R·I·T

Rochester Institute of Technology
Golisano Institute for Sustainability
Department of Architecture

# Architecture Program Report for 2015 NAAB Visit for: Initial Accreditation

## Master of Architecture

105 credit program or students entering Rochester Institute of Technology with a four-year undergraduate degree in a field other than architecture

Year of Previous Visit: 2013
Current Term of Accreditation: NA

Submitted to: The National Architectural Accrediting Board
28 February, 2015

ARCHITECTURE

Rochester Institute of Technology

# Master of Architecture Program

Golisano Institute for Sustainability
College of imaging Arts and Sciences

## Architecture Program Report for Initial Accreditation (APR-IA)

Dennis A. Andrejko, FAIA
Head, Department of Architecture
Master of Architecture Program
585.475.4990
daaarch@rit.edu

Dr. William W. Destler, President
Office of the President

Dr. Jeremy Haefner
Provost and Senior Vice President for Academic Affairs

Dr. Nabil Z. Nasr, Associate Provost and Director
Golisano Institute for Sustainability

28 February, 2015

## Table of Contents

ARCHITECTURE

## Introduction

The Rochester Institute of Technology's Master of Architecture program, which enrolled its first cohort of students in fall of 2011, is a three and one half-year, full-time graduate program designed for students with an earned bachelor's degree in a non-architecture field. The program is jointly offered by RIT's College of Imaging Arts and Sciences (CIAS) and the Golisano Institute for Sustainability (GIS) and is primarily housed in GIS.

### Program Character

At a time of significant transition for the architectural profession, developing an academic program "de novo" allows for full incorporation of the skills and knowledge critical to the 21st-century architect. Unlike existing programs in which emerging professional issues must be accommodated through evolutionary modifications to curriculum and pedagogy, the design of this program—its content, methods, and outcomes—has been thoroughly shaped by today's most urgent imperatives.

### Sustainability

Chief among these is the sustainability imperative. Our program was founded upon the principle that the adjective "sustainable" is always the implicit modifier of the noun "architecture." We can no longer afford to teach anything other than sustainable architecture, regardless of the course title.

Among the required sustainability courses in the curriculum are courses in Sustainability Science, Industrial Ecology, and Sustainable Buildings—all offered through our graduate programs in Sustainability. But beyond these direct forms of exposure, the entire program curriculum is suffused with the principles and practices of sustainability. Every required course—from Integrated Building Systems to Architectural Design to Design Theory—is presented and experienced primarily through the lens of sustainability. Further, architecture students are exposed to the results of cutting-edge research in such areas as material aging, clean technologies, alternative energy solutions, pollution prevention, and green product assessment.

In addition to programs in GIS, the Rochester Institute of Technology (RIT) offers a number of synergistic graduate programs in areas related to sustainability. Among these are an MS and ME in Sustainable Engineering; an MS in Industrial Engineering; an MS in Environmental Science; and an MS in Environmental Health and Safety Management. Students are encouraged to consider courses in these programs to fulfill elective options.

### Urbanism

By the year 2050, it is estimated nearly 70% of the world's population will live in urban environments, with 93% of the growth occurring in under-developed cities and regions.[1] Because a degraded or under-developed urban environment has grave implications for social, economic, cultural, and environmental health, the RIT Master of Architecture program will pay particular attention to urban settings and principles. The complexity of the urban environment—of which the built environment is only one of many components—will require an interdisciplinary approach to architectural education—one that references economics, public policy, sociology, and regional culture.

Since the urban fabric of many cities is essentially pre-determined, the program will foreground the practices and principles of sustainable preservation and adaptive reuse. The city of Rochester—as well as other U.S. and international cities where our students will work and study—will serve as living classrooms for the students. RIT is fortunate to have strong academic programs in Urban and Community Studies and in Public Policy—both of which will contribute courses to the Master of Architecture program.

### Integrated Learning/Integrated Practice

Like all strong architecture programs, the core educational venue for our students is the studio, but a studio that models the same cross-disciplinary, cross-professional integration fast becoming the norm in architectural practice. From the outset, students approach design problems within teams, learning to value and leverage their collective intelligence and diverse academic backgrounds.

While the necessity of listing courses in the curriculum mask inevitably suggests a series of discrete experiences, actual instruction in the Master of Architecture program is characterized by continuing cross-reference, contextualization, review, and preview. Critical topics are introduced, applied, and re-visited on an as-needed basis, resulting in the continuing integration of architecture skills and knowledge domains.

