate Professor, NJIT, 2006-present
Assistant Professor, NJIT, 2001-2006
University Lecturer, NJIT, 1996-2001
Visiting Professor, Rutgers University, 2008, 2005, 2003, 2002

Professional Experience:
Rosenbaum Sollohub Architects, New York, NY, Principal, 1996-2004
Polshek and Partners Architects, New York, NY, Project Architect, Senior Designer, 1989-1996
Steven Holl Architects, New York, NY, Staff Designer, 1986–1987

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:
Millennials and Design Education, (In Development)
ACSA 2012 Annual Meeting "Millennials in Design Education"
ACSA 2010 Annual Meeting "A Comprehensive Neighborhood Plan for New Orleans East: Repositioning in Place"
Professional Memberships:
The American Institute of Architects
Regional Plan Association (New Jersey Committee)

Name: Kathleen L. Sowle, Adjunct

Courses Taught (Two academic years prior to current visit):

ARCH 164 – Introduction to Design II
ARCH 156 – Modes of Communication
ARCH 100S – Introduction to Architecture
PMPC – Portfolio Development

Educational Credentials:

B.Arch., Pratt Institute, 2000
M.Arch., Pratt Institute, 2002
B.Liberal Studies, SUNY-Purchase, 1997

Teaching Experience:

Instructor, Pratt Institute, 1999-2008
Assistant Professor, Pratt Institute, 2008-2012
Assistant Professor, NJIT, 2013-present

Professional Experience:

Project Manager, The Brown Companies, New York, NY 2000
Project Architect, John D. Nakrosis, Jr. Building Design, New York, NY 2002-2005
Self-employed 2005-present

Name: Jennifer Switala, Adjunct

Courses Taught (Two academic years prior to current visit):

ARCH 155 Modes of Design Communication I
ARCH 156 Modes of Design Communication II
ARCH 163 Intro to Design I
ARCH 164 Intro to Design II
ARCH 500G Computer Aided Design
ARCH 662 BIM and ECS
ARCH 662 Advanced Topics in BIM

Educational Credentials:
B.S. Architecture, University of Minnesota, 2006
M.Arch, New Jersey Institute of Technology, 2011

Teaching Experience:
Adjunct Instructor, NJIT, 2011-present

Professional Experience:
Project Designer, GRO Architects, New York 2010-present

Name: Dr. Rima Taher, Senior University Lecturer

Courses Taught (Two academic years prior to current visit):
ARCH 229 Structures I, ARCH 329 Structures II, ARCH 429 Structures III, ARCH 544G Graduate Building Systems IV, ARCH 545G Graduate Building Systems V, ARCH 546 Graduate Building Systems VI, ARCH 548 Graduate Building Systems VIII, ARCH 227 Environmental Control Systems I, ARCH 583 (Electives: BIM & Structural Technology, Building Design for Hazard Prone Areas, High-Rise Structures)

Educational Credentials:
B. Civil Engineering, INSA de Lyon (Institute National des Sciences Appliquées), Lyon, France, 1982
M.S. Civil Engineering/ Building Technology, École Nationale des Ponts et Chaussées (ENPC), Paris France, 1983
Ph. D. Civil Engineering/ Building Technology, École Nationale des Ponts et Chaussées (ENPC), Paris France, 1986

Teaching Experience:
Adjunct Professor, NJIT/ School of Architecture, 1989-1990 and the City University of New York/ City College School of Architecture, Fall 1990
University Lecturer, NJIT/ School of Architecture, 1990 – present
And teaching part-time at the NJIT-Department of Civil & Environmental Engineering, 2010 – present (Structural Stability, Structural Steel Design, and Short-Span Bridge Design)

Professional Experience:
Staff Engineer, Converse Consultants East (Geotechnical Engineers), Caldwell, NJ, 1988
Structural Engineer, Clinton Bogert Associates (Consulting Engineers), Englewood, NJ, 1988 – 1990
Structural Engineer (part-time), CE/CM Entech (Consulting Engineers), Passaic Park, NJ, 1999 – 2001
Principal/ Structural Engineer, Taher Engineering LLC, Clifton, NJ, 2010 - present

Licenses/Registration:
New Jersey

Selected Publications and Recent Research:
Books
A review book for the Architect Registration Exam (ARE 4.0): "Structural Systems – ARE Sample Problems and Practice Exam", published by Professional Publications, April 2008.
A review book for the Architect Registration Exam (ARE 3.1) in structural technology: "Architecture Exam Review – ARE Sample Exams: Structural Divisions", published by Professional Publications, Inc, April 2007.
Engineering Journals and Conference Proceedings
Best Building Practices for Hurricane and Earthquake Prone Areas, Construction Specifications Canada (CSC), Annual Conference, Montreal, Canada, May 2011.
Design and Strengthening of Educational Facilities for the Risks of Earthquakes and Hurricanes, Inter-American Development Bank (IDB), Regional Policy Conference, Santiago, Chile, October 2010
Improved Building Practices for Hurricanes, Caribbean Construction Magazine, 3rd Quarter, 2009
Design of Low-Rise Buildings under Extreme Wind Events, Journal of Architectural Engineering of the American Society of Civil Engineers in March of 2007.
Structural Solutions for the Design of a Cyclonic or Hurricane Resisting Home, Proceedings of the 11th International Conference on Wind Engineering, June 2-5, 2003, hosted by Texas Tech University, Lubbock, Texas.

Professional Memberships:
American Society of Civil Engineers, Member
Structural Engineering Institute (SEI) of the American Society of Civil Engineers, Member and President of the SEI Chapter at the North Jersey Branch
American Institute of Steel Construction (AISC), Member
American Association of University Professors, Member

Name: Georgeen Theodore, Associate Professor

Courses:
MIP 602 / ARCH 464: Better Boroughs, Resilient Regions (Spring 2013)
MIP 631: History and Theory of Infrastructure (Spring 2013)
MIP 601 / ARCH 463: Urban Age (Fall 2012)
ARCH 464: SumCity (Spring 2012)
MIP 601 / ARCH 463: Infrastructure is… (Fall 2012)
ARCH 673: Visualizing Infrastructure (Fall 2012)

Educational Credentials:
Master of Architecture in Urban Design with Distinction, Harvard University, 2002
Bachelor of Architecture, Rice University, 1994
Bachelor of Arts in Architecture, Art and Art History, Rice University, 1992

Teaching Experience:
Associate Professor, New Jersey Institute of Technology, 2011-present
Critical Practice Studio Leader, Lawrence Technical University, 2013
Workshop Leader, Bauhaus Kolleg XIII, 2012
Baumer Visiting Studio Professor, Ohio State University, Knowlton School of Architecture, 2011-2012
Assistant Professor, New Jersey Institute of Technology, 2005-2011
Adjunct, New Jersey Institute of Technology, 2004-2005
Lecturer, University of Pennsylvania, 2004
Instructor in Urban Planning and Design, Harvard University Career Discovery Program, 2002

Professional Experience:
Principal and Co-founder, Interboro Partners, Brooklyn, NY, 2002-present
Associate, Senior Designer, Ehrenkrantz Eckstut & Kuhn Architects, NY, 2003-2005
Senior Urban Designer, Peterson/Littenberg Architecture & Urban Design, NY, 2002-2003
Researcher, Harvard Planning and Real Estate, Cambridge, MA, 2001
Associate, Project Manager, Eric R. Kuhne & Associates, NY and London, 1995-2001
Intern, Ricardo Bofill, Taller de Arquitectura, Barcelona,1992-1993
Intern, Hasmukh C. Patel Architect, Ahmedabad,1991

Licenses/Registration:
New York

Selected Publications and Recent Research:
Theodore, G., Armborst, T., D'Oca, D. (2013). In Martina Baum (Editor), Kees Christiaanse (Editor) (Ed.), *"From Soho to SumCity"* (pp. 32-38). Zurich: gta publishers.
Theodore, G. (2010). In Katrina Stoll and Scott Lloyd (Ed.), *"Visualizing Infrastructure," in Infrastructure as Architecture* (pp. 38-41). Berlin: Jovis.
Theodore, G., Armborst, T., D'Oca, D. (2009). In Tim Rieniets, Jennifer Sigler, Kees Christiaanse (Ed.), *"Community: The American Way of Living,"* in *Open City: Designing Coexistence* (pp. 257-296). Amsterdam: Sun Publishers.
Theodore, G., Armborst, T., D'Oca, D., Williams, C. (2006). In Philipp Oswalt (Ed.), *"However Unspectacular – The New Suburbanism" in Shrinking Cities: Volume 2: Interventions* (English and German editions ed., pp. 324-330). Ostfildem Ruit: Hatje Cantz Verlag.
Theodore, G., Armborst, T., D'Oca, D., Williams, C. (2006). In Linda Lee (Ed.), *"Inside the Oligopticon," in Young Architects 7: Situating* (pp. 150-175). New York, New York: Princeton Architectural Press.
Theodore, G., Armborst, T., D'Oca, D. (2012). "NORCs in New York" in Socio. *Thresholds, Journal of the MIT Department of Architecture, Published by SA+P Press, 40*, 189-208.

Professional Memberships:
The American Institute of Architects

Name: Andrew Varela, Adjunct

Courses Taught (Two academic years prior to current visit):
ARCH 264 Undergraduate Design Studio, Spring 2013

Educational Credentials:
B.A., Brown University, 1997
M.Arch I., Graduate School of Design, Harvard University, 2001
MPAA, Master of Advance Architectural Design, Escuela Técnica Superior de Arquitectura de Madrid (ETSAM), Madrid, Spain, 2012

Teaching Experience:
Adjunct Instructor, IE Architecture School, Segovia, Spain 2013
Adjunct Instructor, NJIT, 2013

Professional Experience:
Office dA, Boston, 1996
Machado & Silvetti & Assoc. Boston, 1997
FXFOWLE Architects, NY, NY, 2002-2009
Andrés Perea Arquitectos, Madrid, Spain, 2009
Colmenares Vilata Arquitectos, Madrid, Spain, 2010-2011

Licenses/Registration:
New York
COAM, Madrid, Spain

Professional Memberships:
COAM, Colegio Oficial de Arquitectos de Madrid

Name: Dr. Donald Wall, Associate Professor

Courses Taught:
Arch 463, Arch 464

Educational Credentials:
Doctor of Architecture, 1970. Catholic University
Master of Architecture, 1960. Cornell University
Bachelor of Architecture, 1958. University of Manitoba

Teaching Experience:
New Jersey Institute of Technology
Teaching Fellowship, Cornell University, 1958-59
Teaching Fellowship, Catholic University, 1963-64

Selected Publications and Recent Research:
Books
—Gene Davis: Perinting, Praeger Publishers, New York, 224 pages, with contributions by Barbara Rose and Walter Hopps, 1975
—Visionary Cities: The Arcologies of Paolo Soleri, Praeger Publishers, New York, 248 pages, 1971. (May Book of the month selection, The IIbrary of Urban Affairs, 1971
—Documenta Box Book, pub. By Orcoran Gallery of Art, 112 pages plus 16 scroll drawing in a 10 inch cub container, 1970
Articles
—True Stories and Not So True Stories from Childhood, interviews with Alice Aycock, Robert Cumming, Harriet Feigenbaum, Elsia D'Arrigo, Gordon Matta-Clark, Will Insley, Dennis Oppenheim, John Hejduk, Helen Demchyshyn re: function of childhood in adult ideologies, Architecture in New Jersey, 1979
—History of Children's Architecture in America, presentation, Expo 79: Cognitive Development and Education, sponsored by Rutgers Graduate School of Education, New Brunswick, NJ, 1979
—Child Built Architecture: Work or Play?, working paper, Play in Human Settlements, symposium sponsored by the International Playground Association, 7th World Conference, 1978
—Don Wall, in Children's Spaces, by Norman and Molly McGrath, Murrow Publishers, New York, 1979
—Architecture in Preschool Curriculum, presentations at Ryder State Teachers College, New Jersey, and the Bank Street College of Education, New York, 1978
—The Room: A Curriculum for Thinking‖, position paper, and —Throwaway Spaces as Children's Places‖, speech, People, Place and Space conference, sponsored by Arkansas Arts Council, Little Rock, 1978
—Some Thoughts on Children's Architecture, New Jersey Society of Architects' Quarterly

Professional Memberships:
—The Case Study Group‖, Research into the Creative Personality, Institute of Cognitive Studies, Rutgers University-Newark.
Board of Directors, Day Care Coordinating Council of Essex County, 1979-80

Name: Augustus Wendell, University Lecturer

Courses Taught:
Arch 434, Simulated Environments

Educational Credentials:
MFA, The School of Visual Arts, 2004
BS, Architecture with Honors, Northeastern University, 1998

Teaching Experience:
New Jersey Institute of Technology, 2006-present
Parsons The New School of Design, 2003-2009
The New York School of Interior Design, 2004-2009
Virginia Polytechic Institute and State University, 2007

Licenses/Registration:
N/A

Selected Publications and Recent Research:
N/A

Professional Memberships:
The American Institute of Architects
New York Society of Renderers
Art Directors Club
Type Directors Club
American Institute of Graphic Artists

Name: Timothy Wood, University Lecturer

Courses Taught (Two academic years prior to current visit):
ARCH 364 Architecture Studio IV / S'13
ARCH 363 Architecture Studio III / F'12
ARCH 506/507G Graduate Architecture Studios V/VI / S'12
ARCH 563/564 Architecture Studios IX/X / F'11
ARCH 156 Modes of Design Communication II / S'13
ARCH 583 Fundamentals of Urban Design / F'12
ARCH 156 Modes of Design Communication II / S'12
ARCH 155 Modes of Design Communication I / F'11

Educational Credentials:
B.Arch., Cornell University, 1965
Fulbright Fellow, Architectural Association School of Planning, 1966-67
MFA Princeton University, 1969

Teaching Experience:
Associate Professor, Columbia University, 1972-1985
Critic in Architectural Design, Yale University, 1986-1988
University Lecturer, NJIT, 1989-2013

Professional Experience:
Draftsman, Michael Graves Architect, Princeton, NJ, 1968-1969
Draftsman, Job Captain, Gwathmey-Siegel Architects, NYC, 1969-1973
Design Consultant, Peter Gluck Architect, NYC, 1973-1974
Principal, Timothy Wood Architect, NYC, 1972-2013

Licenses/Registration:
New York
Connecticut (lapsed)

Selected Publications and Exhibitions:
Faculty Show, Exhibition and Catalog, Yale University, 1987
Presentation of Work, University of Michigan, 1984
The Making of an Architect / Centennial Exhibition, Columbia University, National Academy of Design, NYC, 1984
Grader for NCARB administered Professional Licensing Design and Site Planning Exams, 1975 & 1982
Presentation of Professional Work at AIA Mid-Atlantic Regional Convention, 1981
Window, Room, Furniture, Group Exhibition and Catalog, Cooper Union, NYC, 1982
Inside Space, Group Exhibition, Museum of Modern Art, NYC, 1981
Young Architects, Exhibition and Catalog, Yale University, 1980

Professional Memberships:
The American Institute of Architects
Nation Council of Architectural Registration Boards

Name: Ross Woolley, Adjunct

Courses Taught:
Arch 363.015, Studio III

Educational Credentials:
B.Arch., Syracuse University, 1979

Principal, Woolley Morris Architects, Princeton, NJ + Syracuse, NY

Teaching Experience:
Adjunct, New Jersey Institute of Technology

Licenses/Registration:
New York
New Jersey

Selected Publications and Recent Research:
N/A

Professional Memberships:
N/A

Name: Andrzej Zarzycki, Associate Professor

Courses Taught (Two academic years prior to current visit):
ARCH 229 Structures 1, (Spring 2012, Spring 2013)
DD 464 Digital Design Studio III, (Spring 2012, Spring 2013)
ARCH 263-21, Architecture Studio I, (Fall 2012)
AD 490-101 Character Animation Design, (Fall 2012)
AD 490-102 Designing for Augmented Reality, (Spring 2012)

Educational Credentials:
M.Arch., Technical University of Gdansk, Poland, 1992
S.M.Arch.S., Massachusetts Institute of Technology, 1994

Teaching Experience:
Studio Critic, Architecture, BAC, 2003-2004
Lecturer and Studio Critic, Interior Architecture, RISD, 2005 - 2008
Assistant Professor, NJIT, 2008-present

Professional Experience:
Senior Designer, TRO/The Ritche Organization, Newton, MA, 1994-1999
Senior Designer, Tsoi/Kobus & Associates, Cambridge, MA, 2000-2004
Partner (Private Practice), Technomorphic, TUTS, Boston, MA, 2004-present

Licenses/Registration:
New York, #035676 (Registered Architect)

Selected Publications and Recent Research:
Collaborative Research: CyberSEES:Type 1: Unmasking the Hidden Webs of Life: Persuasive Technology for Environmental Awareness, (NSF 13-500 Proposal, 2013)

Mediated and Situated Landscapes, (ACSA, 2013)
Learning with Digital and Physical Mock-ups Using BIM, (CAADRIA, 2013)
Urban Games: Application of Augmented Reality, (ACM SIGGRAPH Asia, 2012)
Component-based Design Approach Using BIM, (Digital Physicality, eCAADe, 2012)
Urban Games: Inhabiting Real and Virtual Cities, (Digital Physicality, eCAADe, 2012)
Parametric BIM as a generative design tool, (Digital Aptitudes, ACSA 2012)
Creativity with ARTags; a Mobile Augmented Reality App for Android, (ACM SIGGRAPH Asia 2011)
The Digital Object, (Architecture Boston, 2011)
Mediated Lives, (Respecting Fragile Places, eCAADe, 2011)
Exploring parametric BIM as a conceptual tool for design and building technology teaching, (BTES, 2011)
Form-making without form making, (Parametricism: SPC, ACADIA Regional Conference, 2011)
Unusual encounters: the use of special effects tools as design generators", (ACSA, 2011)
Wall to Wall: The Digital Landscape, (Architecture Boston, 2010)

Professional Memberships:

BTES	Building Technology Educators' Society
ACM	Association for Computing Machinery
ACM SIGGRAPH	Association for Computing Machinery, Special Interest Group on Graphics and Interactive Techniques
ACADIA	the Association for Computer-Aided Design in Architecture (North America)
eCAADe	Education and Research in Computer Aided Architectural Design in Europe
IGDA	International Game Developer Association

Name: Michael S. Zdepski

Courses Taught:
ARCH 563-013 & ARCH 564-006 Comp I and Comp II Studio (Fall 2012)
ARCH 564-016 Comp II Studio, ARCH 333-004 Image & Word II (Spring 2013)
ARCH 563-013 Comp I Studio, ARCH 333-004 Image & Word I (Fall 2013)

Educational Credentials:
Master of Architecture II (post professional degree), University of Pennsylvania, 1970
Bachelor of Architecture, cum laude, Syracuse University, 1969

Teaching Experience:
Associate Professor, NJIT, 1974-present
Department of Landscape Architecture at Rutgers University, New Brunswick

Professional Experience:
Principal, Stephen Michael Zdepski PC Architecture

Licenses/Registration:
Architect; New Jersey, Cert. C-6172, 1973.
Architect; New York, Cert. 024060, 1993.
National Council of Architectural Registration
Boards Certificate, Cert. 15060, 1974.
Professional Planner; New Jersey, Cert. 1469, 1974.

Selected Publications and Recent Research:
"Architectural Diversity through Climate-Responsive Architecture." Oak Ridge National Laboratory, 2012

"Architoons." *The Chronicle of Higher Education,* (by others) June 16, 2000.

"Multiplex. Octoplex. Just Plain Perplexed", *New York Times,* Section 14: pg 1. (Quote) by Neil Genzlinger, 1998.

"Education by Design," Autodesk/Discreet, Summer, 1999.(cover story), Case Study: Architectural Studio Autodesk Website, By Autodesk, 1999.
Architectural Design Portfolio
Kinetix, Summer, 1999.