For example, the design and technical courses are co-requisites and are fully integrated. What the students design in one course sequence will be technically investigated in the other. The Integrated Building Systems courses will integrate all the technical knowledge commonly segregated into various courses in other architecture programs—structures; building materials and methods of construction; building codes and standards; mechanical, electrical, and plumbing systems; cost analysis; and site work.

These three emphases—sustainability, urban revitalization, and integrated practice—are clearly included in the *"2009 Conditions"* of the NAAB student performance criteria (sustainability, leadership, collaboration, and human behavior).

1. *Urban Growth in an Age of Globalization*, Cengage Learning, 2009.

# Part One (I): Institutional Support & Commitment to Continuous Improvement

## I.1—Identity & Self-Assessment

### I.1.1 History and Mission

**History, Mission, Founding Principles of RIT**

The Rochester Institute of Technology (RIT) marks its founding in 1829, with the formation of the Athenaeum, a cultural association promoting literature, science, and the arts in Rochester, New York. In 1891, the Athenaeum merged with a very different institution—the Rochester Mechanics Institute, founded in 1885 to provide technical training for skilled industrial workers. The marriage of these two organizations—the one promoting arts and letters, the other career education through technical skills—would shape the unique academic portfolio that distinguishes RIT today.

Today, technology, design, application, interdisciplinarity, and innovation are defining features of the RIT educational experience, shaping our distinctive cooperative education program, our diverse academic program portfolio (with such programs as microelectronic engineering, industrial design, and color science), and our highly interdisciplinary research agenda. Once delivered largely in isolation from each other, today's programs in the arts and technology are bridging the divide, thus satisfying the demands of 21st century employers for multi- and interdisciplinary expertise.

The RIT mission links the university's founding purposes with today's certainties and tomorrow's questions.

- [RIT will] provide a broad range of career-oriented educational programs with the goal of producing innovative, creative graduates who are well-prepared for their chosen careers in a global society.... pursue new and emerging career areas....[and] develop and deliver curricula and advance scholarship and research relevant to emerging technologies and social conditions.
- Teaching, learning, scholarship, research, innovation, and leadership development for promoting student success are our central enterprises.

RIT's "Educational and Access Goals" derive from the university's unique history and shape the character of our academic program portfolio and our educational culture. Reflected in these goals are RIT's long-standing commitments to teaching, community engagement, application, and innovation. All new academic programs must demonstrably incorporate these goals into their educational objectives and learning outcomes; thus, they are addressed as part of every annual program assessment. Because of the centrality of these goals to the program when it was conceived and launched, we include them in full in Appendix A.

The architecture program's five educational objectives, which are derived from these goals, speak both explicitly and implicitly to the five perspectives. Thus the five perspectives are tightly stitched into the curriculum, extra-curriculum, and culture of the architecture program. Their similarity to our Education and Access Goals further assures their continued centrality.

**History, Mission, Founding Principles of the Program**

RIT's Master of Architecture program, the first architecture program to be offered by the university, is the product of an interdisciplinary and inter-professional committee (faculty, practicing architects, administrators) charged in 2008 with exploring and then developing an architecture program for RIT. Like its parent institution, the program combines design, application, interdisciplinarity, and innovation.

The program is offered jointly by the College of Imaging Arts and Sciences (CIAS) and the Golisano Institute for Sustainability (GIS), thus drawing upon RIT's founding and enduring strengths in art and design (CIAS) *and* its newest and most innovative interdisciplinary initiative - GIS.

This Master of Architecture program, having enrolled its first cohort of students for the fall of 2011 addresses the pressing environmental exigencies of the 21st century. It derives from the belief that we can no longer afford to teach anything other than sustainable architecture as an explorative vehicle for increasing the value, purpose and significance of design. The curriculum and co-curriculum are suffused with the principles and practices of sustainability. Virtually every required course—from Integrated Build-

ing Systems to Architectural Design to Design Theory—is regularly presented and experienced through the lens of sustainability. Further, students will be exposed to the results of cutting-edge research being conducted in the Golisano Institute for Sustainability in such areas as material aging, clean technologies, alternative energy solutions, pollution prevention and green product assessment. Because in the northeast, sustainable architecture is almost synonymous with adaptive re-use, the program also emphasizes building re-use in primarily urban settings.