Professional Memberships:
Association of Computer Aided Design in Architecture (member and Past Vice President and President)
NCARB

Name: Joshua Zinder, Adjunct

Courses Taught (Two academic years prior to current visit):
Undergraduate Design Studio 263
Comprehensive Studio 563
Comprehensive Studio 564

Educational Credentials:
B. Arch., Syracuse University, 1991
M.S. in Advanced Architectural Design, Columbia University, 1992

Teaching Experience:
Adjunct Design Professor, 2nd, 4th and 5th year Bachelor of Architecture Comprehensive Design Studios, 2006-present
Princeton University Visiting Critic, 2011
City University of New York Visiting Critic, 1999

Professional Experience:
Principal, Joshua Zinder Architecture + Design, 6 years - present
Associate, Michael Graves Associates, Princeton, NJ, 6 years
Project Architect, Peter Gisolfi Associates, Hastings-on-Hudson, NY, 4 years
Project Architect, Hudson Design, Cold Spring, NY, 2 years
Project Manager, Kossar + Garry Architects, New York, NY, 1.5 years
Architect, Misc Offices, 1.5 years

Licenses/Registration:

New York	New Jersey	Pennsylvania	Nevada
Florida	NCARB Certified	LEED Accredited	

Selected Publications and Recent Research:
The New York Times, December 2012
U.S. 1, October 2012
Commercial Building Products April 2012
Boutique Design March/April 2012
X Space 2 February 2012
Hospitality Design March 2011, October 2012
Indesign Magazine AU February 2011
Hotels Magazine February 2010
New Jersey Monthly April 2009
Hotels Magazine September 2008
Luxury Las Vegas July 2008
Angeleno Magazine May 2008
Style Magazine Winter 07/08
Architectural Record, The Beauty of Stone, Winter 2002; Schools of the 21st Century, Winter 2012
High Access Home, Rizzoli December 1999

Professional Memberships:
The American Institute of Architects
United States Green Buildings Council
New Jersey Association of School Administrators
Association of Collegiate Schools of Architecture
Gotham City Networking
IIDA

Spring '12

		BARCH S'12																	MARCH S'12										ACHITECTURE ELECTIVE S'12																										ART + DESIGN S'12																									
		Modes of Deisgn Communication II	Intro to Design II	Environmental Control Systems I	Structures I	History II	Studio II	Construction II	Environmental Control Systems II	Structures II	Studio IV	History IV	Structures III	Options II	Prog & Proj Dev	Prof Arch Practice	Pre-Comp/Comp	Comp Studio Lab	Computer Aided Design	Grad Design II	Grad Design IV	Grad Design VI/VII	Grad History II	Bldg Sys II: Integr Bldg Tech	Bldg Sys IV: Intro Bldg Srv	Bldg Sys V: Struc Prin Apps	Bldg Sys VIII Strct Comp	Building & Development	Environmental Ed	Image & Word II	Building Inf Modeling	Photography	Many Faces of Arch	Honors Seminar	Landscape in the American Culture	Lighting	Everyday Life in the Public Realm	Thinking Outside the Box	Advanced Parametric Modeling	Furniture as Fashion	Honors Seminar	Architecture and Social Change	Advanced Topics in BIM	Memorials and the Making of Meaning	Japanese Architecture	Indoor Evn Quality	Sustainable Bldg Resouces	Infrastructure Studio	Public Private Finance in Urban Planning	Hist & Thry Infrastructure	Infr Plan in Pract	Infr & Arch	The Good City	Methods in Urban and Architectural History	Comm A+D Traditional Media	Comm A+D Digital Media	History Art & Design II	Human Factors/Ergonomics	Design Entrepreneurship	Andvanced Digital Music	Extreme Fabrication - Design & Computation	Creative Web Design	Design for Augmented Reality	Video and Animation	Acting Fund for Animators	Digital Design Studio	Digital Design Studio VI	Modeling & Manufacturing	Ind Design Studio II	Design Specialization -	Mechanics & Electronics	Sust Material and Processes	Ind Design Studio IV	Ind Design Comp Studio	Building and Interior Systems II	Interior Design Studio II	Contract Documents	Interior Design Studio IV	Interior Design Studio VI	Structures I
Faculty Member	Summary of expertise, recent research or experience	Arch 156	Arch 164	Arch 227	Arch 229	Arch 252	Arch 264	Arch 323	Arch 327	Arch 329	Arch 364	Arch 382	Arch 429	Arch 464	Arch 472	Arch 558	Arch 563/564	Arch 565	Arch 500G	Arch 502G	Arch 504G	Arch 506/507G	Arch 529G	Arch 542G	Arch 544G	Arch 545G	Arch 548G	Arch 569G	Arch 312	Arch 333	Arch 337	Arch 419	Arch 483	Arch 483	Arch 536	Arch 543	Arch 583	Arch 583	Arch 583	Arch 583	Arch 583	Arch 662	Arch 662	Arch 662	Arch 662	Arch 664	Arch 666	MIP 602	MIP 618	MIP 631	MIP 673	MIP 674	URB 788	URB 788	AD 111	AD 112	AD 162	AD 201	AD 490	AD 490	AD 490	AD 490	AD 490	DD 284	DD 301	DD 364	DD 464	ID 217	ID 264	ID 301	ID 312	ID 341	ID 364	ID 464	INT 222	INT 264	INT 322	INT 364	INT 464	Arch 282
Ajemian, Silva	Practicing NYC Architect Focusing on residential design and Urban Place-making Co-director of First Street Green Recent research on the architect as a social catalyst						■																																																																										
Alcala, Jose	Practicing Industrial Designer - Teaches A+D courses																																																									■																					■						
Altin, Ersin	PhD. Candidate. Expert in design and architecture in the non-western world. Writer / historian / practicing architect.						■																																																		■																										
Atwood, Brooks	Practicing Industrial Designer - Teaches A+D courses																																						■																																								■							
Bales, Erv	Senior Research Consultant to the U.S. Environmental Protection Agency, where he helped initiate the Energy Star Homes program.																																														■																																					
Barry, Tom	NY licensed architect and LEED accredited professional.		■																																																																														
Beita, Esteban	Expert in digital technology, design visualization and Japanese Architecture		■																																																																															
Benanti, Vince	Expert in the use and teaching of Building Information Modeling Software.																													■																																																				
Bess, Mark	Licensed architect in New York and New Jersey. Member of the Construction Specifications Institute with Contract Document Certification (CDT)							■								■		■																																																												■			
Booth, Chris	Accomplished 2-D and 3-D digital skills expert	■					■																																																																										
Brill, Glenn	Expert in New York Metropolitan real estate annalysis and development													■																																																																	
Brothers, David	Practicing Interior Designer - Teaches A+D courses																																																																												■		■	
Burgermaster, Matt	2012 ACSA Education Award recipient. Recent research on the use of concrete in resilient building design.	■												■																																																																	
Cooke, Frederick	Project designer for numerous NJ Architecture firms including his own practice						■																																																																										
Coover, Abby	Practicing NYC designer,experts in digital media. Co-founder and editor of suckerPUNCHdaily.com	■																																																																														
Dallessio, Tom	Professional Planner and recently named Director of NJIT's Center for Resilient Design. Teaches in MIP program.																																																	■																														
Damadian, Aris	Expert in 19th century American architecture. Writing PhD dissertation on historic NJ resort towns.										■																																																																				
Dart, Jim	Practicing NYC Architect. Expert in disaster recovery. Featured in 2012 book that examines the roles and responsibilities of architects in disaster recovery.									■																																																																					
DeLuna, Brian	Practicing NYC designer. Expert in in digital design and visualization.	■	■																																																																													
Eade, Angus	Practicing NYC architect, recent research on 3D printed textiles and industrial design applications.						■																																																																									
Esperdy, Gabrielle	PhD. Gabrielle Esperdy, architectural historian and critic, specializes in North American modernism and everyday landscapes, current research on territories of the automobile and architectural and urban discourse, editor of SAH Archipedia										■																																																																				
Feris, Manny	Manny Feris – a LEED AP / 40 years with designers/specifiers to achieve energy-efficient lighting design and controls that meet the needs of commercial and residential projects.																																			■																																														
Ferri, Emilia	Practicing architect in NY and CT. Specializes in design-build projects	■	■																																																																												
Franck, Karen	PhD. Expert in environmental psychology. Author of numerous books. Recent research on memorials in the NYC metropolitan area.																																											■									■																													
Fuentes, Gabe	Practicing NYC designer. Most recent research revoles around urbanism in the developing world.		■																																																																												
Figueroa, Julio	Practicing NJ architect. Recognized expert on school design and special-needs housing. Recent research on pre-fab residential construction.						■																																																																											
Garber, Richard	Practicing NYC and NJ architect. Current work deals with performance based sustainable design at the architectural and urban scales. Most recent book in progress: design BIM, Wiley													■																				■																																														
Gauchat, Urs	Practicing Architect, Registered in Australia, Expert in housng typologiy, sesimic design and real estate market analysis. Currently working with United Nations on global urban community issues.													■														■						■																																													
Goldman, Glenn	Expert in digital media and pedagogy in multiple design disciplines. Most recently served on the national committee as education liason for SIGGRAPH. Teached A+D courses.																																																																																
Gosser, Matt	Practicing fine artist, curator and gallery director, 2012 artist in residence, Newark Museum, Chief planner of the Art Factory in Paterson, NJ	■	■																																																																													
Grosman, Henry	Practicing NYC architect. Expert in using computational techniques to generate design.																			■																		■																																											
Harp, Cleve	Practicing NYC Architect. Expertise in Interior Architecture & Interior Design: AD 100 ARCHITECTS. NEW YORK SPACES, December 11, Residential Interior Architecture & Interior Design feature article																				■																													■																														
Harper, Virginia	Practicing NYC architect. LEED AP. Works primarily at the residential scale.																																																																			■												
Harrington, Anthony	Practicing NYC designer. LEED AP		■																																																																														
Hutchinson, Robert	Specialist inInfrastructure Planning, Public and Private Finance, Project Management,Building Economics, Sustainable Technologies, Renewable Energy																																																■																															
Kliwinski, Jason	Practicing NJ/PA/NYC architect, Recognized expert in green building, Current work: LEED Platinum, LBC NYC Townhouse,AIA-NJ Architect of Year 2011, USGBC LEED Fellow 2012																																													■																																		
Klokis, Brent	Practicing NYC designer. Expert in in digital design, visualization and parametrics.	■																																																						■																								
Kopec, Dan	Practicing Registered Architect + LEED AP. NJIT Representative on Nat'l Inst of Building Science Education Sub-committee focused on Building Technologies	■		■																																																																											
Krippa, Ersela	Practicing architect in NY and NJ. 2011 Rome Prize. Work deals with design at the building to urban scale.						■																																																																											
Laera, Lory	Practicing architect and interior designer in NY and internationally. Teaches A+D courses.																																																																	■														
Laucirica, Linda	Practicing NYC Interior designer. 20+ years experience in residential and hospitality industry. Teaches A+D courses.																																																																	■														
Lerner, Ran	Practicing NYC Industrial designer. Teaches A+D courses.																																																										■										■	■											
Little, Fred	Expert in Meiji period Japanese culture, religion, politics and eastern philosophy. Uses this to introduce students to classical Japanese architecture.																																												■																																						
Majmudar, Kunal	Digital music and sound expert. Teaches A+D courses.																																																											■																				
Mallelari, Enkella	Practicing Architectural Designer and Planner in NJ, Successfully completed the US Solar Decathlons in 2011 and China Solar Decathlon this year, Currently seeking licensure from NJ Board of Architects	■																																																																														
Martinez, Ceu	Practicing NJ designer. M.Arch, Yale.	■	■																																																																														

Martinez, Ernesto	Practicing NYC Architect. Promotes art and architecture for the non-profit sector in Austin, TX and NY. Competition Director at the Remember the Triangle Fire Coalition. 2012
McEwen, Mitch	Practicing NYC designer, artist, curator and writer. 2010-11 grant recipient The New York State Council on the Arts Independent Projects award for Architecture, Planning and Design.
Moore, Sandy	Ed.D Harvard. Current interests in social space and community outreach programs to bring design into Newark Public Schools.
Mostoller, Michael	Distinguished Professor. Practicing NJ architect. Work include single and multi-family residential, public housing, commercial and Institutional projects.
Narahara, Taro	D.Arch. Expert in physical computing and digital design. Teaches A+D courses.
Navin, Tom	Practicing NYC architect and landscap architect. Expert in Landscape history and design.
Ogorzalek, Tom	Practicing NJ designer. Current work focusses on masonry systems.
Pagani, Sabrina	Practicing NYC architect and certified interior designer.
Peckham, Matt	Practicing NYC architect. Expert in tectonics, detailing, construction and project management.
Prado, Jorge	Practicing NYC architect ,iicensed in NYS. Co-Director First Street Green, an arts organization focused on arts programming & urban place-making. Research: Architect as social catalyst
Prantis, Nana	Professional NY photographer.
Ruegg, Gabe	Practicing Industrial Designer - Teaches A+D courses
Russo, Rhett	Expert in ceramic building components. Work and writing published in Second Nature, Meander: Variegating Architecture, Metropolis Magazine. Work chosen for the 2010 Beijing Biennale. Published research: ACADIA
Sakran, Will	Practicing Industrial Designer. Expert in mechanics and electronics. - Teaches A+D courses
Santos, Margaret	Current research in Portugese architecture. Currently practicing in NJ and NM.
Santos, Tony	Registered architect. International practice. Expert in largescale infrastructure and urban planning as well as architecture at the building scale.
Sassi, Larry	Practicing NYC architect. Work includes interiors, residential and historic renovation projects.
Schuman, Tony	Registered architect. Recognized advocate of architecture's social vocation. Named a Distinguished Professor by ACSA in 2010. Recognized as one of 30 "Top Professors" by Design Intelligence in 2013.
Siegel, joy	LIcensed architect in New York and New Jersey. LEED AP. Residential architecture and interiors.
Smith, Ira	Practicing NJ architect. Wide range of archtiectural and interiors work from residential to Fortune 500 clients. Chair of the Montclair Historic Preservation Commission.
Smith, Roger	Practicing NJ architect. Works on funded research projects in community design for local municipalities.
Sollohub, Darius	Licenced architect in NY and NJ. Current research centers on how to best educate Millenial generationarchitecture students.
Switala, Jen	Expert in teaching advanced techniques in Building Information Modeling. Coordinated all building documents for team NJ's 2011 Solar Decathlon entry in Washington DC.
Taher, Rima	PhD. Expert in structural and mechanical systems. Recognized expert in resilient structural design.
Theodore, Georgeen	Registered architect and urban designer. Co founder of an internationally recognized design proactice, Interboro. Exhibited at 2012 Venice Bienalle.
Vrdoljak, Maria	UK registered architect. M. Arch, GSD
Wall, Don	D.Arch. Recognized expert in archtectural theory.
Wells, Louis	Theater Director. Teaches A+D courses
Wendell, Augustus	Expert in architectural visualization and creating narrative through imagery and motion based media.. Principal at an interdisciplinary digital design practice in Brooklyn, New York. Teaches A+D courses
Wood, Tim	Practicing NYC architect. Currently focussing on building architectural and urbanism history seminars.
Zaitseva, Polina	Practicing international artist. NY/NJ Animator for film and commercials. Creative Director and Animator for Felt Feelings and Dreams (2012) documentaries Teaches A+D courses.
Zarzycki, Andrzej	Expert in media-based environments and validation methodologies of generative design through building performance analysis and a simulation tools.
Zdepski, Steve	Pracitcing NJ architect. Expert in the use of digital software in design education.
Zinder, Josh	Pracitcing NJ architect. Licensed in NJ, NY, PA and NV. LEED AP. 2010 NJ AIA Interior Architecture Merit Award.

Spring '12

Modes of Deisgn Communication II	Arch 156	BARCH S'12
Intro to Design II	Arch 164	
Environmental Control Systems I	Arch 227	
Structures I	Arch 229	
History II	Arch 252	
Studio II	Arch 264	
Construction II	Arch 323	
Environmental Control Systems II	Arch 327	
Structures II	Arch 329	
Studio IV	Arch 364	
History IV	Arch 382	
Structures III	Arch 429	
Options II	Arch 464	
Prog & Proj Dev	Arch 472	
Prof Arch Practice	Arch 558	
Pre-Comp/Comp	Arch 563/564	
Comp Studio Lab	Arch 565	
Computer Aided Design	Arch 500G	MARCH S'12
Grad Design II	Arch 502G	
Grad Design IV	Arch 504G	
Grad Design VI/VII	Arch 506/507G	
Grad History II	Arch 529G	
Bldg Sys II: Integr Bldg Tech	Arch 542G	
Bldg Sys IV: Intro Bldg Srv	Arch 544G	
Bldg Sys V: Struc Prin Apps	Arch 545G	
Bldg Sys VIII Strct Comp	Arch 548G	
Building & Development	Arch 569G	
Environmental Ed	Arch 312	ACHITECTURE ELECTIVE S'12
Image & Word II	Arch 333	
Building Inf Modeling	Arch 337	
Photography	Arch 419	
Many Faces of Arch	Arch 483	
Honors Seminar	Arch 483	
Landscape in the American Culture	Arch 536	
Lighting	Arch 543	
Everyday Life in the Public Realm	Arch 583	
Thinking Outside the Box	Arch 583	
Advanced Parametric Modeling	Arch 583	
Furniture as Fashion	Arch 583	
Honors Seminar	Arch 583	
Architecture and Social Change	Arch 662	
Advanced Topics in BIM	Arch 662	
Memorials and the Making of Meaning	Arch 662	
Japanese Architecture	Arch 662	
Indoor Evn Quality	Arch 664	
Sustainable Bldg Resouces	Arch 666	
Infrastructure Studio	MIP 602	
Public Private Finance in Urban Planning	MIP 618	
Hist & Thry Infrastructure	MIP 631	
Infr Plan in Pract	MIP 673	
Infr & Arch	MIP 674	
The Good City	URB 788	
Methods in Urban and Architectural History	URB 788	
Comm A+D Traditional Media	AD 111	ART + DESIGN S'12
Comm A+D Digital Media	AD 112	
History Art & Design II	AD 162	
Human Factors/Ergonomics	AD 201	
Design Entrepreneurship	AD 490	
Andvanced Digital Music	AD 490	
Extreme Fabrication - Design & Computation	AD 490	
Creative Web Design	AD 490	
Design for Augmented Reality	AD 490	
Video and Animation	DD 284	
Acting Fund for Animators	DD 301	
Digital Design Studio	DD 364	
Digital Design Studio VI	DD 464	
Modeling & Manufacturing	ID 217	
Ind Design Studio II	ID 264	
Design Specialization -	ID 301	
Mechanics & Electronics	ID 312	
Sust Material and Processes	ID 341	
Ind Design Studio IV	ID 364	
Ind Design Comp Studio	ID 464	
Building and Interior Systems II	INT 222	
Interior Design Studio II	INT 264	
Contract Documents	INT 322	
Interior Design Studio IV	INT 364	
Interior Design Studio VI	INT 464	
Structures I	Arch 282	