The program combines those same strengths that distinguished RIT at its founding: science, technology, design, and society. And its emphasis on integrated practice—a collaborative, multi-professional approach to the practice of architecture—reflects RIT's abiding consideration of practical, career-oriented education.

The program mission reads as follows:

Through its curricular and experiential emphases on sustainable design and construction solutions, urban revitalization, and integrated practice, the RIT Master of Architecture program will educate broad-thinking architects well grounded in the principles and practices of sustainability, who will be able to create comprehensive projects that solve problems at the intersection of architecture and sustainability.

The five educational objectives that follow clearly reflect the "Education and Access Goals" previously described (see Appendix A).

The Master of Architecture program is designed to:

1. Develop in its students a first-principle commitment to a fully sustainable built environment;
2. Provide students with the technical and practical knowledge necessary to develop innovative and sustainable solutions to urban problems;
3. Habituate students to creative thinking, problem-solving, and design;
4. Prepare students as leaders in a briskly evolving profession requiring teamwork, business integration, and holistic thinking;
5. Provide students with the knowledge and skills necessary to obtain professional licensure.

**Benefit to the Institution**

The program benefits RIT in a number of ways, including enriched community relationships, new funding sources, enhancement of the faculty/student exhibit culture, a new cadre of visiting speakers, extension of RIT's applied research portfolio, and a constant sustainability presence.

Interdisciplinary collaboration. RIT offers a broad range of degree programs many of which are closely related to architecture such as industrial and interior design, engineering and engineering technologies, and urban and community studies. With the addition of an architecture program all these allied programs can only be enriched by providing collaboration opportunities for faculty and students.

Community relationships. AIA Rochester is fully supportive of this program—indeed, it was a letter and recommendation from this organization that first set the program development in motion. A number of area architects have contributed substantial amounts of their time to program development and review activities. The resulting connection between the local architecture community and RIT strongly continues through the participation of AIA Rochester members as adjuncts, mentors, employers (including co-op), and advisory committee members.

The Master of Architecture program closely associates with such community organizations as the Rochester Historical Society, the Landmark Society, and the Community Design Center Rochester. We continue to increase collaborations on community projects, speaker series, and workshops.

New funding sources. Since the fall of 2009, the local architecture community has donated over $250,000 in direct support of the program. These were first-time gifts for many of the smaller donors, and we are confident that they will continue to support the program. The department head meets with the development office throughout the year to discuss and identify program gifts and donations.

AIA Rochester has also donated to RIT a valuable collection of original architectural drawings (early 20th

century) of important Rochester buildings. These drawings will obviously benefit architecture students and faculty, but they will also be important for students in Civil Engineering, Industrial Design, and Urban and Community Studies.

Exhibition culture. From RIT's founding in the 19th century, an important part of the institutional culture has been faculty and student shows and exhibits. This continues to be the case, not only in the areas of photography, crafts, design, and film, but also engineering (senior design projects) and, more recently, RIT's Innovation and Creativity Festival, which features inventions, performance, and projects developed by students in every RIT major. The architecture program, with its student and faculty shows, provides a rich addition to this culture.

Distinguished speaker series. Some of the funds mentioned under "New funding resources" above are being directed to an architecture lecture series called archiTALKS. Given the interdisciplinary nature of the profession, attendance by students from other RIT majors is already being experienced.

Applied research. RIT's research agenda tends to be applied and interdisciplinary. Both student and faculty projects in the architecture program provide faculty and students in the Golisano Institute for Sustainability a range of real-life problems that are addressed by their work.

Campus sustainability. Like the Golisano Institute for Sustainability, the architecture program contributes significantly to the campus' environmental conscience. RIT has a good track record in this area, including the Sustainability Hall as its second LEED platinum academic building in New York State and its commitment to the American College and University Presidents' Climate Commitment (ACUPCC) for carbon neutrality by 2030, and the presence of architecture students and faculty is positioned to add to this record. In addition, many of our students work with RIT's Senior Sustainability Officer who's office is located within GIS.

**Benefit to the Program**

Among the benefits provided to the program by the university are reflected visibility, an academic culture hospitable to and experienced with professional degree programs, experience with studio-based instruction, existing exhibit spaces, and excellent facilities.

Reflected visibility. The strong reputation that RIT enjoys in design and technology will automatically provide positive visibility to the architecture program. Likewise, the Golisano Institute for Sustainability, one of a handful of such centers nationwide, is providing the program immediate credibility in the sustainability area.