Fall '12

BARCH F'13

Faculty Member	Summary of expertise, recent research or experience	Modes of Design Communication I (Arch 155)	Intro to Design I (Arch 163)	Construction I (Arch 223)	History I (Arch 251)	Studio I (Arch 263)	Environmental Control Systems II (Arch 327)	Structures II (Arch 329)	Studio III (Arch 363)	History III (Arch 381)	Construction III (Arch 423)	Structures III (Arch 429)	Options I (Arch 463)	Computer Applications to Design (Arch 500G)	Comp I (Arch 563)	Comp II (Arch 564)	Prof Arch Practice (Arch 558)	Comp Studio Lab (Arch 565)
Ajemian, Silva	Practicing NYC Architect Focusing on residential design and Urban Place-making. Co-director of First Street Green. Recent research on the architect as a social catalyst								■									
Alcala, Jose	Practicing Industrial Designer - Teaches A+D																	
Altin, Ersin	PhD. Candidate. Expert in design and architecture in the non-western world. Writer / historian / practicing architect.					■												
Atwood, Brooks	Practicing Industrial Designer - Teaches A+D courses																	
Bales, Erv	Senior Research Consultant to the U.S. Environmental Protection Agency, where he helped initiate the Energy Star Homes program.																	
Barry, Tom	NY licensed architect and LEED accredited professional.	■	■															
Benanti, Vince	Expert in the use and teaching of Building Information Modeling Software.																	
Bess, Mark	Licensed architect in New York and New Jersey. Member of the Construction Specifications Institute with Contract Document Certification (CDT)																■	■
Bobenhousen	Founder Sustainable Design Collaborative LLC in 2001. Chairman of NY chapter of USGBC 2003.																	
Booth, Chris	Accomplished 2-D and 3-D digital skills expert		■															
Bristol, Susan	Practicing NJ Architect,Licensed NJ Planner,LEED AP,Coastal construction & design research,YWCA Tribute to Women Honoree, 2011, Leadership in Historic Preservation Award, 2005														■			
Brothers, David	Practicing Interior Designer - Teaches A+D courses																	
Burgermaster, Matt	2012 ACSA Education Award recipient. Recent research on the use of concrete in resilient building design.										■		■					
Chun, Brad	Expert in digital media entrepreneurship. Teaches A+D courses																	
Cooke, Frederick	Project designer for numerous NJ Architecture firms including his own practice					■												
Coover, Abby	Practicing NYC designer,experts in digital media. Co-founder and editor of suckerPUNCHdaily.com	■																
Dallessio, Tom	Professional Planner and recently named Director of NJIT's Center for Resilient Design. Teaches in MIP program.																	
Dart, Jim	Practicing NYC Architect. Expert in disaster recovery. Featured in 2012 book that examines the roles and responsibilities of architects in disaster recovery.								■									
Decker, Martina	Recognized for pioneering research into applications for advanced materials with novel properties, particularly smart materials and nanomaterials.																	
Eade, Angus	Practicing NYC architect, recent research on 3D printed textiles and industrial design applications.	■				■												
Esperdy, Gabrielle	PhD. Gabrielle Esperdy, architectural historian and critic, specializes in North American modernism and everyday landscapes, current research on territories of the automobile and architectural and urban discourse, editor of SAH Archipedia									■								
Ferri, Emilia	Practicing architect in NY and CT. Specializes in design-build projects	■	■															
Figueroa, Julio	Practicing NJ architect. Recognized expert on school design and special-needs housing. Recent research on pre-fab residential construction.	■				■												
Fuentes, Gabe	Practicing NYC designer. Most recent research revoles around urbanism in the developing world.		■															
Garber, Richard	Practicing NYC and NJ architect. Current work deals with performance based sustainable design at the architectural and urban scales.														■			
Goldman, Glenn	Expert in digital media and pedagogy in multiple design disciplines. Most recently served on the national committee as education liason for SIGGRAPH. Teached A+D courses.																	
Gosser, Matt	Practicing fine artist, curator and gallery director, 2012 artist in residence, Newark Museum, Chief planner of the Art Factory in Paterson, NJ	■																
Grosman, Henry	Practicing NYC architect. Expert in using computational techniques to generate design.					■												
Hansen, Greta	NYC designer and writer. M.Arch, Columbia.					■												
Harp, Cleve	Practicing NYC Architect. Expertise in Interior Architecture & Interior Design: AD 100 ARCHITECTS. NEW YORK SPACES, December 11, Residential Interior Architecture & Interior Design feature article					■												
Harper, Virginia	Practicing NYC Industrial designer. Teaches A+D courses.																	
Harrington, Anthony	Practicing NYC designer. LEED AP		■															
Hutchinson, Robert	Specialist inInfrastructure Planning, Public and Private Finance, Project Management,Building Economics, Sustainable Technologies, Renewable Energy																	
Klokis, Brent	Practicing NYC designer. Expert in in digital design, visualization and parametrics.	■	■															
Kopec, Dan	Practicing architectect in NY and NJ. Professional work focusses on sustainability through building system optimization. Researching asynchronous course delivery systems for large lecture courses.		■				■											
Krumweidie, Kieth	Expert in residential development patterns. Most recent research centers on resilient design in coastal regions.																	
Laucirica, Linda	Practicing NYC Interior designer. 20+ years experience in residential and hospitality industry. Teaches A+D courses.																	
LeCavalier, Jesse	D.Sci. Expert in logistics and urbanism. Published in several books and collections. Current research on the spacial consequences of Walmart's logistics operations.		■															
Lerner, Ran	Practicing NYC Industrial designer. Teaches A+D courses.																	
Lindemans, Josh	Practicing NJ designer. Accomplished in using Building information Modeling on all stages of design projects.		■															
Littman, Barbara	Practicing NYC interior designer. Teaches A+D courses																	
Loughlin, Brian	Chief Architect, Jersey City Housing Authority. M. Arch, Columbia								■									
Mailloux, Andrew	Practicing NYC designer. Expert in in digital design, visualization and parametrics.	■																
Martinez,Ernesto	Practicing NYC Architect. Promotes art and architecture for the non-profit sector in Austin, TX and NY. Competition Director at the Remember the Triangle Fire Coalition. 2012		■															
Mehta, Nidhip	International design practice. Skilled digital design software iuser and teacher.	■																
Miller, Bruce	Digital music and sound expert. Teaches A+D courses.																	
Moore, Sandy	Ed.D Harvard. Current interests in social space and community outreach programs to bring design into Newark Public Schools																	
Mostoller, Michael	Distinguished Professor. Practicing NJ architect. Work include single and multi-family residential, public housing, commercial and Institutional projects.																	
Narahara, Taro	D.Arch. Expert in physical computing and digital design. Teaches A+D courses.																	
Navin, Tom	Practicing NYC architect and landscap architect. Expert in Landscape history and design.															■		
Nowicki, Susan	PhD. Expert on post Civil War suburban development in New Jersey				■													
Ogorzalek, Tom	Practicing NJ designer. Current work focusses on masonry systems.												■					
Pagani, Sabrina	Practicing NYC architect and certified interior designer.								■									
Peckham, Matt	Practicing NYC architect. Expert in tectonics, detailing, construction and project management.			■														
Prado, Jorge	Practicing NYC architect ,iicensed in NYS. Co-Director First Street Green, an arts organization focused on arts programming & urban place-making. Research: Architect as social catalyst	■																
Prantis, Nana	Professional NY photographer.																	
Prince, Will	Practicing NYC architect. International clientele. Large hospitaliy to small interior projects.					■												

MARCH F'13

Faculty Member	Grad Design I (Arch 501 G)	Grad Design III (Arch 503G)	Grad Design V/VI (Arch 505/506G)	Grad History I (Arch 528G)	Bldg Sys I: Integr Bldg Tech (Arch541G)	Bldg Sys III: Intro Bldg Srv (Arch 543G)	Prof Arch Practice (Arch 579G)	Graduate Architectural Graphics (Arch 555G)
Ajemian, Silva								
Alcala, Jose								
Altin, Ersin								
Atwood, Brooks								
Bales, Erv						■		
Barry, Tom								
Benanti, Vince								
Bess, Mark							■	
Bobenhousen								
Booth, Chris								■
Bristol, Susan								
Brothers, David								
Burgermaster, Matt								
Chun, Brad								
Cooke, Frederick								
Coover, Abby								
Dallessio, Tom								
Dart, Jim								
Decker, Martina								
Eade, Angus								
Esperdy, Gabrielle								
Ferri, Emilia								
Figueroa, Julio								
Fuentes, Gabe								
Garber, Richard								
Goldman, Glenn								
Gosser, Matt								
Grosman, Henry								
Hansen, Greta								
Harp, Cleve								
Harper, Virginia								
Harrington, Anthony								
Hutchinson, Robert								
Klokis, Brent								
Kopec, Dan								
Krumweidie, Kieth			■					
Laucirica, Linda								
LeCavalier, Jesse								
Lerner, Ran								
Lindemans, Josh								
Littman, Barbara								
Loughlin, Brian								
Mailloux, Andrew								
Martinez,Ernesto								
Mehta, Nidhip								
Miller, Bruce								
Moore, Sandy								
Mostoller, Michael	■							
Narahara, Taro								
Navin, Tom								
Nowicki, Susan								
Ogorzalek, Tom								
Pagani, Sabrina								
Peckham, Matt					■			
Prado, Jorge		■						
Prantis, Nana								
Prince, Will								

ACHITECTURE ELECTIVE F'13

Faculty Member	Digital Modeling & Fabrication (Arch 301)	Building Information Modeling (Arch 337)	Photography (Arch 419)	Simulated Environments (Arch 434)	Many Faces of Arch (Arch 483)	Material Matters for Design (Arch 583)	Glass and the Chinese Landscape (Arch 583)	Fundamentals of Urban Design (Arch 583)	Pop-Up Architecture - A Global Trend (Arch 583)	Exploring Urban Gardening (Arch 583)	Ungluing the Self (Arch 583)	Building and Nature (Arch 583)	Emergent Typologies (Arch 583)	Economy of Building (Arch 650)	Envisioning Newark (Arch 662)	Project Japan - China Rising (Arch 662)	BIM and ECS (Arch 662)	Sust. Des. In Energy Efficient Bld (Arch 665)	Intro to Sustainable Design (Arch 663)	Infrastructure Studio (MIP 601)	Geographic Information Systems (MIP 652)	Land Use Planning (MIP 655)	Evol. Of American Metropolis (USYS 702)
Ajemian, Silva																							
Alcala, Jose																							
Altin, Ersin																							
Atwood, Brooks																							
Bales, Erv																			■				
Barry, Tom																							
Benanti, Vince		■																					
Bess, Mark																							
Bobenhousen																		■					
Booth, Chris	■																						
Bristol, Susan																							
Brothers, David																							
Burgermaster, Matt																							
Chun, Brad																							
Cooke, Frederick																							
Coover, Abby																							
Dallessio, Tom																						■	
Dart, Jim													■										
Decker, Martina																							
Eade, Angus																							
Esperdy, Gabrielle																							■
Ferri, Emilia																							
Figueroa, Julio																							
Fuentes, Gabe																							
Garber, Richard							■																
Goldman, Glenn																							
Gosser, Matt																							
Grosman, Henry																							
Hansen, Greta																							
Harp, Cleve																							
Harper, Virginia																							
Harrington, Anthony																							
Hutchinson, Robert														■									
Klokis, Brent																							
Kopec, Dan																							
Krumweidie, Kieth																							
Laucirica, Linda																							
LeCavalier, Jesse																							
Lerner, Ran																							
Lindemans, Josh																							
Littman, Barbara																							
Loughlin, Brian																							
Mailloux, Andrew																							
Martinez,Ernesto																							
Mehta, Nidhip																							
Miller, Bruce																							
Moore, Sandy					■				■	■													
Mostoller, Michael																■							
Narahara, Taro																							
Navin, Tom												■											
Nowicki, Susan																							
Ogorzalek, Tom						■																	
Pagani, Sabrina																							
Peckham, Matt																							
Prado, Jorge																							
Prantis, Nana			■																				
Prince, Will																							

ART + DESIGN F'13

Faculty Member	Color & Comp (AD 150)	History Art & Design I (AD 161)	Human Factors/Ergonomics (AD 201)	Collaborative Design Studio (AD 463)	Advanced Architectural Rendering (AD 490)	Basic Sound and Music (AD 490)	Digital Entrepreneurship (AD 490)	Character Modeling (AD 490)	History of Games (DD 275)	Digital Design Studio I (DD 363)	Innovations Past Present & Future (ID 203)	Modeling and Prototyping (ID 216)	Studio I (ID 263)	Ethnographic and Market Research (ID 310)	Materials & Processes (ID 340)	Studio III (ID 363)	Professional Practice & Ethics (ID 410)	Bldg & Interior Systems I (INT 221)	Interior Design Studio I (INT 263)	Methods & Materials (INT 321)	Interior Design Studio III (INT 363)	History of Furniture (INT 350)	History I (Arch 251)
Ajemian, Silva																							
Alcala, Jose			■								■		■										
Altin, Ersin		■																					
Atwood, Brooks												■				■							
Bales, Erv																							
Barry, Tom																							
Benanti, Vince																							
Bess, Mark																							
Bobenhousen																							
Booth, Chris																							
Bristol, Susan																							
Brothers, David																		■	■				
Burgermaster, Matt																							
Chun, Brad							■																
Cooke, Frederick																							
Coover, Abby																							
Dallessio, Tom																							
Dart, Jim																							
Decker, Martina				■																			
Eade, Angus																							
Esperdy, Gabrielle																							
Ferri, Emilia																							
Figueroa, Julio																							
Fuentes, Gabe																							
Garber, Richard																							
Goldman, Glenn	■																						
Gosser, Matt				■																			
Grosman, Henry																							
Hansen, Greta																							
Harp, Cleve																							■
Harper, Virginia																				■			
Harrington, Anthony																							
Hutchinson, Robert																							
Klokis, Brent																							
Kopec, Dan																							
Krumweidie, Kieth																							
Laucirica, Linda																					■		
LeCavalier, Jesse																							
Lerner, Ran				■											■		■						
Lindemans, Josh																							
Littman, Barbara																						■	
Loughlin, Brian																							
Mailloux, Andrew																							
Martinez,Ernesto																							
Mehta, Nidhip																							
Miller, Bruce						■																	
Moore, Sandy																							
Mostoller, Michael																							
Narahara, Taro	■								■														
Navin, Tom																							
Nowicki, Susan																							
Ogorzalek, Tom																							
Pagani, Sabrina																							
Peckham, Matt																							
Prado, Jorge																							
Prantis, Nana																							
Prince, Will																							

Ronderous, Nick	Experienced Urban Planner, Recognized expert on real estate and economic development, Recent research on real estate development trends in NYC and Nationally, NAIOP research grant 2012
Russo, Rhett	Expert in ceramic building components. Work and writing published in Second Nature, Meander: Variegating Architecture, Metropolis Magazine. Work chosen for the 2010 Beijing Biennale. Published research: ACADIA
Santos, Margaret	Current research in Portugese architecture. Currently practicing in NJ and NM.
Santos, Tony	Registered architect. International practice. Expert in largescale infrastructure and urban planning as well as architecture at the building scale.
Schuman, Tony	Registered architect. Recognized advocate of architecture's social vocation. Named a Distinguished Professor by ACSA in 2010. Recognized as one of 30 "Top Professors" by Design Intelligence in 2013.
Siegel, joy	LIcensed architect in New York and New Jersey. LEED AP. Residential architecture and interiors.
Smith, Ira	Practicing NJ architect. Wide range of archtiectural and interiors work from residential to Fortune 500 clients. Chair of the Montclair Historic Preservation Commission.
Smith, Roger	Practicing NJ architect. Works on funded research projects in community design for local municipalities.
Sollohub, Darius	Licenced architect in NY and NJ. Current research centers on how to best educate Millenial generationarchitecture students.
Switala, Jen	Expert in teaching advanced techniques in Building Information Modeling. Coordinated all building documents for team NJ's 2011 Solar Decathlon entry in Washington DC.
Taher, Rima	PhD. Expert in structural and mechanical systems. Recognized expert in resilient structural design.
Theodore, Georgeen	Registered architect and urban designer. Co founder of an internationally recognized design proactice, Interboro. Exhibited at 2012 Venice Bienalle.
Wall, Don	D.Arch. Recognized expert in archtectural theory.
Wendell, Augustus	Expert in architectural visualization and creating narrative through imagery and motion based media.. Principal at an interdisciplinary digital design practice in Brooklyn, New York. Teaches A+D courses
Wood, Tim	Practicing NYC architect. Currently focussing on building architectural and urbanism history seminars.
Woolley, Ross	Practicing NJ architect. Work include single-family residential, commercial and Institutional projects.
Zaitseva, Polina	Practicing international artist. NY/NJ Animator for film and commercials. Creative Director and Animator for Felt Feelings and Dreams (2012) documentaries Teaches A+D courses.
Zarzycki, Andrzej	Expert in media-based environments and validation methodologies of generative design through building performance analysis and a simulation tools.
Zdepski, Steve	Pracitcing NJ architect. Expert in the use of digital software in design education.
Zinder, Josh	Pracitcing NJ architect. Licensed in NJ, NY, PA and NV. LEED AP. 2010 NJ AIA Interior Architecture Merit Award.

Fall '12

Arch 155	Modes of Design Communication I
Arch 163	Intro to Design I
Arch 223	Construction I
Arch 251	History I
Arch 263	Studio I
Arch 327	Environmental Control Systems II
Arch 329	Structures II
Arch 363	Studio III
Arch 381	History III
Arch 423	Construction III
Arch 429	Structures III
Arch 463	Options I
Arch 500G	Computer Applications to Design
Arch 563	Comp I
Arch 564	Comp II
Arch 558	Prof Arch Practice
Arch 565	Comp Studio Lab
Arch 501G	Grad Design I
Arch 503G	Grad Design III
Arch 505/506G	Grad Design V/VI
Arch 528G	Grad History I
Arch541G	Bldg Sys I: Integr Bldg Tech
Arch 543G	Bldg Sys III: Intro Bldg Srv
Arch 579G	Prof Arch Practice
Arch 555G	Graduate Architectural Graphics
Arch 301	Digital Modeling & Fabrication
Arch 337	Building Information Modeling
Arch 419	Photography
Arch 434	Simulated Environments
Arch 483	Many Faces of Arch
Arch 583	Material Matters for Design
Arch 583	Glass and the Chinese Landscape
Arch 583	Fundamentals of Urban Design
Arch 583	Pop-Up Architecture - A Global Trend
Arch 583	Exploring Urban Gardening
Arch 583	Ungluing the Self
Arch 583	Building and Nature
Arch 583	Emergent Typologies
Arch 650	Economy of Building
Arch 662	Envisioning Newark
Arch 662	Project Japan - China Rising
Arch 662	BIM and ECS
Arch 662	Sust. Des. In Energy Efficient Bld
Arch 665	Intro to Sustainable Design
Arch 663	Infrastructure Studio
MIP 601	Geographic Information Systems
MIP 652	Land Use Planning
MIP 655	Evol. Of American Metropolis
USYS 702	Color & Comp
AD 150	History Art & Design I
AD 161	Human Factors/Ergonomics
AD 201	Collaborative Design Studio
AD 463	Advanced Architectural Rendering
AD 490	Basic Sound and Music
AD 490	Digital Entrepreneurship
AD 490	Character Modeling
DD 275	History of Games
DD 363	Digital Design Studio I
ID 203	Innovations Past Present & Future
ID 216	Modeling and Prototyping
ID 263	Studio I
ID 310	Ethnographic and Market Research
ID 340	Materials & Processes
ID 363	Studio III
ID 410	Professional Practice & Ethics
INT 221	Bldg & Interior Systems I
INT 263	Interior Design Studio I
INT 321	Methods & Materials
INT 363	Interior Design Studio III
INT 350	History of Furniture
Arch 251	History I

BARCH F'13 | MARCH F'13 | ACHITECTURE ELECTIVE F'13 | ART + DESIGN F'13

Spring '13

		BARCH S'13														MARCH S'13								ACHITECTURE ELECTIVE S'13																							ART + DESIGN S'13																											
		Modes of Deisgn Communication II	Intro to Design II	Environmental Control Systems I	Structures I	History II	Studio II	Construction II	Studio IV	History IV	Options II	Prog & Proj Dev	Prof Arch Practice	Pre-Comp/Comp	Comp Studio Lab	Grad Design II	Grad Design IV	Grad Design VI/VII	Grad History II	Construction II	Environmental Control Systems I	Structures II	Structures III	Environmental Ed	Image & Word I	Building Inf Modeling	Photography	B.Sci Project Based Seminar	Honors Seminar Glass in the Chineese Landscape	Prospecting for Urban Gems	Case Studies in Community and Urban Design	Environmental Education	Building for Hazard Prone Areas	B.I.M. and Structural Technologies	China Decathlon Seminar	Tectonic Performance	Honors Seminar	Elevational Strategies	Roadscape/Landscape	Japaneese Architecture	Indoor Evn Quality	Sustainable Bldg Resouces	Infrastructure Studio	Hist & Thry Infrastructure	Infr Plan in Pract	The Good City	Comm A+D Traditional Media	Comm A+D Digital Media	History Art & Design II	Human Factors/Ergonomics	Andvanced Digital Music	Extreme Fabication: Robotics for Architects and Designers	Life Cycle Assesment for Designers	Pharamaceutical Animation	Video and Animation	Acting Fund for Animators	Digital Design Studio	Web / Exhibit Development	Digital Design Studio VI	Modeling & Manufacturing	Ind Design Studio II	Design Specialization -	Mechanics & Electronics	Sust Material and Processes	Ind Design Studio IV	Ind Design Comp Studio	Building and Interior Systems II	Interior Design Studio II	Contract Documents	Furniture Design	Interior Design Studio IV	Interior Design Studio VI	Structures I	Imaginary Worlds
Faculty Member	Summary of expertise, recent research or experience	Arch 156	Arch 164	Arch 227	Arch 229	Arch 252	Arch 264	Arch 323	Arch 364	Arch 382	Arch 464	Arch 472	Arch 558	Arch 563/564	Arch 565	Arch 502G	Arch 504G	Arch 506/507G	Arch 529G	Arch542G	Arch 543G	Arch 546G	Arch 548G	Arch 312	Arch 332	Arch 337	Arch 419	Arch 483	Arch 483	Arch 583	Arch 583	Arch 312	Arch 583	Arch 583	Arch 583	Arch 583	Arch 583	Arch 662	Arch 662	Arch 662	Arch 664	Arch 666	MIP 602	MIP 631	MIP 673	URB 788	AD 111	AD 112	AD 162	AD 201	AD 490	AD 490	AD 490	AD 490	DD 284	DD 301	DD 364	DD 415	DD 464	ID 217	ID 264	ID 301	ID 312	ID 341	ID 364	ID 464	INT 222	INT 264	INT 322	INT 351	INT 364	INT 464	Arch 282	Arch 585
Ajemian, Silva	Practicing NYC Architect Focusing on residential design and Urban Place-making Co-director of First Street Green Recent research on the architect as a social catalyst								■																																																																	
Alcala, Jose	Practicing Industrial Designer - Teaches A+D courses																																																	■																■								
Altin, Ersin	PhD. Candidate. Expert in design and architecture in the non-western world. Writer / historian / practicing architect.						■																																										■																									
Atwood, Brooks	Practicing Industrial Designer - Teaches A+D courses																																																												■	■												
Bales, Erv	Senior Research Consultant to the U.S. Environmental Protection Agency, where he helped initiate the Energy Star Homes program.																			■																					■																																	
Barry, Tom	NY licensed architect and LEED accredited professional.		■																																																																						
Benanti, Vince	Expert in the use and teaching of Building Information Modeling Software.																								■																																																
Bess, Mark	Licensed architect in New York and New Jersey. Member of the Construction Specifications Institute with Contract Document Certification											■		■																																																					■					
Bobenhousen, Bill (deceased) / Kliwinski, Jason	Founder Sustainable Design Collaborative LLC in 2001. Chairman of NY chapter of USGBC 2003. / Practicing NJ/PA/NYC architect, Recognized expert in green building, Current work: LEED Platinum, LBC NYC Townhouse,AIA-NJ Architect of Year 2011, USGBC LEED Fellow 2012																																							■																																		
Booth, Chris	Accomplished 2-D and 3-D digital skills expert	■	■																																																																							
Branquinho, Tania	Practicing Interior designer. Teached A+D classes.																																																																		■						
Bristol, Susan	Practicing NJ Architect,Licensed NJ Planner,LEED AP,Coastal construction & design research,YWCA Tribute to Women Honoree, 2011, Leadership in Historic Preservation Award, 2005												■																																																												
Brothers, David	Practicing Interior Designer - Teaches A+D courses																																													■																			■			■				
Burgermaster, Matt	2012 ACSA Education Award recipient. Recent research on the use of concrete in resilient building design.									■																									■																																						
Cays, John	Licenced architect in NY and NJ. Current research on life cycle assessment in the design fields.																																																		■																					
Cooke, Frederick	Project designer for numerous NJ Architecture firms including his own practice						■																																																																		
Coover, Abby	Practicing NYC designer,experts in digital media. Co-founder and editor of suckerPUNCHdaily.com	■																																																																			INT 322				
Dallessio, Tom	Professional Planner and recently named Director of NJIT's Center for Resilient Design. Teaches in MIP program.																																										■																														
Dart, Jim	Practicing NYC Architect. Expert in disaster recovery. Featured in 2012 book that examines the roles and responsibilities of architects in disaster recovery.								■																																																																	
Decker, Martina	Recognized for pioneering research into applications for advanced materials with novel properties, particularly smart materials and nanomaterials.										■																																																														
Eade, Angus	Practicing NYC architect, . He is currently researching for his forthcoming book - Branching Logic: Technologies of the Collective and the Re-Contouring of Our Reality	■					■																																																																		
Esperdy, Gabrielle	PhD. Gabrielle Esperdy, architectural historian and critic, specializes in North American modernism and everyday landscapes, current research on territories of the automobile and architectural and urban discourse, editor of SAH Archipedia									■																													■																																			
Ferri, Emilia	Practicing architect in NY and CT. Specializes in design-build projects		■																																																																							
Figueroa, Julio	Practicing NJ architect. Recognized expert on school design and special-needs housing. Recent research on pre-fab residential construction.	■					■																																																																		
Fuentes, Gabe	Practicing NYC designer. Most recent research revoles around urbanism in the developing world.						■																																																																		
Garber, Richard	Practicing NYC and NJ architect. Current work deals with performance based sustainable design at the architectural and urban scales.										■																		■																																															
Goldman, Glenn	Expert in digital media and pedagogy in multiple design disciplines. Most recently served on the national committee as education liason for SIGGRAPH. Teached A+D courses.																																																																									■
Gosser, Matt	Practicing fine artist, curator and gallery director, 2012 artist in residence, Newark Museum, Chief planner of the Art Factory in Paterson, NJ		■																																												■																											
Grosman, Henry	Practicing NYC architect. Expert in using computational techniques to generate design.						■																																																																		
Harp, Cleve	Practicing NYC Architect. Expertise in Interior Architecture & Interior Design: AD 100 ARCHITECTS. NEW YORK SPACES, December 11, Residential Interior Architecture & Interior Design feature article												■																																																												
Harrington, Anthony	Practicing NYC designer. LEED AP								■																																																																
Klokis, Brent	Practicing NYC designer. Expert in in digital design, visualization and parametrics.																																															■																										
Kopec, Dan	Practicing architectect in NY and NJ. Professional work focusses on sustainability through building system optimization. Researching asynchronous course delivery		■	■																																																																						
Kripa, Ersela	Practicing architect in NY and NJ. 2011 Rome Prize. Work deals with design at the building to						■																																																																		
Kroeckel, Mark	Practicing NYC architect. Panelist on NY Magazine and Dwell fall 2012 discussion on Designing for Retail Spaces															■																																																										
Krumweidie, Kieth	Expert in residential development patterns. Most recent research centers on resilient design in coastal regions.																■																																																									
Laera, Lory	Practicing architect and interior designer in NY and internationally. Teaches A+D courses.																																																																							■			
Lau	Practicing interior designer in NY and NJ. Teaches A+D courses.																																																																							■		
LeCavalier, Jesse	D.Sci. Expert in logistics and urbanism. Published in several books and collections. Current research on the spacial consequences of Walmart's logistics operations.		■																																																																							
Lerner, Ran	Practicing NYC Industrial designer. Teaches A+D courses.																																																															■	■									
Lindemans, Josh	Practicing NJ designer. Accomplished in using Building information Modeling on all stages of design projects.		■																																																																						
Little, Fred	Expert in Meiji period Japanese culture, religion, politics and eastern philosophy. Uses this to introduce students to classical Japanese architecture.																																							■																																			
Mailloux, Andrew	Practicing NYC designer. Expert in in digital design, visualization and parametrics.																																															■																										
Majmudar, Kunal	Digital music and sound expert. Teaches A+D courses.																																																		■																							
Mehta, Nidhip	International design practice. Skilled digital design software iuser and teacher.	■	■																																																																							
Meisterlin, Leah	Experienced in the use of GIS methods and spatial analysis. Master's thesis on the Ethics of Information in NYC Planning.Recent research - Ornamental Connectivity: Form, Fabrication, and Data Environments										■																																																															
Moore, Sandy	Ed.D Harvard. Current interests in social space and community outreach programs to bring design into Newark Public Schools																													■	■	■																																										
Mostoller, Michael	Distinguished Professor. Practicing NJ architect. Work include single and multi-family residential, public housing, commercial and Institutional projects.																■	■																																																								
Narahara, Taro	D.Arch. Expert in physical computing and digital design. Teaches A+D courses.																																																			■					■																	

Navin, Tom	Practicing NYC architect and landscap architect. Expert in Landscape history and design.
Nowicki, Susan	PhD. Expert on post Civil War suburban development in New Jersey
Ogorzalek, Tom	Practicing NJ designer. Current work focusses on masonry systems.
Peckham, Matt	Practicing NYC architect. Expert in tectonics, detailing, construction and project management.
Prado, Jorge	Practicing NYC architect ,iicensed in NYS. Co-Director First Street Green, an arts organization focused on arts programming & urban place-making. Research: Architect as social catalyst
Prantis, Nana	Professional NY photographer.
Prince, Will	Practicing NYC architect. International clientele. Large hospitaliy to small interior projects.
Ronderous, Nick	Experienced Urban Planner, Recognized expert on real estate and economic development, Recent research on real estate development trends in NYC and Nationally, NAIOP research grant 2012
Ruegg, Gabe	Practicing Industrial Designer - Teaches A+D courses
Russo, Rhett	Expert in ceramic building components. Work and writing published in Second Nature, Meander: Variegating Architecture, Metropolis Magazine. Work chosen for the 2010 Beijing Biennale. Published research: ACADIA
Sakran, Will	Practicing Industrial Designer. Expert in mechanics and electronics. - Teaches A+D courses
Santos, Margaret	Current research in Portugese architecture. Currently practicing in NJ and NM.
Santos, Tony	Registered architect. International practice. Expert in largescale infrastructure and urban planning as well as architecture at the building
Schuman, Tony	Registered architect. Recognized advocate of architecture's social vocation. Named a Distinguished Professor by ACSA in 2010. Recognized as one of 30 "Top Professors" by
Shin, Jae	Practicing NJ designer and planner. Fabrication consultant on the first scale model of the entire
Siegel, joy	LIcensed architect in New York and New Jersey. LEED AP. Residential architecture and interiors.
Smith, Roger	Practicing NJ architect. Works on funded research projects in community design for local
Sollohub, Darius	Licenced architect in NY and NJ. Current research centers on how to best educate Millenial generationarchitecture students.
Sowle, Kathleen	Practicing NYC designer. Active with the non-profit group, Art for Change
Switala, Jen	Expert in teaching advanced techniques in Building Information Modeling. Coordinated all building documents for team NJ's 2011 Solar Decathlon entry in Washington DC.
Taher, Rima	PhD. Expert in structural and mechanical systems. Recognized expert in resilient structural design.
Theodore, Georgeen	Registered architect and urban designer. Co founder of an internationally recognized design proactice, Interboro. Exhibited at 2012 Venice Bienalle.
Varela, Andrew	Practicing NYC architect. Project detailer for Alice Tully Hall while at FXFowle. Accomplished
Vega, Paul	Practicingarchitect an interior designer in NY and NJ. Teaches A+D courses.
Wall, Don	D.Arch. Recognized expert in archtectural theory.
Wells, Louis	Theater Director. Teaches A+D courses
Wendell, Augustus	Expert in architectural visualization and creating narrative through imagery and motion based media.. Principal at an interdisciplinary digital design practice in Brooklyn, New York. Teaches A+D courses
Wood, Tim	Practicing NYC architect. Currently focussing on building architectural and urbanism history seminars.
Zaitseva, Polina	Practicing international artist. NY/NJ Animator for film and commercials. Creative Director and Animator for Felt Feelings and Dreams (2012) documentaries Teaches A+D courses.
Zarzycki, Andrzej	Expert in media-based environments and validation methodologies of generative design through building performance analysis and a simulation tools.
Zdepski, Steve	Pracitcing NJ architect. Expert in the use of digital software in design education.
Zinder, Josh	Pracitcing NJ architect. Licensed in NJ, NY, PA and NV. LEED AP. 2010 NJ AIA Interior Architecture Merit Award.

Spring '13

Modes of Design Communication II	Arch 156	BARCH S'13
Intro to Design II	Arch 164	
Environmental Control Systems I	Arch 227	
Structures I	Arch 229	
History II	Arch 252	
Studio II	Arch 264	
Construction II	Arch 323	
Studio IV	Arch 364	
History IV	Arch 382	
Options II	Arch 464	
Prog & Proj Dev	Arch 472	
Prof Arch Practice	Arch 558	
Pre-Comp/Comp	Arch 563/564	
Comp Studio Lab	Arch 565	
Grad Design II	Arch 502G	MARCH S'13
Grad Design IV	Arch 504G	
Grad Design VI/VII	Arch 506/507G	
Grad History II	Arch 529G	
Construction II	Arch542G	
Environmental Control Systems I	Arch 543G	
Structures II	Arch 546G	
Structures III	Arch 548G	
Environmental Ed	Arch 312	ACHITECTURE ELECTIVE S'13
Image & Word I	Arch 332	
Building Inf Modeling	Arch 337	
Photography	Arch 419	
B.Sci Project Based Seminar	Arch 483	
Honors Seminar Glass in the Chinese Landscape	Arch 483	
Prospecting for Urban Gems	Arch 583	
Case Studies in Community and Urban Design	Arch 583	
Environmental Education	Arch 312	
Building for Hazard Prone Areas	Arch 583	
B.I.M. and Structural Technologies	Arch 583	
China Decathlon Seminar	Arch 583	
Tectonic Performance	Arch 583	
Honors Seminar	Arch 583	
Elevational Strategies	Arch 662	
Roadscape/Landscape	Arch 662	
KATACHI- Japaneese Design on the Nine	Arch 662	
Indoor Evn Quality	Arch 664	
Sustainable Bldg Resouces	Arch 666	
Infrastructure Studio	MIP 602	
Hist & Thry Infrastructure	MIP 631	
Infr Plan in Pract	MIP 673	
The Good City	URB 788	
Comm A+D Traditional Media	AD 111	ART + DESIGN S'13
Comm A+D Digital Media	AD 112	
History Art & Design II	AD 162	
Human Factors/Ergonomics	AD 201	
Andvanced Digital Music	AD 490	
Extreme Fabication: Robotics for Architects and Designers	AD 490	
Life Cycle Assessment for Designers	AD 490	
Pharmaceutical Animation	AD 490	
Video and Animation	DD 284	
Acting Fund for Animators	DD 301	
Digital Design Studio	DD 364	
Web / Exhibit Development	DD 415	
Digital Design Studio VI	DD 464	
Modeling & Manufacturing	ID 217	
Ind Design Studio II	ID 264	
Design Specialization -	ID 301	
Mechanics & Electronics	ID 312	
Sust Material and Processes	ID 341	
Ind Design Studio IV	ID 364	
Ind Design Comp Studio	ID 464	
Building and Interior Systems II	INT 222	
Interior Design Studio II	INT 264	
Contract Documents	INT 322	
Furniture Design	INT 351	
Interior Design Studio IV	INT 364	
Interior Design Studio VI	INT 464	
Structures I	Arch 282	
Imaginary Worlds	Arch 585	

IV 4 – VISITING TEAM REPORT (VTR)

National Architectural Accrediting Board, Inc.

July 22, 2008

Dr. Robert A. Altenkirch, President
Office of the President
New Jersey Institute of Technology
University Heights
Newark, NJ 07102

Dear President Altenkirch:

At the July 2008 meeting of the National Architectural Accrediting Board (NAAB), the board reviewed the *Visiting Team Report* for the New Jersey Institute of Architecture School of Architecture.

As a result, the professional architecture programs:

Bachelor of Architecture
Master of Architecture

were formally granted six-year terms of accreditation. The accreditation terms are effective January 1, 2008. The programs are scheduled for their next accreditation visit in 2014.

1735 New York Avenue, NW
Washington, DC 20006
www.naab.org
tel 202.783.2007
fax 202.783.2822
email info@naab.org

Accreditation is subject to the submission of *Annual Reports*. *Annual Reports* are due by November 30 and **must** include the following:

- a response to each condition identified as not met in the *Visiting Team Report*,
- a response to each of the causes of concern in the *Visiting Team Report*,
- a brief summary of changes that have been made or may be made in the accredited program, and
- the statistical report

Please note, beginning in November 2008, these reports will be submitted online.

If an acceptable *Annual Report* is not submitted to the NAAB by January 15, 2009, the NAAB may consider advancing the schedule for the program's next accreditation sequence. A complete description of the *Annual Report* process can be found on pages 14–15 of the *NAAB Procedures for Accreditation, 2008 Edition*.

NAAB encourages public dissemination of information about each school contained in both the school's 2008 *Architecture Program Report* and the 2008 *Visiting Team Report*. If the *Visiting Team Report* is made public, then it is to be published in its entirety.

The visiting team has asked me to express its appreciation for your gracious hospitality.

Very truly yours,

Bruce E. Blackmer, FAIA
President

Enc. Visiting Team Report

cc: Urs P. Gauchat, Dean
Marilys R. Nepomechie, AIA, Team Chair
Visiting Team Members

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New Jersey Institute of Technology
School of Architecture

Visiting Team Report

Bachelor of Architecture (164 undergraduate credit hours)

Master of Architecture (45 undergraduate credit hours plus up to 97graduate credit hours)

The National Architectural Accrediting Board
27 February 2008

The National Architectural Accrediting Board (NAAB), established in 1940, is the sole agency authorized to accredit U.S. professional degree programs in architecture. Because most state registration boards in the United States require any applicant for licensure to have graduated from an NAAB-accredited program, obtaining such a degree is an essential aspect of preparing for the professional practice of architecture.

Table of Contents

I. Summary of Team Findings

1. Team Comments

The NAAB Visiting Team thanks the New Jersey School of Architecture for a gracious reception, for solicitous attention, and for the very thorough preparation for our visit that facilitated our efforts at NJIT.

In the course of our visit we have seen much to respect and much to admire:

- New Jersey School of Architecture students are articulate, engaged, enthusiastic and gifted. Their accomplishments on a wide range of fronts have impressed us all.
- Their professors --full and part-time, permanent and adjunct-- comprise a generous, dedicated, and passionate faculty component whose work with students is widely admired and deeply appreciated.
- The architecture programs benefit tremendously from a collegial group of staff and support personnel whose dedication to the school is paramount, and whose energies and efforts are broadly valued.
- The school, under the leadership of Dean Gauchat, has achieved an enormous amount with limited resources. Among those accomplishments is the recent development of Kepler. The innovative digital system for archiving, organizing, and presenting both program information and student work holds extraordinary and wide-ranging promise
- Finally, President Altenkirch and Provost Nelson value the New Jersey School of Architecture as a key constituent of the NJIT mission, understanding its potential as a model for institutional development that is at once visionary and entrepreneurial.

2. Progress Since the Previous Site Visit (2002)

Condition 3, Public Information: *The program must provide clear, complete and accurate information to the public by including in its catalog and promotional literature the exact language found in Appendix A-2 [of the NAAB* 1998 Conditions and Procedures*], which explains the parameters of an accredited professional degree program.*

Previous Team Report (2002 - Not Met): *The informational language required by NAAB properly appears in the graduate program catalog but not in the general catalog. Measures have been taken to correct the online version of the catalog but the printed version will be correct only upon reprinting at 2-year intervals.*

> **2008 Visiting Team Assessment:** Current program information accurately reflects the NAAB informational language.

Criterion 12.14, Accessibility Ability to *design both site and building to accommodate individuals with varying physical abilities*

Previous Team Report (2002 - Not Met): *Although there is some evidence in the upper studios of acknowledgment of this criterion, many projects did not exhibit awareness, understanding, or ability to deal with issues of accessibility. At the option studio level and particularly within the Comprehensive Studio this ability was not consistently demonstrated in either the graduate or undergraduate programs.*

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2008 Visiting Team Assessment: This Criterion remains Not Met by the B. Arch. and M. Arch. programs. See Criterion 13.14 below

Criterion 12.22, Building Systems Integration (Not Met): Ability to *assess, select, and integrate structural systems, environmental systems, life-safety systems, building envelope systems, and building service systems into building design*

Previous Team Report (2002 – Not Met): *While students do receive a very strong understanding of structural, environmental, life-safety, building service and envelope systems, the ability to thoughtfully select and integrate these systems into their design work and to have these systems inform that work was not observed on a consistent basis in either program. It should be noted that the Comprehensive Studio, implemented in response to the 1997 VTR, is making progress in this regard. (See also comments under Criterion 12.29, Comprehensive Design.)*

2008 Visiting Team Assessment: This Criterion is now met by the B. Arch. and M. Arch. programs. See Criterion 13.23 below

Criterion 12.29, Comprehensive Design: Ability to *produce an architecture project informed by a comprehensive program, from schematic design through the detailed development of programmatic spaces, structural and environmental systems, life-safety provisions, wall sections, and building assemblies, as may be appropriate; and to assess the completed project with respect to the program's design criteria*

Previous Team Report (2002 – Not Met): *The core curricula provide a thorough grounding in critical thinking and basic design skills and an understanding of ordering, structural, environmental control, and envelope systems. While the team did observe evidence of the ability to integrate the various systems into a design, it was not consistent nor did it always manifest itself at those times indicated in the criteria-curriculum matrix. Furthermore, the ability to preliminarily detail components and assemblies, thereby recognizing their impact on the design, was not consistently demonstrated.*

The SOA has responded to the need for improvement in this area through the development and implementation of a series of Comprehensive Studios and advanced design options, an appropriate representation of which is required of all students in both undergraduate and graduate programs. These course offerings have been a part of the program for the past 3 years. However in general, because of the "option" nature of some of these studio offerings, it is not always clear that a student is exposed to all of the issues of the stated NAAB goals. It should be noted that the team did find that many students opt for more than one comprehensive studio (regular or option) and in so doing gain a greater proficiency than either NAAB or NJIT SOA has set as minimal levels of achievement.

Finally, attaining this comprehensive design ability is often encumbered by the advanced computer graphic skills possessed by the average student at NJIT SOA. All too often seductively compelling CAD presentations are missing the integrated technical program and building systems detail necessary to qualify as thoughtful architectural solutions. The introduction of the Comprehensive Studio (also mentioned in comments for Criteria 12.14, Accessibility, and 12.22, Building Systems Integration) must embody in its objectives both the proper inclusion of building systems requirements and the suitable application of CAD technologies in solution presentations.

2008 Visiting Team Assessment: This criterion is now Well-Met in the B. Arch. and M. Arch. programs. See Criterion 13.28 below

[Causes of Concern taken from VTR dated February 27, 2002]
In addition to the team's comments in 1, Summary of Team Findings, and in 4, Conditions Not Met (each included individually within the evaluation of the conditions and performance criteria), the team expresses the following concerns with particular emphasis on issues related to the conditions and criteria evaluated as "met" but having related observations or reservations.

Condition 4, Social Equity (Met)
Although NJIT is considered a diverse campus and SOA exhibits an even higher level of diversity than the total enrollment at NJIT, the numbers are still relatively low for both ethnicity- and gender-based data considering the urban setting of the institution. These proportions have remained relatively unchanged over the past 5 years and exist equally for both students and faculty. It is likely that a concentrated effort to improve the diversity of the faculty would in turn serve to attract a more diverse student body. Administration is conscious of this inconsistency and strives to improve.

> ***2008 Visiting Team Assessment:*** *See 'Social Equity', Condition 4 below*

Condition 6, Human Resources Development (Met)
NJIT at large and the SOA have embarked on a goal to improve rates of retention and graduation. The team did not find evidence that a parallel plan exists to fund an increase in the number of tutors and teaching assistants. Without such support, if retention and graduation rates are in fact improved, they likely will have been achieved via an erosion of educational standards or an undue burden placed on existing faculty, neither of which seems acceptable.

> ***2008 Visiting Team Assessment:*** *See 'Human Resource Development', Condition 7 below*

Condition 7, Physical Resources (Met)
Since 1998 the SOA has occupied a new structure solely dedicated to housing the Architecture program. While it does this in exemplary fashion, there remain several unresolved building conditions. The new facility has fallen short in final "commissioning" in that HVAC balancing and solar control are less than satisfactory, and NJIT seems not to recognize that an architectural program typically requires a 24-hour-a-day, 7-day-a-week occupancy plan and commensurate HVAC support. The SOA continues to utilize the Campbell Hall gallery and Colton Annex and both of these older facilities are markedly substandard with regard to HVAC, electrical, and IT systems installations.

> ***2008 Visiting Team Assessment:*** *See 'Physical Resources' Condition 8 below*

Condition 8, Information Resources (Met)
The library facilities centrally located in the new structure meet all requirements. However, the need exists for funding better curatorial management of the visual collection to more fully realize the educational potential of this library asset by both students and faculty.

> ***2008 Visiting Team Assessment:*** *Information Resources are no longer a cause for concern.*

Criterion 12.2, Graphic Skills (Met)
The SOA computer graphics program is unsurpassed in the nation. However, that status raises two concerns: 1) traditional hand sketching capabilities run the risk of going undeveloped which, aside from not cultivating the technique, may also have an impact in not nurturing all avenues to think in three dimensions and 2) seductively compelling CAD graphics presentations may be found as substituting for thoughtfully and comprehensively resolved architecture.

> ***2008 Visiting Team Assessment:*** *See 'Graphic Skills', Criterion 13.3 below*

Criterion 12.5, Fundamental Design Skills (Met)
In the evaluation of student work, the team considered examples exhibited throughout the school. However, the team felt that the exhibits as presented in the immediate team evidence area did not demonstrate this ability as convincingly as evidence did in the design studios and their related corridor exhibits.

2008 Visiting Team Assessment: *Fundamental Design Skills are no longer a cause for concern.*

Criterion 12.15, Site Conditions (Met)
Although isolated projects demonstrated this *ability*, there did not seem to be comprehensive evidence throughout the program that this issue was sufficiently emphasized for all projects.

2008 Visiting Team Assessment: *See 'Site Conditions', Criterion 13.17 below*

3. **Conditions Well Met**
   - 1.4 Architectural Education and the Profession
   - 13.02 Critical Thinking Skills (M. Arch. program)
   - 13.11 Use of Precedents
   - 13.15 Sustainable Design
   - 13.19 Environmental Systems
   - 13.21 Building Envelope Systems
   - 13.24 Building Materials and Assemblies
   - 13.28 Comprehensive Design

4. **Conditions Not Met**
   - 13.09 Non-Western Traditions (M. Arch. program)
   - 13.14 Accessibility
   - 13.20 Life Safety
   - 13.31 Professional Development

5. **Causes of Concern**
   The Causes for Concern identified by this Visiting Team center principally on issues of financial support and on aspects of intramural communication. Among these:

   - The current proposal to expand the New Jersey School of Architecture through the creation of a multi-disciplinary College of Design will undoubtedly increase the unit's contribution to NJIT –if properly planned, fully communicated and financially supported– even as the school maintains and continues to improve the quality and aspirations of its successful existing programs in architecture.

   - As new programs develop, the school of architecture at NJIT has the potential to sustain and expand its current academic and research connections. Careful and inclusive planning, development, and communication with all stakeholders, are each critical to ensuring that all opportunities are maximized.

   - Due to a large adjunct faculty component which delivers over fifty percent of its academic credit hours, the school of architecture faces several unique conditions. Among them: Institutional support for this excellent, dedicated constituent of the faculty ranks is limited, and the compensation and benefit structure for these positions is of significant concern. At this point in time, the adjunct academic faculty system functions well in the classroom due to the energy and commitment of the individuals who hold those positions. However, there is a critical need to explore and resolve the allocation of resources for this major sector of the school and program faculty.

- The overall financial resources of the school of architecture are strained but largely adequate to provide its current levels of service. However, there are significant areas, such as information technology, digital fabrication shops, and printing services for which additional funding is currently necessary in order to support the school's digitally driven curriculum. The situation is projected to become even more critical as the State of New Jersey and its system of public education currently face major budget reductions.

- The stated aspirations of the school and of the central administration at NJIT are to expand the New Jersey School of Architecture into a College of Design that will include programs in industrial design, digital design, fine arts and interior design. In the face of a potential economic downturn, the financial resources that will support this growth must be very carefully considered –particularly in order to continue to support the existing programs of the school at the level required to achieve the stated goals of academic leadership in professional architecture education.

II. Compliance with the Conditions for Accreditation

1. Program Response to the NAAB Perspectives

Schools must respond to the interests of the collateral organizations that make up the NAAB as set forth by this edition of the NAAB Conditions for Accreditation. *Each school is expected to address these interests consistent with its scholastic identity and mission.*

1.1 Architecture Education and the Academic Context

The accredited degree program must demonstrate that it benefits from and contributes to its institution. In the APR, the accredited degree program may explain its academic and professional standards for faculty and students; its interaction with other programs in the institution; the contribution of the students, faculty, and administrators to the governance and the intellectual and social lives of the institution; and the contribution of the institution to the accredited degree program in terms of intellectual resources and personnel.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The Team recognizes the invaluable historical role that the New Jersey School of Architecture has played in the development of NJIT. It was one of the earliest academic programs of the institution, and the strength of its early contribution remains evident today. The current proposal to expand the School of Architecture through the creation of a multi disciplinary College of Design will enhance its contribution to NJIT --if properly planned in conjunction with all stakeholders, as well as communicated and fully supported by the university community. This must be accomplished while sustaining and continuing to improve the quality and aspirations of the existing programs at the NJSOA.

As new college of design programs develop, the New Jersey School of Architecture has the potential to sustain and expand its current academic and research connections --to other academic units within NJIT, and to adjacent institutions. Careful planning, development, and communications are critical to ensure that all opportunities are maximized. All existing infrastructure and such support units as information technology must be sustained at a level commensurate with the digital demands of new and existing directions in the curriculum --and to clearly enable the new college of design to establish a leadership role in design education, while enhancing its professional programs in architecture.

1.2 Architecture Education and Students

The accredited degree program must demonstrate that it provides support and encouragement for students to assume leadership roles in school and later in the profession and that it provides an environment that embraces cultural differences. Given the program's mission, the APR may explain how students participate in setting their individual and collective learning agendas; how they are encouraged to cooperate with, assist, share decision making with, and respect students who may be different from themselves; their access to the information needed to shape their future; their exposure to the national and international context of practice and the work of the allied design disciplines; and how students' diversity, distinctiveness, self-worth, and dignity are nurtured.

Met Not Met

B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The students in both programs are thoughtful, engaged, and enthusiastic participants in their own education. The administration is accessible, responsive to student issues, and supportive of student initiatives. The large number of adjunct instructors provides a vital link between the classroom and the profession; students reported that relationships formed in the classroom often lead to internship opportunities. The recently revitalized NOMAS chapter promises to further increase awareness and appreciation of cultural diversity and difference within the school community.

1.3 Architecture Education and Registration

The accredited degree program must demonstrate that it provides students with a sound preparation for the transition to internship and licensure. The school may choose to explain in the APR the accredited degree program's relationship with the state registration boards, the exposure of students to internship requirements including knowledge of the national Intern Development Program (IDP) and continuing education beyond graduation, the students' understanding of their responsibility for professional conduct, and the proportion of graduates who have sought and achieved licensure since the previous visit.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The Team notes that both programs employ a wide range of resources to prepare students for the transition to internship and licensure, including a high proportion of faculty who are registered architects currently engaged in practice. Both programs specifically address internship and licensure in ARCH 558 Professional Practice, and a high proportion of students who attended meetings during the visit indicated an interest in pursuing careers as architects and seeking registration.

The Team also notes that students did not demonstrate a consistent level of awareness of the IDP and licensure processes (See Criterion 13.31 below). The Team found limited information respecting the involvement of the IDP coordinator with the educational process. The relationship of the professional programs with the state registration board was similarly unclear.

1.4 Architecture Education and the Profession

The accredited degree program must demonstrate how it prepares students to practice and assume new roles and responsibilities in a context of increasing cultural diversity, changing client and regulatory demands, and an expanding knowledge base. Given the program's particular mission, the APR may include an explanation of how the accredited degree program is engaged with the professional community in the life of the school; how students gain an awareness of the need to advance their knowledge of architecture through a lifetime of practice and research; how they develop an appreciation of the diverse and collaborative roles assumed by architects in practice; how they develop an understanding of and respect for the roles and responsibilities of the associated disciplines; how they learn to reconcile the conflicts between architects' obligations to their clients and the public and the demands of the creative enterprise; and how students acquire the ethics for upholding the integrity of the profession.

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The Team notes that the New Jersey School of Architecture excels at preparing its students for the realities of the profession, and for the increasing social and cultural responsibilities that professionals have in the communities they serve. Particularly noteworthy is the regular and frequent incorporation of real clients and communities in the studio projects of both programs. Through these intense immersions, students are exposed to and demonstrate a sophisticated understanding of the complexities of changing client and regulatory demands on the profession of architecture.

1.5 Architecture Education and Society

The program must demonstrate that it equips students with an informed understanding of social and environmental problems and develops their capacity to address these problems with sound architecture and urban design decisions. In the APR, the accredited degree program may cover such issues as how students gain an understanding of architecture as a social art, including the complex processes carried out by the multiple stakeholders who shape built environments; the emphasis given to generating the knowledge that can mitigate social and environmental problems; how students gain an understanding of the ethical implications of decisions involving the built environment; and how a climate of civic engagement is nurtured, including a commitment to professional and public services.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

Students in both programs showed a strong commitment to working in a variety of communities. These ranged from the NJIT campus, to Jersey City Public Schools, to devastated neighborhoods in post-Katrina New Orleans. In most studios, sensitive, ethical analyses of societal and environmental issues were synthesized by students into bold, lively architectural and urban proposals. These concerns were not eclipsed in the more technical studios of the upper levels. There, too, the engagement of many stakeholders was evident, ranging from nursery school children to Newark Mayor Cory Booker. In both programs, faculty selected projects, clients, and sites that created an excellent framework for exploring social issues.

2. Program Self-Assessment Procedures

The accredited degree program must show how it is making progress in achieving the NAAB Perspectives and how it assesses the extent to which it is fulfilling its mission. The assessment procedures must include solicitation of the faculty's, students', and graduates' views on the program's curriculum and learning. Individual course evaluations are not sufficient to provide insight into the program's focus and pedagogy.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The New Jersey School of Architecture nurtures productive and significant communication with its alumni base, which it surveys regularly to gauge the efficacy of its instruction. School alumni

mentor and frequently employ both students and graduates. They participate in studio reviews, and sometimes return to form part of the school's adjunct faculty. Additionally, the school has recently invested substantial human and financial resources in the development of Kepler --an innovative digital system for archiving, organizing, analyzing and presenting both student work and program information. Kepler appears to hold extraordinary promise as an instrument for internal and external assessment of student and program outcomes at NJIT.

The self-study document presented by the New Jersey School of Architecture includes a clearly articulated strategic plan to guide the development of the school and to shape the course of its evolution (Vol. I, pp 22-26). Notwithstanding, the extent of substantive faculty and student involvement in the development of that plan remains unclear: While faculty and students appeared supportive of the principal elements of the plan --including the expansion of the School of Architecture to a multi-disciplinary College of Design— there was clear unease on the part of both groups with the processes and implications of its implementation. The robust engagement and full participation of these key program stakeholders in the development of any plan for the future of the School will make its realization possible.

3. Public Information

To ensure an understanding of the accredited professional degree by the public, all schools offering an accredited degree program or any candidacy program must include in their catalogs and promotional media the exact language found in the NAAB Conditions for Accreditation, *Appendix A. To ensure an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must inform faculty and incoming students of how to access the* NAAB Conditions for Accreditation.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

4. Social Equity

The accredited degree program must provide faculty, students, and staff—irrespective of race, ethnicity, creed, national origin, gender, age, physical ability, or sexual orientation—with an educational environment in which each person is equitably able to learn, teach, and work. The school must have a clear policy on diversity that is communicated to current and prospective faculty, students, and staff and that is reflected in the distribution of the program's human, physical, and financial resources. Faculty, staff, and students must also have equitable opportunities to participate in program governance.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The atmosphere among students, faculty and staff is one of mutual respect and collaboration. There is evidence of diversity among students and staff that is supported by university policies and school of architecture initiatives. A newly revitalized chapter of the National Organization of Minority Architecture Students (NOMAS) currently supports an ongoing conversation about cultural diversity among students. Students report that the school administration and staff are highly responsive to their concerns. Students are apprised of impending school and program changes through regular 'pizza with the dean' meetings each term, but do not typically form part of school or program faculty meetings or committees. Diversity in the composition of the student body has improved since the previous visit. While the programs have made strides to rectify any

deficiencies, ethnic, racial, and, to a lesser extent, gender diversity in the permanent faculty has remained elusive.

Over sixty percent of the faculty component listed by the school in its 2007 self-study is comprised of lecturers and adjunct instructors, who were granted full voting rights specifically on "issues related to the reconsideration of the existing curriculum" at a 1995 faculty meeting (NJSOA Faculty Meeting Minutes, September 13, 1995, p. 3). Currently this faculty complement is understood to be empowered to vote on all but the tenure and promotion matters of the school. Section 3.4.3 of the self-study highlights an "intricate web of consensus-making practices" which constitutes the principal basis of faculty, student and staff access to school governance (Vol. I, p. 67). Currently, these institutional practices appear to work for the programs. As the School of Architecture expands to become the College of Design, and as the faculty composition of the new academic unit changes, its governance processes may require re-assessment.

5. Studio Culture

The school is expected to demonstrate a positive and respectful learning environment through the encouragement of the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff. The school should encourage students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The New Jersey School of Architecture developed and adopted a written studio culture policy in spring 2007. The document is distributed to students at the outset of each design studio course. Students are widely aware of this document and expressed interest in further opportunities to discuss the ideas it addresses as part of an ongoing dialogue on studio culture, time management, and professionalism. The Team encourages the school to foster broad ongoing discussion and revision of the studio culture policy within the entire school of architecture community.

6. Human Resources

The accredited degree program must demonstrate that it provides adequate human resources for a professional degree program in architecture, including a sufficient faculty complement, an administrative head with enough time for effective administration, and adequate administrative, technical, and faculty support staff. Student enrollment in and scheduling of design studios must ensure adequate time for an effective tutorial exchange between the teacher and the student. The total teaching load should allow faculty members adequate time to pursue research, scholarship, and practice to enhance their professional development.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The New Jersey School of Architecture has sufficient administrative oversight. Academic instruction is delivered by a faculty complement adequate in number to provide satisfactory instruction for its student population. Students find their professors readily accessible and express high satisfaction with the quality of their instruction. A significant proportion of the school faculty is comprised of adjunct instructors whose compensation and benefit structure demands substantial institutional attention (See Condition 7 below). Currently, the total teaching and

service load of tenured and tenure earning faculty appears to allow for research, scholarship and/or practice. Two tenure track faculty members are currently completing successful 3rd year review processes.

The stated institutional vision of NJIT is 'preeminence ...in technological research, innovation, entrepreneurship and engagement' (Vol. I P. 9). A Distribution of Effort chart in the 2007 self-study enumerates 71 teaching and research faculty (Vol. I, pp 75-76). Research assignments are listed for 12 of those individuals. The Team notes that the total number of permanent faculty recorded by the school in its Annual Report to NAAB has remained relatively constant since the previous visit, despite an increase in student population from 477 architecture studio students to 744 architecture studio students (Vol. II, pp. 297-307 NJSOA Annual Reports 2002 - 2006). An increase in the number of adjunct teaching faculty appears to have made that growth possible. Two issues emerge: At this time the adjunct academic faculty system functions well due to the exceptional energy and commitment of the individuals who hold these posts –and to the current ability of the permanent faculty to contribute effectively to the research mission of the university. As the New Jersey School of Architecture expands its offerings to become a multi-disciplinary College of Design, its capacity continue to enhance that mission may be increasingly constrained by the number of faculty members whose designated assignments include a significant research component.

School support and advising staff serve a population of over 700 students. The group is uniformly enthusiastic and appears highly committed to the architecture programs. In the area of information technology, staff is operating at or beyond capacity: A three-person team manages IT systems for a school community numbering approximately 800, and in one instance, also provides instruction for students. The position of a critical fourth member of that team was recently eliminated, leaving the group sorely shorthanded. As the school prepares for its stated future expansion to a College of Design in the shadow of impending financial cutbacks, it is imperative that current levels of support for existing programs be not only maintained but enhanced.

7. Human Resource Development

Schools must have a clear policy outlining both individual and collective opportunities for faculty and student growth inside and outside the program.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The policies and procedures of the School of Architecture follow those of the larger university with regard to the institutions' hiring, review, promotion and tenure processes. Members of the tenured and tenure earning faculty appear to be compensated in a manner commensurate with their academic expertise and experience.

As noted elsewhere in this report, the school includes a substantial proportion of adjunct faculty members, who currently deliver over fifty percent of the academic credit hours of the school. This group makes up over sixty percent of the total faculty complement listed in the 2007 APR, and includes several of the academic program coordinators. Support for this exceptionally dedicated faculty group is limited and the compensation and benefit structure for their positions is of significant concern. The need to allocate additional resources for this major sector of the school and program faculty is a priority.

Mechanisms for the continued development of tenured and tenure-earning faculty and for members of the staff are in place. These include financial support for scholarly investigation, travel stipends to present scholarly findings, as well as support for the continued education, technical training and advancement of staff. Such assistance can also be extended to members of the adjunct faculty. Release time for permanent faculty is provided through merit based proposals for paid and unpaid leave, as well as for service and administrative positions.

Involvement in student organizations is encouraged by the school administration and appears robust, although students report that financial support for the activities and initiatives of these organizations is limited.

8. Physical Resources

The accredited degree program must provide the physical resources appropriate for a professional degree program in architecture, including design studio space for the exclusive use of each student in a studio class; lecture and seminar space to accommodate both didactic and interactive learning; office space for the exclusive use of each full-time faculty member; and related instructional support space. The facilities must also be in compliance with the Americans with Disabilities Act (ADA) and applicable building codes.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

With the exceptions noted below, the physical facilities at Weston and Campbell Halls are attractive, serviceable, and largely sufficient to serve the existing programs. The digital fabrication lab, print shop, and wood shop facilities all require additional space, equipment, and hours of operation/access. Space for a student lounge has been allocated and awaits completion. The Team notes that the current physical plant will require substantial extension as the New Jersey School of Architecture expands to become the College of Design.

The majority of spaces appeared compliant with ADA and building codes. The Team notes these apparent exceptions: One (1) of the school's 52 studio spaces does not appear accessible; some machines in the woodshop do not appear accessible; and the shop may benefit from verification of full compliance with OSHA requirements. Some exterior doors require card access for after-hours egress. When the fire alarm sounds, doors automatically unlock. Absent the alarm, emergency egress without the use of access cards is impossible, posing a potential hazard. Finally, as noted by the previous visiting team, the mechanical system balance appears inconsistent, including a need for attention to dust from the HVAC system and heat gain on the southeast face of the building.

9. Information Resources

Readily accessible library and visual resource collections are essential for architectural study, teaching, and research. Library collections must include at least 5,000 different cataloged titles, with an appropriate mix of Library of Congress NA, Dewey 720–29, and other related call numbers to serve the needs of individual programs. There must be adequate visual resources as well. Access to other architectural collections may supplement, but not substitute for, adequate resources at the home institution. In addition to developing and managing collections, architectural librarians and visual resources professionals should provide information services that promote the research skills and critical thinking necessary for professional practice and lifelong learning.

Met	Not Met

B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The Team applauds the work of the staff of the Littman Architecture Library and the faculty of the school for ensuring that library research forms an essential element of the student experience. The outstanding efforts of the library staff were recognized by both students and faculty during the visit. While resources for the library appear adequate to support academic inquiry in both programs, both the school administration and program students cite a need for additional resources to supplement the print media collection of the Littman Library.

10. Financial Resources

An accredited degree program must have access to sufficient institutional support and financial resources to meet its needs and be comparable in scope to those available to meet the needs of other professional programs within the institution.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The overall financial resources of the New Jersey School of Architecture are strained but adequate to provide the current levels of service. However, there are significant areas that currently require additional support. Shortfalls in adjunct faculty compensation have been noted elsewhere in this report and highlighted in the Causes for Concern. Shortfalls in information technology –including IT staff and digital fabrication and printing facilities– constrain the school's existing capacity to support its digitally driven curriculum. The situation is projected to become even more critical as the State of New Jersey and its system of public education face major budget reductions.

The stated aspirations of the school and of the central administration at NJIT are to expand the New Jersey School of Architecture into a College of Design that will include programs in industrial design, digital design, fine arts and interior design. The financial resources that will support these initiatives must be very carefully considered –particularly in order to continue to support the existing programs of the school at the level required to achieve and sustain the stated objectives of academic leadership in professional architecture education.

11. Administrative Structure

The accredited degree program must be, or be part of, an institution accredited by one of the following regional institutional accrediting agencies for higher education: the Southern Association of Colleges and Schools (SACS); the Middle States Association of Colleges and Schools (MSACS); the New England Association of Schools and Colleges (NEASC); the North Central Association of Colleges and Schools (NCACS); the Northwest Commission on Colleges and Universities (NWCCU); and the Western Association of Schools and Colleges (WASC). The accredited degree program must have a measure of autonomy that is both comparable to that afforded other professional degree programs in the institution and sufficient to ensure conformance with the conditions for accreditation.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

12. Professional Degrees and Curriculum

The NAAB accredits the following professional degree programs: the Bachelor of Architecture (B. Arch.), the Master of Architecture (M. Arch.), and the Doctor of Architecture (D. Arch.). The curricular requirements for awarding these degrees must include professional studies, general studies, and electives. Schools offering the degrees B. Arch., M. Arch., and/or D. Arch. are strongly encouraged to use these degree titles exclusively with NAAB-accredited professional degree programs.

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13. Student Performance Criteria

The accredited degree program must ensure that each graduate possesses the knowledge and skills defined by the criteria set out below. The knowledge and skills are the minimum for meeting the demands of an internship leading to registration for practice.

13.1 Speaking and Writing Skills

Ability to *read, write, listen, and speak effectively*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.2 Critical Thinking Skills

Ability to *raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions, and test them against relevant criteria and standards*

	Met	Not Met
B. Arch.	[x]	[ ]
	Well Met	
M. Arch.	[x]	[ ]

The Team notes that in addition to the introductory graduate studios and their embedded seminars, students in the M. Arch. program demonstrated a keen ability to articulate research questions clearly and to develop well-reasoned conclusions in essays written for the graduate history of architecture courses ARCH 528G and 529G.

13.3 Graphic Skills

Ability to *use appropriate representational media, including freehand drawing and computer technology, to convey essential formal elements at each stage of the programming and design process*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

As noted by the previous visiting team, the ability of students to use technology as representational media at NJIT is remarkable. It is impressive to see the programs of the school evolve with the profession --and even propose to lead the profession in this area. However, a concern expressed by the previous team respecting the ability of students to develop the freehand techniques required by this criterion remains. Absent a shift in the programs' stated philosophy that firms of any size or substance exclusively employ digital representational technology for all aspects of their work, this Team believes that students' already limited ability for freehand drawing may continue to deteriorate.

13.4 Research Skills

Ability to *gather, assess, record, and apply relevant information in architectural coursework*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.5 Formal Ordering Skills

Understanding of *the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.6 Fundamental Skills

Ability to *use basic architectural principles in the design of buildings, interior spaces, and sites*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.7 Collaborative Skills

Ability to *recognize the varied talent found in interdisciplinary design project teams in professional practice and work in collaboration with other students as members of a design team*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

Group research assignments and site assessment projects serve as the basis for collaborative engagement throughout the curriculum of each program. Additionally, in the B. Arch. program, the annual masonry competition provides students with a rich opportunity to design and execute challenging full-scale designs on campus, working with skilled masons during the construction phase. This is an excellent example of multi-

layered collaboration that is clearly valued by all students. The M. Arch. program would benefit from an opportunity to engage in an analogous experience.

13.8 Western Traditions

Understanding of *the Western architectural canons and traditions in architecture, landscape and urban design, as well as the climatic, technological, socioeconomic, and other cultural factors that have shaped and sustained them*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.9 Non-Western Traditions

Understanding of *parallel and divergent canons and traditions of architecture and urban design in the non-Western world*

	Met	Not Met
B. Arch.	[x]	[ ]
	Met	Not Met
M. Arch.	[ ]	[x]

This criterion is met in the B. Arch. program. In the M. Arch. program, the Team found evidence that some non-western material was presented in the required History of Architecture courses (ARCH 528G and ARCH 529G), but did not find consistent evidence of understanding in the student work. The Team noted a limited number of examples of non-western precedents referenced in the studio work of either program.

13.10 National and Regional Traditions

Understanding of *national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.11 Use of Precedents

Ability to *incorporate relevant precedents into architecture and urban design projects*

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

Case studies --ranging from city plans to historic buildings to contemporary projects-- inform student design work throughout the curricula of both programs. These investigations, documented through drawings, photographs, diagrams and verbal descriptions, demonstrate a commitment to learning from excellent examples. Well integrated to the design process, the resulting studio projects reflect a holistic, often sophisticated understanding of architectural issues.

13.12 Human Behavior

Understanding of *the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.13 Human Diversity

Understanding of *the diverse needs, values, behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.14 Accessibility

Ability to *design both site and building to accommodate individuals with varying physical abilities*

	Met	Not Met
B. Arch.	[ ]	[x]
M. Arch.	[ ]	[x]

As in the previous visit, this criterion is not met by either the B. Arch. or the M. Arch. program. Both curricula state that accessibility is a criterion for evaluating the comprehensive studio. While it appears that most students may have an understanding of accessibility, most of the projects submitted for Team review did not provide sufficient evidence to consistently demonstrate the ability of students to incorporate the fundamentals of accessibility in their design work. Additionally, the Team found insufficient evidence that students can demonstrate the ability to design accessible sites, particularly in the immediate vicinity of a building and its points of entry/ egress.

13.15 Sustainable Design

Understanding of *the principles of sustainability in making architecture and urban design decisions that conserve natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities*

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

Sustainability is often defined narrowly: a technical requirement applied to a project to reduce energy use. In studio and non-studio coursework, the Team found strong evidence that the NJIT programs do much more. As one faculty member noted, "Sustainability is an attitude which infuses our curriculum." Student work demonstrated concern for environmental factors such as sunlight, wind and rain; for the social equity challenges found in inner city design projects; and for an interest in fashioning inventive

building solutions. All reflected a pervasive and commendable attention to building sustainably.

13.16 Program Preparation

Ability to *prepare a comprehensive program for an architectural project, including assessment of client and user needs, a critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions, a review of the relevant laws and standards and assessment of their implication for the project, and a definition of site selection and design assessment criteria*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.17 Site Conditions

Ability to *respond to natural and built site characteristics in the development of a program and the design of a project*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The students demonstrated an ability to respond to natural and built site characteristics, especially those relating to sustainability.

In the comprehensive projects of either program, the Team found only limited evidence to demonstrate students' ability to effectively relate individual buildings to their environs.

13.18 Structural Systems

Understanding of *principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.19 Environmental Systems

Understanding of *the basic principles and appropriate application and performance of environmental systems, including acoustical, lighting, and climate modification systems, and energy use, integrated with the building envelope*

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In both programs, the Team found convincing evidence at many levels that students understood the basic principles of environmental systems, and were at the beginning stages of successfully applying those principles in their projects.

13.20 Life-Safety

Understanding of *the basic principles of life-safety systems with an emphasis on egress*

	Met	Not Met
B. Arch.	[ ]	[x]
M. Arch.	[ ]	[x]

While the Team found that students were exposed to the basic principles of life-safety systems in the coursework of each program, there was insufficient evidence in the student work that they had gained an understanding of those principles. For both programs, the Team found too many examples of a failure to incorporate life safety principles into projects.

13.21 Building Envelope Systems

Understanding of *the basic principles and appropriate application and performance of building envelope materials and assemblies*

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In both programs, the Team observed a thorough demonstration of the students' ability to develop design projects that incorporated detailed building envelopes. Projects consistently addressed a variety of issues and constraints ranging from aesthetic to performance to technical to sustainable. Many projects demonstrated that students also considered construction processes.

13.22 Building Service Systems

Understanding of *the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security, and fire protection systems*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.23 Building Systems Integration

Ability to *assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.24 Building Materials and Assemblies

Understanding of *the basic principles and appropriate application and performance of construction materials, products, components, and assemblies, including their environmental impact and reuse*

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

The Team notes that the evidence demonstrates exceptional understanding, comprehension and ability with regard to materials and assemblies throughout the curriculum. This is particularly well demonstrated in the final projects of the comprehensive studios of both programs.

13.25 Construction Cost Control

Understanding of *the fundamentals of building cost, life-cycle cost, and construction estimating*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.26 Technical Documentation

Ability to *make technically precise drawings and write outline specifications for a proposed design*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.27 Client Role in Architecture

Understanding of *the responsibility of the architect to elicit, understand, and resolve the needs of the client, owner, and user*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

13.28 Comprehensive Design

Ability to *produce a comprehensive architectural project based on a building program and site that includes development of programmed spaces demonstrating an understanding of structural and environmental systems, building envelope systems, life-safety provisions, wall sections and building assemblies, and the principles of sustainability*

	Well Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[X]	[ ]

In both programs, the student work demonstrated a deep understanding of comprehensive design without sacrifice of design quality or innovation. Comprehensive design studios consistently reflected a strong grounding in research and case studies; site sensibilities based on thorough analysis; and design proposals consistent with the best of contemporary practice. The quality of comprehensive design work at NJIT is borne out by recent successes in national competitions: Three students have won awards in the AISC/ACSA Steel Competition in 2006 and 2007: NJIT students were awarded second place, third place, and honorable mention.

13.29 Architect's Administrative Roles

Understanding of *obtaining commissions and negotiating contracts, managing personnel and selecting consultants, recommending project delivery methods, and forms of service contracts*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In the B. Arch. and M. Arch. programs, this criterion is met through Professional Practice coursework.

13.30 Architectural Practice

Understanding of *the basic principles and legal aspects of practice organization, financial management, business planning, time and project management, risk mitigation, and mediation and arbitration as well as an understanding of trends that affect practice, such as globalization, outsourcing*, project delivery, expanding practice settings, diversity, and others

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In the B. Arch. and M. Arch. programs, this criterion is met through Professional Practice coursework.

13.31 Professional Development

Understanding of *the role of internship in obtaining licensure and registration and the mutual rights and responsibilities of interns and employers*

	Met	Not Met
B. Arch.	[ ]	[x]
M. Arch.	[ ]	[x]

Although some students who choose to pursue employment in architectural offices appear to glean this information informally through the internship experience itself, the Team found insufficient evidence in either program that the role of internship in obtaining licensure and registration --especially for the local jurisdiction-- is being understood by each student either through the program coursework or through school-sponsored presentations as required by this criterion.

13.32 Leadership

Understanding of *the need for architects to provide leadership in the building design and construction process and on issues of growth, development, and aesthetics in their communities*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In the B. Arch. and M. Arch. programs, this criterion is met through Professional Practice coursework, through studio-based community engagements, and through participation in a range of student organizations and initiatives.

13.33 Legal Responsibilities

Understanding of *the architect's responsibility as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, historic preservation laws, and accessibility laws*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In the B. Arch. and M. Arch. programs, this criterion is met through Professional Practice coursework.

13.34 Ethics and Professional Judgment

Understanding of *the ethical issues involved in the formation of professional judgment in architectural design and practice*

	Met	Not Met
B. Arch.	[x]	[ ]
M. Arch.	[x]	[ ]

In the B, Arch. and M. Arch. programs, this criterion is met through Professional Practice coursework

III. Appendices

Appendix A: Program Information

1. History and Description of the Institution

The following text is taken from the 2008 New Jersey Institute of Technology Architecture Program Report.

"Our value as a State depends upon the development of skilled labour."
-New Jersey Centennial Commission, 1877

By 1877, the City of Newark had grown into a significant manufacturing center, prompting the Newark Board of Trade to initiate a movement to found a technical school. On March 20, 1880, Assemblyman Wilkinson of Essex County introduced "An Act to Provide for the Establishment of Schools of Industrial Education". This bill passed in 1881, signaling the birth of the Institute. Pursuant to the Act, the New Jersey Legislature appropriated $5,000 per year for the upkeep of a technical school in any locality, provided that community residents matched the State's investment.

Led by the Newark Board of Trade and City Hall, the citizens of Newark launched a campaign to fund the new school. The first Board of the Newark Technical School met on July 1, 1884. The members decided to establish an evening school, which Newark residents could attend tuition-free. This began a local-state partnership that has turned into one of the finest technological universities in the nation.

Charles Adams Colton was the school's first Director. Ninety students were selected for the first class; machinists, bookkeepers, clerks, draftsmen, carpenters, printers, electricians, plumbers, jewelers, harness makers, tinsmiths, and dyers. They ranged in age from 15 to 42.

In 1890, a campaign was launched to fund a permanent building for the school, On January 4, 1897, classes began in a three-story brownstone. The first physical expansion of the campus occurred with the addition of three new buildings; Campbell Hall (1926), Colton Hall (1930), and the Laboratory Building Annex (1947). Eberhardt Hall, the former Newark Orphan Asylum, was acquired in 1948.

During the war years, Dr. Allan R. Cullimore guided the growth of the College, then known as the Newark College of Engineering (NCE). He fostered a philosophy of education at NCE that stressed "the engineer's duty as a citizen." This concern for continuing professional education and good citizenship remain a hallmark of an NJIT education.

In 1949, the Board of Trustees tapped NCE graduate Robert W. Van Houten to become the next president. Among the developments of the Van Houten years were the establishment of the Research Foundation, the institution of the annual Science Fair, the expansion of the graduate school, the initiation of the Engineering Opportunity Program, and the physical development of the Newark campus. During Dr. Van Houten's tenure, enrollment grew from 2,842 in 1947 to just over 6,000 in 1970. The physical size of the school expanded from four buildings on two acres of land to twelve buildings on a twenty-acre campus. In the fifties and sixties a number of new academic programs were added.

The New Jersey Institute of Technology Act established that NJIT is "deemed to be a public and essential government function necessary for the welfare of the State and the people of

New Jersey". Recognizing the new organization and broadened mission of the College, the name was changed to the New Jersey Institute of Technology. This name change was preceded in 1973 by the addition of a second college: the New Jersey

School of Architecture. The status of the University was confirmed when the State enacted the Higher Education Restructuring Act (1994) confirming NJIT as one of three State Research Universities. NJIT's status was further changed with the NJIT Act of 1996.

Saul K. Fenster became the sixth President of NJIT in 1978. Under his leadership, NJIT took further steps toward meeting a broader institutional mission in graduate education, research, and public service activities appropriate to being a National Research University. An aggressive building program changed the nature of the campus. At the same time, the academic aspirations of NJIT were challenged and raised by a spectacular growth in research volume.

In 2002, Dr. Robert A. Altenkirch became the University's seventh President.

Under President Altenkirch, NJIT has instituted a 5-year Strategic Plan defining a set of priorities and objectives for the University's academic, economic, and civic mission. President Altenkirch has achieved a number of these objectives well ahead of schedule: NJIT has increased its intellectual and research capital with a consistent cohort of 60 awarded Ph.D. degrees across 15 disciplines annually; an improved graduation rate of first-time, full-time freshmen surpassing targeted expectations; and steady increases in the enrollment of underrepresented minority groups, particularly among Hispanic populations.

President Altenkirch's commitment to both the NJIT community and the broader Newark community is evident in significant campus improvements and connections to the surrounding neighborhoods. Landscape and campus appearance enhancements, facilities improvements and a new Campus Center have dramatically changed the face of the campus, resulting in higher student satisfaction and campus vitality. The recently initiated NJIT Campus Gateway project will develop a comprehensive plan for the development of new, private, clustered housing for Greek Life organizations and the redevelopment of neighborhoods adjacent to the NJIT campus. This project brings key Newark religious, civic and neighborhood stakeholders into dialogue with NJIT and the City of Newark to foster greater recognition of shared interests and cooperation between NJIT students and the neighboring communities.

NJIT is accredited through the Middle States Association. Every ten years (most recently in 1992 and 2002), the University undertakes a self-assessment after ran exhaustive round of discussions followed by a five-year Periodic Review Report and update (1997, 2007).

The Middle States Accreditation process is used as the catalyst for an institutional self-assessment. It provides the impetus for the University community to define common goals and objectives and to set priorities for the allocation of resources for the next ten years. At the most recent accreditation (1997 and again in 2007), a number of specific goals and objectives were established in each of several key areas. Additionally, a series of University benchmarks were established by which NJIT could guide and measure its own progress and compare itself to similar institutions. These parameters were designed to equate NJIT to other Technological institutions such as Georgia Tech, Rensselaer, Carnegie Mellon, and Virginia Tech. Such comparisons provide a form of validation for faculty and students alike. They also provide tangible goals or key performance indicators for which to strive.

In 2006-2007, NJIT enrolled approximately 8,210 students of which 5,380 are in undergraduate and 2,830 in graduate programs. There are five academic units, or colleges, and an Honors College (a non-academic unit), each reporting to the Provost, the Chief Academic Officer.

- The Newark College of Engineering (NCE), which traces its roots to the Newark Technical School of 1884, consists of five departments: Chemical Engineering, Civil and Environmental Engineering, Electrical and Computer Engineering, Industrial and Manufacturing Engineering, and Mechanical Engineering.

- The New Jersey School of Architecture (NJSOA), established in 1973, consists of a single department with multiple graduate and undergraduate programs in the fields of architecture, planning and design.

- The College of Science and Liberal Arts (CSLA), founded in 1982, encompasses Aerospace Studies, Biology, Chemistry and Environmental Science (Federated with Rutgers), History (Federated with Rutgers), Humanities and Social Sciences, Mathematical Sciences, Physics, and the Rutgers/NJIT Theatre Arts Program.

he New Jersey School of rchitecture consists of multiple ograms in architecture, planning id design.

The School of Management (SOM), created in 1988 (another single-department school) contains a range of academic programs in the area of management.

The College of Computing Sciences (CCS), created in 2001, consists of two departments: Information Systems (IS) and Computer Science (CS), and is home to the interdisciplinary program in Information Technology.

- The Albert Dorman Honors College was formed in 1985 as a non-academic unit open to all disciplines and based on academic achievement prior to and/or during a student's education at NJIT.

- Coordination of graduate offerings takes place through the Graduate Division headed by the Dean of Graduate Studies. An active research agenda includes over 50 specialized research centers and programs created in response to industrial, state, and national needs. A sampling includes the following:

- The Center for Architecture and Building Science Research, a division of the New Jersey School of Architecture,

- The North Jersey Transportation Planning Authority-NJIT Brownfields Planning Project,

- The National Center for Transportation and Industrial Productivity (NCTIP),

- The Transportation Economic and Land Use System (TELUS).

The Division of Continuing Education offers a range of courses to help professionals keep pace with the ever-expanding realm of technological and professional knowledge.

Various modes are employed to offer more than 200 courses and classes at locations both on and off the Newark campus, including in-house courses at client sites. The courses are delivered in various modalities including classroom instruction, videotapes, and cable television, as well as both synchronous and asynchronous delivery via the internet.

2. Institutional Mission

The following text is taken from the 2008 New Jersey Institute of Technology Architecture Program Report.

The NJIT Vision Statement and NJIT Mission Statement were published in *The Future's Edge, New Jersey Institute of Technology Periodic Review Report,* prepared for the Middle States Commission on Higher Education, June 2007. They are reproduced here in their entirety.

NJIT Vision Statement:

A preeminent technological research university known for innovation, entrepreneurship, and engagement.

NJIT Mission Statement:

NJIT is the state's technological research university, committed to the pursuit of excellence

- in undergraduate, graduate and continuing professional *education, [in* an effort to prepare] students for productive careers and amplifying their potential for lifelong personal and professional growth;
- in the conduct of *research* with emphasis on applied, interdisciplinary efforts encompassing architecture, the sciences, including the health science, engineering, mathematics, transportation and infrastructure systems, information and communications technologies;
- in contributing to *economic development* through the state's largest business incubator system, workforce development, joint ventures with government and the business community, and through the development of intellectual property;
- in service both to its urban environment and the broader society of the state and nation by conducting public policy studies, making educational opportunities widely available, and initiating community-building projects.

NJIT prepares its graduates for positions of leadership as professionals and as citizens; provides educational opportunities for a broadly diverse student body; responds to needs of large and small, state and local governmental agencies, and civic organizations; partners with educational institutions at all levels to accomplish its mission; and advances the uses of technology as a means of improving life.

3. Program History

The following text is taken from the 2008 New Jersey Institute of Technology Architecture Program Report.

In its thirty-five year existence, the New Jersey School of Architecture has played an important role in architectural education in New Jersey. The need for a public College of Architecture in New Jersey was recognized as early as 1958, when the New Jersey Society of Architects (NJSA) actively lobbied for its creation.

In 1972, the NJSA asked the AIA to appoint a National Advisory Committee to make recommendations for a public School of Architecture in New Jersey. The Committee subsequently recommended that the School be established in Newark. In 1973, Newark College of Engineering submitted a formal proposal to the State Board of Higher Education. With the Board's approval, the New Jersey School of Architecture was born.

By September of that year, the NJSOA established office space in temporary quarters in Tieman Hall. In its first year, the School consisted of founding Dean Harlyn Thompson, an administrative assistant, a secretary and 2 work-study students. By the first full operating year (1974-75), the School had grown to include 240 FTE students and 8 faculty members, some of whom are still active today.

Accreditation was granted in 1978, following the graduation of the first class in 1977. Dean Thompson resigned in 1979 and was followed by Professor Barry Jackson who was appointed acting dean and served until January 1981. At that time, Sanford Greenfield was appointed dean and served for nearly ten years. The present dean, Urs Gauchat, was appointed in February, 1991.

Since its inception, the New Jersey School of Architecture has continuously built its academic, research and technical strength. In addition to the initial accredited Bachelor of Architecture program, the School initiated other undergraduate and graduate programs to provide our students more educational opportunities, particularly for those interested in pursuing study in related fields.

- 1984/85: Master of Architecture (accredited program)
- 1984/85: Master of Science in Architecture
- 1996/97: Master of Infrastructure Planning
- 1998/99: Bachelor of Science in Architecture
- 2001/02: Ph.D. in Urban Systems
- 2006/07: Bachelor of Industrial Design

A more detailed description of each these programs is contained in Sections 3.11.3 Non-accredited Degree Programs, and 3.12.2 Master of Architecture Program.

The Center for Architecture and Building Science Research (CABSR) was established in 1989 under the direction of Ezra Ehrenkrantz, who held one of the first endowed chairs at the University. Present Executive Director Deane Evans assumed leadership of the Center in 2001. The Center makes significant contributions to the knowledge in the field and adds an important dimension to the School (see Section 3.12.2 and Volume III, NJSOA Research Activities).

To support the School's commitment to CAD, Digital Graphics, and associated tools and techniques, the NJSOA founded the Imaging Lab in 1991. This is the decentralized facility responsible for information technology used throughout the School and provides support for

the studio environment, print room, Littman Architecture Library, and various specialized laboratories and facilities in spaces used by the New Jersey School of Architecture. Building on this base, we added the Fabrication Laboratory (FAB Lab) in 2005, which provides facilities and equipment to explore the use of Computer-Aided Manufacturing (CAM) and rapid three-dimensional prototyping.

In 1998, the School of Architecture opened the doors of its new building, Weston Hall. The building was designed by Alan Chimacoff of the Hillier Group with significant faculty input. Weston Hall has proved to be an excellent facility whose design reveals many of the key functions that make up the School of Architecture. It also makes an impressive entrance to the south end of the campus along Warren Street, and provides a striking visual evidence of the importance of the School of Architecture within NJIT. This self-contained building fosters studio culture by housing all of the School's programs under a single roof, with 24/7 access and lighting.

Since Weston Hall's completion, the University has continued to commit additional space and resources to support the School's expanding curriculum. As the student population gradually increased, we have both expanded into the contiguous buildings and added a satellite facility, under the main NJIT parking deck. As a result, SOA spaces share a common entrance and are connected through interior circulation routes, with the exception of the Studio Annex in the Student Mall & Parking Deck.

4. Program Mission

The following text is taken from the 2008 New Jersey Institute of Technology Architecture Program Report.

The goal of the undergraduate curriculum has been and will continue to be to prepare students with the skills and knowledge necessary for employment in a "generalized" architecture practice immediately upon graduation. To that end, the vision of NJSOA is the creation and implementation of a new curriculum that addresses the changing demands imposed by the 21st century as well as satisfying the mandates required for accreditation by the National Architecture Accreditation Board (NAAB).

In order to fulfill this mission, the new curriculum is divided into two discrete but interrelated components: (1) a three-year lower level program which provides the requisite skills and knowledge fundamental to more advanced study, and (2) a two-year upper level program where students can choose more targeted or specialized areas of expertise ranging from large-scale planning, pre-fabricated modular housing, more intensive yet normative office praxis, commercial office redevelopment, etc. These changes reflect the impending transformation of professional services in architecture. Further, this new undergraduate curriculum imparts to our students the understanding and abilities outlined in the NAAB criteria for accreditation. The recalibration of the curriculum and its major foci - Computer-Aided Design and Design of Communities - will allow the New Jersey School of Architecture to increase its national visibility.

The mission of the graduate program of School of Architecture is not only to prepare students for careers within the broad field of architecture, but also to help them find a direction and a footing within that field. The core of the graduate program is the professional degree in architecture - the M. Arch - accredited by the NAAB. But this core program is allied with other educational opportunities both within the School - the Master of Infrastructure Planning (MIP), The Master of Science in Architecture (M.S. Arch), the Certificate Program in Sustainable Design, and the Urban Environment track of the joint

Ph.D. in Urban Systems - and outside the School, where students can pursue joint masters degrees in business administration (MBA or M.S.Mgmt) or construction management (MSCE).

The *M. Arch* program emphasizes three aspects of architectural design: sustainable design, the design of communities, and digital design. The program implements this focus in three ways: first, through a carefully planned sequence of design studio exercises; second, through integration of technical courses with design studio; and third, through an extensive set of elective courses and advanced and joint degree options that offer students the opportunity for specialized study with recognized leaders in the architecture and related fields.
In addition to providing the level of definition necessary for positive changes within the accredited programs, a clear direction is needed to inform an additional series of discreet but related initiatives. A vision is a powerful mechanism for channeling individual efforts to achieve a synergistic effect. Any change in direction which requires the participation of many requires that each person understand the common goals and know his or her respective role in turning a common dream into a shared reality.

The NJSOA vision anticipates continued growth and change primarily in related design disciplines and foresees the transformation of the 'New Jersey School of Architecture into a more broadly-based College of Design (see Section 1.5.4). We have already begun to move toward that future with the introduction of the Industrial Design Program (Section 1.5.2). Such expansion will diversify not only our program offerings, but the range of our student population, their experience, and diversity they bring to the College of Design and the richness of their subsequent careers and contributions to society. It is expected that our undergraduate intake in the architecture program will be capped at present levels, while the overall student population will be expected to rise to a steady-state total of 1050 by 2010.

5. Program Self Assessment

The following text is taken from the 2008 New Jersey Institute of Technology Architecture Program Report.

Our educational mission is clear, as is our pedagogical intent. Both students and faculty understand our educational thrust and subscribe to it. We have clear foci which provide both an intellectual and operational framework for our next phase of evolution. We are poised to become a great, nationally recognized, School of Design.

1.5.1 Plannin

The New Jersey School of Architecture undergoes a continuous self-assessment to ensure that our goals are met. To that end, we engaged our faculty, students and University administration in a collaborative self-evaluation process. This process has helped to formalize our strategic goals in three key documents, all of which are found in Volume III, Program Planning Documents:

- Strategic Plan (Spring 2005)
- Academic Plan (2006)
- Cost-Benefit Analysis (2006)

These documents outline our objectives, our implementation strategies and the metrics by which we measure our continuing progress.

1.5.2 Strengths and Accomplishment

The prognosis for the School of Architecture is excellent. An ambitious new curriculum has been developed which is gradually being implemented at the undergraduate level and is expected to follow in the graduate. We have been able to achieve growth while raising admission standards. The reputation of the School at a regional and national level is steadily increasing. In addition, our research agenda has been effective in securing twice the volume of funded research compared to five years ago.

We have been able t achieve growth while raisin admission standard

The School of Architecture is in a constant state of evolution in response to a profession in transition, pressures within the University, and initiatives within the School. Changes within the School are not isolated incidents – they are a well-orchestrated series of events as anticipated by and articulated in our strategic and academic plans. Some of the key initiatives are described below, but this litany is by no means a comprehensive list. Rather, it provides the general flavor of innovations and initiatives since the last accreditation.

Our teachers think of themselves as coaches who have a clear stake in the success of their students

- The curriculum has been changed extensively. This is partly in response to the new 2004 NAAB criteria, but more importantly, it reflects an internally generated transformation. The pedagogical approach has changed to give more responsibility to students for their own progress. We intend to instigate a system whereby students can chronicle criticisms and respond electronically. For faculty, the emphasis has been shifted from teaching to learning. We are urging our teachers to think of themselves as coaches who have a clear stake in the success of their students. This is elaborated upon in Section 3.12.

- The instigation of a Design/Build Studio in conjunction with the Masonry Contractors of New Jersey has become a highlight of the NJSOA experience for our undergraduate students. This new program consists of specialized courses designed to provide the knowledge and skills necessary to build fragments of student designs. The Design/Build program is fully integrated into the second year undergraduate curriculum and provides the major focus of the spring semester. An end of term event is staged as a design-build competition with cash prizes. While the shorter seven-semester design studio sequence of the graduate program presents clear constraints and challenges to the development of a similar studio, we are also exploring ways of including a design/build experience at the graduate level.

Design /Build Studio
Spring 2006

- The Fabrication Laboratory (Fab Lab), a facility which is devoted to 3D printing and other immediate prototyping techniques, has been established.

- We have upgraded the specialized laboratories within the Imaging Lab. The Animation Laboratory was overhauled in 2006/07 with new dual-processor workstations, HD video equipment, and current generation professional level software. The Animation Lab is a resource for independent student and faculty work, as well as the primary support facility for courses that include *Cinematic Literacy for Architects and Urban Designers, Imaginary Worlds, Architoons,* and *Advanced Representational Techniques.* Similarly, the Teaching Laboratory was upgraded in 2005/06 with new workstations. Specialized software in the Teaching Lab supports a variety of elective classes, such as *Computer Applications in Architecture, Digital Tectonics, Color Theory/Electronic Color, Simulated Environments, P3 – Post Presentation Processing* – and *Building Information Modeling* (BIM). As such, the Teaching Lab receives the highest priority for upgrades and maintains applications for which licenses are obtained in limited numbers. The workstations in the Teaching Lab are expected to be upgraded and/or replaced within the next three semesters.

- We have improved student retention by balancing the course load throughout the five-year program, replacing the previous "front-loaded" sequence that was, in part, leading to attrition during the first year of the undergraduate architecture program. Furthermore, the first year program has improved coordination between the two architecture courses (Modes of Design Communication and Introduction to Design). Communication between faculty and first year students begins during the summer prior to matriculation in order to (1) better prepare students for entrance and (2) foster better student understanding of the nature of the program before they start.

- The School is experiencing increased selectivity in the admissions process, as can be seen in the data presented in Section 3.6 Human Resources. The quantity and quality of the applicant pool has seen significant improvements due, in part, to an aggressive recruiting plan and the increasing popularity of architecture as a field of study. Among our most successful recruitment strategies is our annual Summer Career Exploration Program, now in its seventh year. Designed to introduce high school students to architecture and to Newark's urban environment, this program has been invaluable in attracting and introducing suburban and out-of-state students to the program and to the School of Architecture. As a result, we generally have been able to be more selective despite the steady increase in the number of enrolled students.

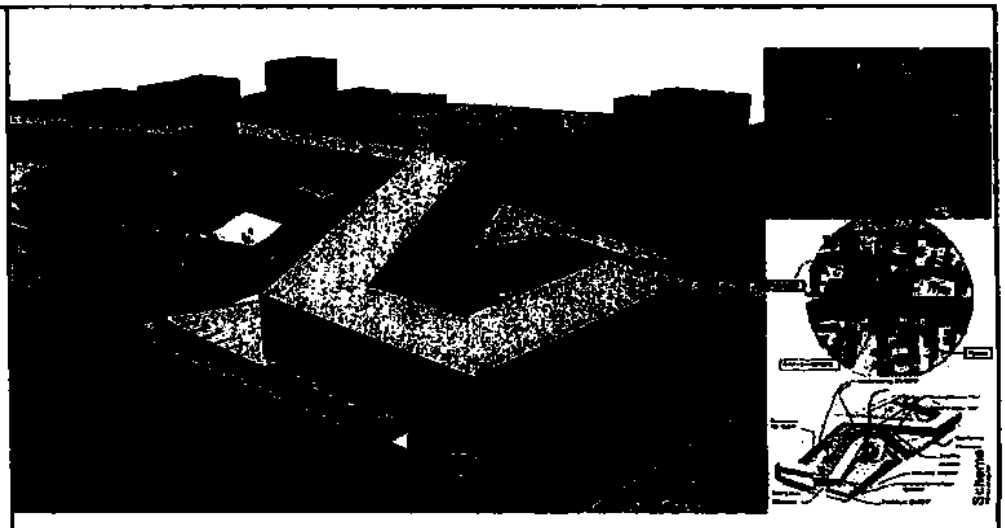
- We are experiencing a steady improvement in student satisfaction as reflected in the NJIT Student Satisfaction Survey conducted by the University's Office of Institutional Research, which is reproduced in Volume III, Program Assessment Documents.

The School of Architecture has also advanced a number of changes and new initiatives beyond the accredited degree programs. These achievements demonstrate the diversity of experience and perspectives cultivated by the School.

- The new degree in Industrial Design was created in 2006/2007. This 4-year undergraduate program is primarily based on real projects supplied by industry, with an emphasis on the generation of intellectual property. The University has a generous arrangement with the School, by which half of any royalty proceeds are shared with students and faculty. This approach roots the program strongly in practice. It also provides students an opportunity to learn about the business of industrial design while learning about design itself.

- The Master of Science in Architectural Studies (M.S.A.S.) has been revised and re-titled Master of Science in Architecture (M.S. Arch). The revised degree will drop to thirty credits from thirty-six, with an optional thesis, in conformance with the structure of most masters programs at NJIT. This will provide the framework for an M.S. Arch degree with several areas of concentration within the single degree title. The M.S. Arch degree requires no new courses, no new faculty and no additional expenditure from the School, since all courses are also offered as elective or required courses in the M. Arch program.

- The Infrastructure Planning Program has been enhanced as a dual-degree option with the Edward J. Bloustein School of Planning and Public Policy at Rutgers University, New Brunswick. Under this program, a student can receive two graduate degrees, one in City and Regional Planning (MCRP) from Rutgers and the other in Infrastructure Planning (MIP) from NJIT, in two years.



MIP Managed Parking
Strategies Studio
East Orange, NJ
2003-2007

ident: Mounir Tawadrous

- A new Ph.D. program in Urban Systems has been founded on the belief that urban problems generally encompass the environment, education, and health. This program was therefore developed as an inter-institutional initiative, with a partnership between NJIT, Rutgers University, and the University of Medicine and Dentistry of New Jersey (UMDNJ). The administration of the whole program resides in the School of Architecture at NJIT.

- We have transformed our administrative style. A significant amount of decentralization and delegation of authority has created a more lateral organization. In doing so, we have revitalized our shared enthusiasm, commonality of purpose, and above all, our clear idea of how individual contributions fashion the whole. Each team member not only takes charge of specific initiatives, but is also accountable for the outcome. This management style has created both a strong team sense and endowed individual team members with strong proprietary feelings about their areas of responsibility.

  We are fortunate to have been able to assemble a highly qualified team of staff and faculty committed to the future of the School. We have bolstered our administrative group with an additional Associate Dean and a new Special Assistant to the Dean. At the same time we have instituted a more codified method for organizing and archiving information. We have also benefited greatly from a turnover in secretarial staff, which has increased both efficiency and morale.

Decentralization ar delegation of author has created a mo lateral organization...v have realized our shar enthusiasm, commonality purpose, and above all, o clear idea of how individu contributions fashion th whol

- A Dean's Executive Council was recently established. The Council consists exclusively of graduates of NJSOA who are CEOs or partners in their firms. It serves as a consultative body and also helps to organize the School's alumni and to host special events. One of these is the successful Design Showcase, an annual fundraising and networking event at which students and alumni exhibit their design work. Council members are also represented on the Board of Visitors.

- The University has successfully encouraged inter-disciplinary activities, involving teaching assignments and research in other schools and colleges within NJIT. These activities provide students with the opportunity for academic cross-fertilization and for dual degree work. Some NJSOA faculty members have dual appointments with the School of Management, the College of Science and Liberal Arts, and the College of Computing Sciences.

This list of strengths and accomplishments is not exhaustive. Nevertheless, it is evidence of progress and demonstrates our ability to deliver programs in keeping with our academic and strategic plans. These accomplishments are also in line with the University's 2005 Strategic Plan.

We are in the process of developing another ambitious list of objectives, described in Section 1.5.4, for the next accreditation.

Over the course of the past five years we have encountered a number of significant challenges and opportunities. These challenges have primarily to do with growth. Generally we embrace growth provided that adequate faculty, physical space and network expansion, as well as the requisite resources, are available. While growth invariably brings a certain amount of stress and strain, it also provides more opportunities for students, creates a vibrant learning environment and keeps us competitive with other schools in the region.

The School has undergone steady growth in the student body since 2001. The student population has grown by 26%, from 661 students in 2001, to 831 in 2006. Soon, a steady state of 180 entering freshmen in the undergraduate program and 30 graduate students will result in a School of over 900 students. New programs in Industrial Design and related disciplines will push that number even higher. This welcome growth has resulted in a number of challenges which we have addressed in the following ways.

We embrace growth, provided tht adequate faculty, physical space and network expansion are available.

- The size of the faculty has not grown commensurately. During the last five years, the number of tenure and tenure-track faculty has decreased from 22 to only 18, and the average age of tenured faculty is now over 60 years. The number of lecturers (seven) has not changed since the last accreditation. This situation is being addressed in a number of ways. We have made optimal use of a number of younger, practicing adjunct instructors, who can also act as role models. Our proximity to New York City affords us the opportunity to hire highly qualified and motivated professionals. The mix of new members of the teaching staff, the cadre of returning adjuncts, and the tenure/tenure-track faculty provides our students and faculty with a vibrant and evolving academic community.

- The school has a finite amount of physical space. Growth in the School of Architecture is predicated not just on the admission intake but also on the availability of space and pedagogical requirements. Architecture students are resource intensive when it comes to physical space as well as network access. We have solved this dilemma by making use of additional space in adjacent buildings but there is a need to develop a permanent long range plan.

- Although the School and University have allocated significant resources to fund continued growth and and ongoing upgrades, there remains a limited amount of network capacity. The educational program at NJSOA relies very heavily on the use of information technology. Computers are fully integrated into all parts of the curriculum. Each year the software used by the students is of increasing complexity and sophistication. At present we produce more than 1.5 terabytes of information per semester, which taxes our ability to move and store digital data.

  Each of our students furnishes his or her assigned workspaces with

their own computer. This means nearly 1,000 active computers are simultaneously using the network. The present bandwidth is being severely taxed. Some of the School's peripherals and servers are at or beyond capacity. Additionally, the IT staff is a fraction of that of comparable Schools of Architecture, which poses a significant challenge at the beginning of each semester when the students' computers are imaged (prepared for use on the NJSOA network and given access to available software licenses). Along with our rapid growth in student headcount, our network expansion efforts and the concomitant staffing have been severely overburdened. It is a critical factor that cannot be neglected without a severe negative impact on both teaching efficacy and student satisfaction.

- Fiscal resources are severely limited. Continuing declines in State higher education funding and increasing per-student education costs further compromise the University's ability to fund the School's program expansion. Architectural education requires a significant yearly investment in software, staffing, and enrichment opportunities such as the Siena study abroad program, lecture series, exhibits and conferences.

In the 2005 NJIT Strategic Plan, the New Jersey School of Architecture is clearly designated as one of the University's priorities. The University is committed to advancing the program objectives of the School. In addition, the School itself has taken every possible measure to leverage available external funds. Through the creation of large lecture classes in which most of the teaching is done by adjuncts, faculty salaries are kept relatively low (on a 9 credit hours or per capita basis). Also, the average teaching load of full time faculty and adjuncts is as high as 16 contact hours per week.

We are pursuing a strategy of in-kind donations particularly for essential software and equipment. Student scholarships are supported by the University and the Honors College, as well as the building industry and the profession at large, and architecture aficionados. NJSOA undraising efforts toward this goal have seen considerable success since the addition of a University Development Officer assigned specifically to the School of Architecture.

Two additional topics present ongoing challenges. Recruitment is continually being addressed in a variety of ways, as detailed in Section 3.6 Human Resources. Many of our students are conflicted between their obligations at work and at school. We recommend that students assume no more than 15 hours/week of work in outside employment, and that no earlier than second year. However, due to financial pressures, many of our students – particularly upperclassmen – work many more hours. This has a profound effect on student performance. The study of Architecture is a very demanding course of study. Any impingement on a student's time generally has a negative effect on their academic performance. Through advising and careful monitoring, students can be compelled to keep their work commitments at a reasonable level.

Despite our present success in attracting students, it is imperative that we keep up an aggressive recruiting program in order not only to increase the number of applicants, but also to improve the quality of the applicant pool. Any slacking off in the recruitment efforts would have an instant deleterious effect on our student intake, both in terms of quantity as well as quality as measured by the average SAT scores, cumulative G.P.A., and average rank in graduating class of our entering students.

1.5.4 Strategies for the Next Five Years

While we anticipate continued achievement moving forward, the next five years pose a number of challenges for the New Jersey School of Architecture. Chief among these are continuing reductions in State funding for Higher Education, resulting in enormous fiscal pressures. Each institution of higher learning therefore has had to reassess its priorities and resource allocations.

Fortunately, the NJSOA program remains a University priority primarily for two reasons:

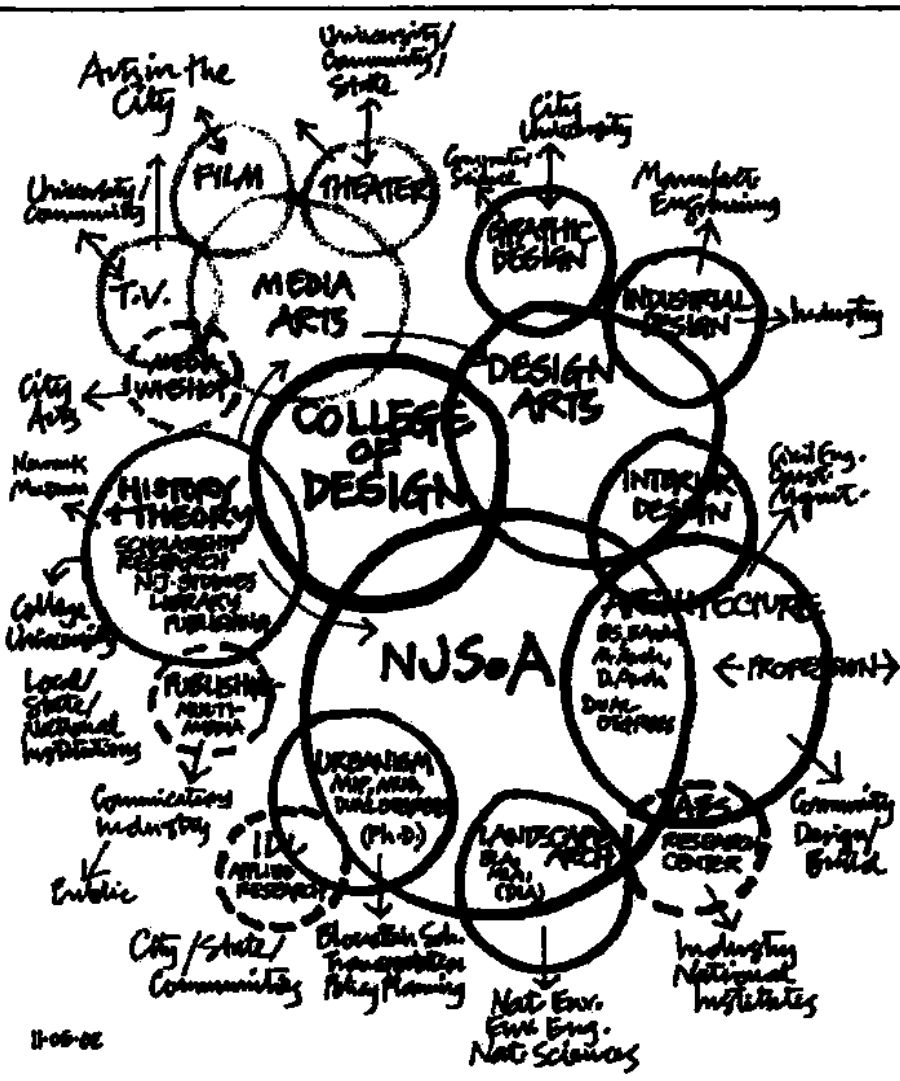
- our trajectory to increase national prominence;
- our aggressive growth plan.

The growth plan has two components:

- the addition of new undergraduate programs, with a concomitant increase in the undergraduate population; and
- an increase in funded research, primarily through the Center for Architecture Building and Science Research.

As noted earlier, the major impediments to implementing our strategic objectives are the lack of expansion space and limited faculty resources. The University is aware of these issues and is willing to allocate resources in part based on performance and enrollment.

- The Creation of a College of Design will expand offerings and degree programs to build a comprehensive design school. The impetus for this change lies in the many unfulfilled educational needs within the State that could effectively be addressed by such a configuration. Equally compelling is the synergy created by assembling parallel programs in design. This will provide enrichment and broader educational exposure for students as well as faculty. The College of Design will contain the present New Jersey School of Architecture as a discreet but related academic entity, but it will eventually add Industrial Design (2006), Interior Design (2008), Digital Design (2008), Fine Arts (2009) and Landscape Architecture (2010). Other disciplines under consideration include graphic design and fine arts.



The creation of a College of Design will expand offerings and degree programs to meet the many unfulfilled educational needs within New Jersey.

- Building Information Modeling (BIM) will be folded into the curriculum and add an additional focus in the use of information technology in architecture. We believe that this data-driven information model, as well as the parametric nature and opportunities afforded by BIM, will have a transformative impact on the pedagogy and process of design, and may dramatically restructure the decision-making and building-delivery process. The introduction of BIM will require the most broad-based changes in the knowledge, skills, and attitudes of architects seen in many decades. As the largest provider of architectural graduates in the region, professional offices will look to our graduates to be competent in BIM techniques, and also to understand the implications of intelligent systems in the design and delivery process. Employers will expect our graduates to be the agents of change that will make their offices competitive in the new BIM-environment.

The School's leadership in BIM has already been recognized: in July 2007, NJSOA received the Revit BIM Experience Award from Autodesk. NJSOA is the first educational institution, public or private, to be so honored. We expect to assume a national leadership role in this area.

- The importance of teamwork in the creation and implementation of complex projects will be increasingly emphasized. To this end, we are changing some curricular components to ensure that all students have team experiences as a mandatory part of their education. First year undergraduate students are assigned team projects in analysis, reporting, and the preparation of common/shared pre-project information requiring them to work collaboratively in groups of two to seven persons. Other design team projects are those in the Masonry Design/Build Competition in second year (see Section 1.5.2). These projects are designed, produced and built by teams. We will continue the team approach for the course in building anatomy (see *Building Anatomy Studio* below). Although Industrial Design has been traditionally an individual pursuit, teamwork is becoming the norm and will therefore be incorporated into that curriculum as well.

- The Building Anatomy Studio will again introduce a team project to the student experience. Students in this course will analyze outstanding existing buildings by isolating each building system using BIM technology. This will aid in the comprehension of how buildings go together, provide examples of building systems, and act as a wonderful preamble to the comprehensive studio experience to follow. More importantly, it will create a visceral understanding of the component systems of a building and the techniques used to assemble them.

  Building Anatomy will be an effective pedagogical mechanism that will not only deepen our students' understanding of the building process, but also accumulate a library of BIM models of well-known buildings. The library of BIM models will become a resource to help gain an in depth understanding of the technical aspects of recent buildings. These may then be discussed as part of the building course, or used as precedents for design problems.

- The continued implementation of the Kepler System will have far-reaching effects on the School. This remarkable innovation was designed and developed by our own technical staff to store all student work in an online database, making it accessible to students, faculty, and administration. Kepler provides the School with a complete record of all student work – a present population of 831 students – for their entire academic careers. It enables students to generate a running portfolio and allows faculty to develop a teaching approach that responds more acutely to each student's individual needs. It enables the administration to perform outcome assessments regarding teaching efficacies, and to carry out longitudinal studies to evaluate curricular changes and resource allocations.

The Kepler System stores all student work in online database and enables outcome assessments regarding teaching efficacies and longitudinal studies to evaluate curricular changes and resource allocations.

- The development of proprietary designs and intellectual property will become a more prominent part of NJSOA. Already a part of the Industrial Design program, the Architecture program and CABSR also plan to focus on the development and exploitation of intellectual property. In order to foster this entrepreneurial spirit, in the future students will take an introductory management course entitled "From Idea to Implementation."

- Continued growth will take place on two fronts: the number of programs of study to be offered (with the eventual formation of a College of Design); and the number of students. The primary growth will be in undergraduate programs. Since the architecture student intake is finite, most of the proposed growth will be in programs in related design fields. The aim is to capture a good percentage of potential design students who now opt to go out of state.

- Faculty development and augmentation is a high priority. The total number of full time faculty appointments has shrunk despite a very significant increase in the total student population. Positions are being sought that can help offset this problem and play a role in the shaping of the progress and administration of our many initiatives.

- Curriculum development will continue as a matter of great importance and we are currently in the midst of a major reorganization which includes both content and pedagogy. We do not, however, expect much change in the key principles and shared vision of where we are going. The calibration and recalibration of the curricula follow a set of principles and guidelines that was established by a faculty Curriculum Advisory Group two years ago.

Information Technology and the computing capabilities of NJSOA are essential to our pedagogical goals. NJSOA maintains an educational environment representative of the professional atmosphere in which students can expect to practice. Every student has a desktop computer connected to a secure dedicated network domain which allows for extensive customization and access to up-to-date digital and graphic programs in accordance with our restricted licenses.

As our pedagogical focus extends into BIM, digital fabrication and virtual environments, we face a number of challenges in maintaining our digital preeminence. Dedicated specialty labs, such as the NJSOA Teaching Lab and the Video/Animation Lab present greater maintenance, upgrade and expansion needs. Network storage solutions must evolve to keep pace with growth of the Architecture and Industrial Design programs. Further investment in expanded and improved computing services will be needed in order to provide our students with the most advanced digitally competitive environment.

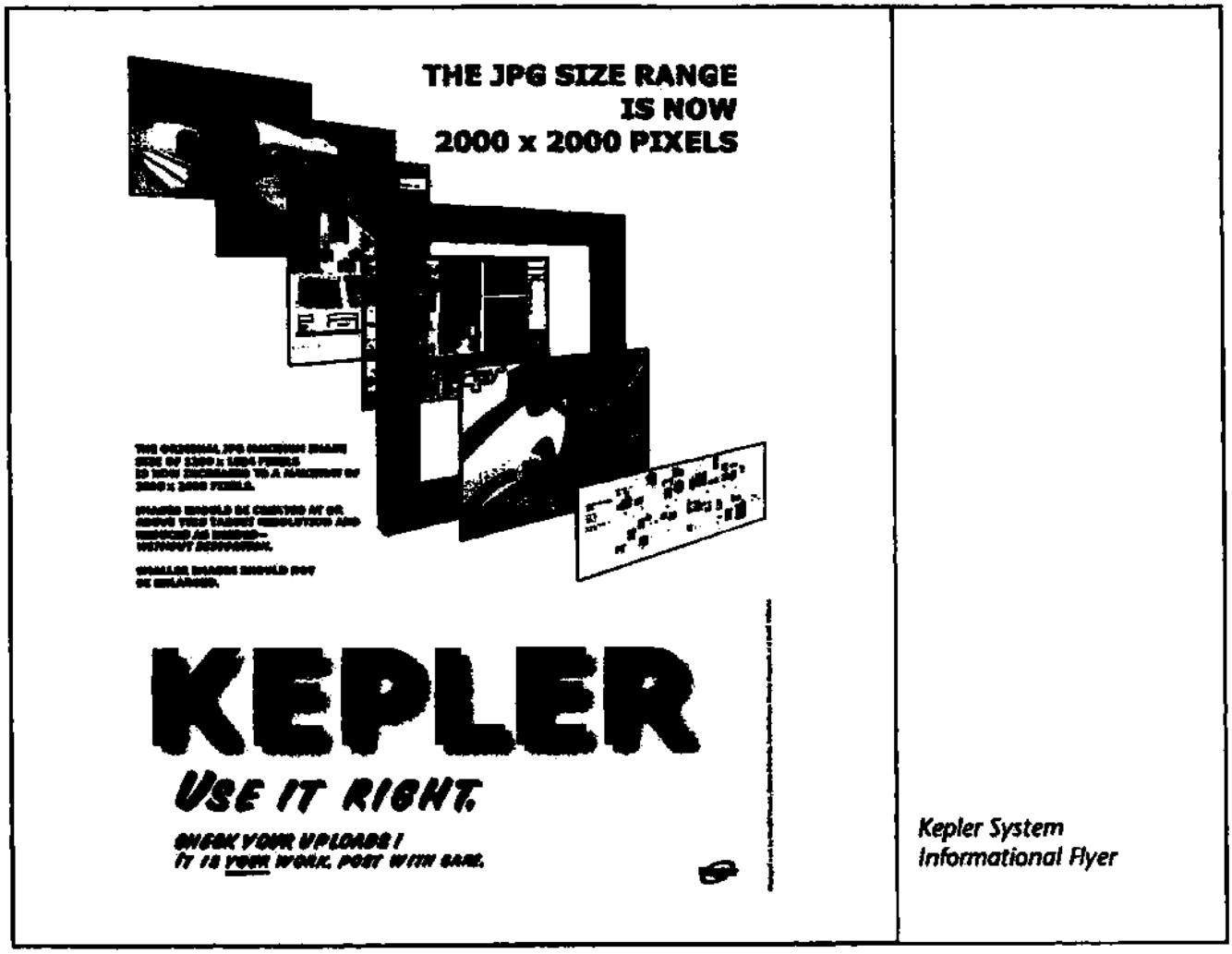
In order to achieve this, the following strategies are being pursued:

- Regular periodic investments are being made in hardware for the Imaging Lab to ensure sufficient capability, peripherals, servers and post-production facilities.

A significant number of our graduates will migrate into related fields, providing the basis for a healthy, broadly based academic program without compromising its efficacy as an excellent preparation for the profession of architecture

- Continuous upgrading of software is ongoing so that students are trained on the latest versions of relevant programs. The programs are all on the School server and can be freely accessed from each student desk.
- Training opportunities are available for faculty to take full advantage of the pedagogical opportunities offered by a computer intensive environment.
- An annual allocation of funds is made from the NJIT technology fee revenue to replace the former NJSOA computer lab fees. The funding is used to defray costs associated with software updates, supplies and replacements of parts.

We are keenly aware that while many of our students will choose employment in traditional architecture offices, a significant number of our graduates will migrate into related fields. We view this trend as positive: it provides the basis for a healthy and broadly based academic program without compromising its efficacy as an excellent preparation for the profession of architecture.



Kepler System Informational Flyer

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Appendix B: The Visiting Team

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Appendix C: The Visit Agenda

Saturday, February 23	**Team Arrives**
4:00 PM to 6:30 PM	Team Meeting in Hotel Meeting Room - Focus on APR
7:00 PM	Team dinner near the Hotel
Sunday, February 24	**SOA Administration/Faculty/Program Introduction**
7:30 AM to 7:45 AM	Team rental cars to NJSOA with SOA escort
7:45 AM to 9:00 AM	Breakfast in AIA Room with Dean and Associate Deans
9:00 AM to 10:30 AM	Team Room and Evidence Room Orientation Dean, Associate Deans and IT staff • Orientation booklet distributed • General Introduction to Kepler software • Tutorials in groups of two
10:30 AM to 1:00 PM	Box Lunch in A.I.A. Room and Presentation of Undergraduate Program • Introduction by Dean • Overview by Associate Dean for Academic Affairs Don Wall, B. Arch Program Director • First Year – Glenn Goldman, Coordinator • Second Year – Tom Ogorzalek, Coordinator • Third Year - Peter Papademetriou, Coordinator • Options - Steve Zdepski, Coordinator
1:00 PM to 2:00 PM	Tour of facilities with Associate Dean for Administration • Studios • NJSOA Library • Imaging Lab • Model Shop/Fab Lab • Print Shop • Center for Architecture and Building Science
2:00 PM to 3:30 PM	Presentation of Graduate Program in A.I.A. Room • Overview by Associate Dean for Academic Affairs Graduate M. Arch. Program - Tony Schuman, Director • First Year – Susan Bristol, Coordinator • Second Year – Joy Siegel, Coordinator
3:30 PM to 7:00 PM	Team work in Team/Evidence Room
7:00 PM	Welcome dinner at NJIT Faculty Club with Dean, Associate Deans, and Staff, Program Coordinators

Monday, February 25			**Meetings with President and Provost, Students, Faculty, Staff, and Class/ Studio Visits**
7:00 AM	to	8:00 AM	Team breakfast at Hotel
8:00 AM	to	8:15 AM	Team rental cars to NJSOA
8:15 AM	to	8:30 AM	Team Room meeting with Administration/Program Directors
8:30 AM	to	9:30 AM	Team work in Team Room
9:30 AM	to	10:30 AM	Team meets with Provost
10:30 AM	to	10:45 AM	Break
10:45 AM	to	11:45 PM	Team meets w/ graduate student body in Weston 2 (No administrators or faculty present)
11:45 PM	to	12:45 PM	Team meets w/ undergraduate student body in Weston 1 (No administrators or faculty present)
12:45 PM	to	1:00 PM	Break
1:00 PM	to	2:30 PM	Faculty and Team lunch in Loft (No administrators present)
2:30 PM	to	4:00 PM	Observe studios and reviews Work in Team Room (Parallel session)
2:30 PM	to	4:00 PM	Team meets with counseling, IT, Library, Research and administrative staff in Library (No administrators present) (Parallel session)
4:00 PM	to	5:00 PM	Team meets with President
5:00 PM	to	6:00 PM	Budget meeting with Dean, Associate Dean for Administration and Finance Associate VP
6:00 PM	to	7:30 PM	Reception: Faculty, University Administrators, Donors, Alumni, student leaders
7:30 AM	to	7:45 PM	Team rental cars to Hotel
7:45 PM			Team dinner and debriefing at Hotel

Tuesday, February 26			**Materials review**
7:00 AM	to	8:00 AM	Team breakfast at Hotel
8:00 AM	to	8:15 AM	Team rental cars to NJSOA
8:15 AM	to	8:30 AM	Team Room briefing with Administration/Program Directors
8:30 AM	to	12:00 PM	Team Room – Materials Review
12:00 PM	to	1:30 PM	Lunch with graduate/undergraduate Student Leaders (ASU, Alpha Rho Chi, and NOMAS)
1:30 PM	to	8:00 PM	Team Room – Materials Review/Draft VTR
8:15 PM			Team dinner and drafting of VTR

Wednesday, February 27			**Team Reports**
7:00 AM	to	8:00 AM	Team breakfast at Hotel
8:00 AM	to	8:15 AM	Team rental cars to NJSOA
8:15 AM	to	9:30 AM	Team reports to Dean and Administrators
9:30 AM	to	10:30 AM	Team reports to Provost and President
10:30 AM	to	10:45 AM	Break
10:45 AM	to	12:00 PM	Team reports to School
12:00 PM			Box Lunch in Loft Individual team member departures

IV. Report Signatures

Respectfully submitted,

Marilys R. Nepomechie, FAIA — **Representing the ACSA**
Team Chair

Shannon B. Kraus, AIA, NCARB, MBA — **Representing the AIA**
Team member

Grant Ullrich — **Representing the AIAS**
Team member

Greg G. Hall, AIA, Ph.D. — **Representing the NCARB**
Team member

Jill E. Bambury — **Representing the ACSA**
Team member

RJ Wayne Drummond, FAIA
Observer

Kim Tanzer, RA
Observer

Joseph P. Giattina, Jr., FAIA
Observer

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IV 5 – CATALOG

The School's online catalogues are posted on the School of Architecture web site: http://catalog.njit.edu. Both NJSOA graduate and undergraduate catalogues detail all degree programs and excerpt language from the NAAB Student Performance Criteria. Printed catalogues are no longer provided by the University.

IV 6 - RESPONSE TO THE OFFSITE PROGRAM QUESTIONNAIRE

N/A