RIT is home to the Vignelli Center for Design Studies, which provides a remarkable new setting for design education, research, and critical examination. The Center also houses the majority of the Vignellis' archival collection of their achievements in industrial design, architectural graphics, interior, and furniture design. Students and faculty from the architecture program have full access to this amazing resource.

Cooperative education. RIT has an extremely strong cooperative education program, which places students in over 50% of its academic programs in paid, major-related positions for up to a full year. RIT's experience in cooperative education will be a substantial advantage to architecture students as they seek co-op placement.

Professional degree programs. The university offers a number of professional graduate programs—from the MBA to a Physicians Assistant MS to the MFA to the ME in a number of engineering fields. Many of our MS programs are practice- rather than research-oriented. RIT's familiarity with accreditation, job placement, and capstone projects is directly helpful to administrators of the architecture program.

Studio-based instruction. RIT is extremely familiar with the space, personnel, and equipment requirements of studio-based programs, and this experience has served us well. Additionally, RIT has a long track record with evaluating studio work (through its NASAD-accredited programs).

Exhibit space. Although this is the first architecture program, RIT has an abundance of exhibit space that can be shared with architecture faculty and students, including the Dyer Art Gallery in the National Technical Institute for the Deaf, the Bevier Gallery in CIAS, and the University Gallery in the new Vignelli Center for Design Studies.

Facilities. Space is almost always an issue for new academic programs, and perhaps particularly for new architecture programs. The opening of our architecture program coincided with the closing of a large bay of a printing application lab in a building adjacent to the new building for the Golisano Institute for Sustainability. Approximately 10,000 sq. ft. of space was re-purposed for studios and classrooms. Additional administrative and faculty offices have recently been re-located in the new GIS building which will also provide additional shared lab, crit, and classroom space.

**Liberal Arts and Practicum-based Learning**

While this program is designed for students with a baccalaureate degree in a non-architecture field, we continue to receive numerous inquiries from students with some previous architecture background, and do consider admitting some of these students on a selected basis into the program. We continue attracting students from undergraduate majors as diverse as anthropology, engineering technology, urban studies, English, history, design, business, law and art. We have selected this model in order to assure that our students, who will be continually working in teams, will bring a rich breadth of academic background and intellectual problem-solving to the studio. We believe that students will continually learn from each other, as they share their diverse disciplinary perspectives.

Because this is a graduate program, there is no required liberal arts core in the Master of Architecture curriculum (incoming students must have earned a minimum of 45 SCH) of undergraduate general education). However, there are a number of liberal arts graduate electives that students may take (e.g., economics, public policy, urban studies, and art history). The program's emphasis on urban environments—of which the built environment is only one of many components—will require an interdisciplinary approach that references economics, public policy, sociology, and regional culture.

From their first semester in the program, students begin work in teams on projects and problem solutions. Our association with the Rochester architecture and design community will offer numerous opportunities to students for on-site work, as well as studio projects based upon projects and problems posed by the community. The required cooperative education experience is essentially a paid practicum in which students apply their studio learning to the real-world practice of architecture.

### I.1.2 Learning Culture and Social Equity

**Learning Culture Policies**

The program has adopted a robust Studio Culture Policy. Because it is important that there be complete investment in the policy and procedures, this policy was developed collaboratively by faculty, students, and staff during student orientation sessions and subsequent meetings and reviews - with its adoption in Fall 2012. The policy includes core values, goals, implementation, assessment, and arbitration, and will undergo review during the spring term in even calendar years. A copy of the Studio Culture Policy is included in Appendix C.

In addition to the Studio Culture Policy, other program policies have been developed to reinforce learning culture in every area of the program. These policies (some included in Appendix C) include:

Global Experience Policy

Co-op Policy

Thesis Policy

Advanced Standing/Course Waiver Policy

Independent Study

Digital Device Requirements

**Policy Access**

All policies are described and discussed during our annual fall Student Orientation, made available to each student, and are kept on file in the Department of Architecture office for reference.

**Implementation and Assessment**
An implementation and assessment process is a routine part of the program's policies, and includes both faculty and student input. The means and scheduling of assessment are a part of each policy and typically occur every other year.

**Participation**
See above.

**Harassment and Discrimination**
See Policy C6.0 in RIT's *Institute Policies and Procedures Manual:*
http://www.rit.edu/academicaffairs/policiesmanual/c060

**Academic Integrity**
See Policy D8.0 in RIT's *Institute Policies and Procedures Manual:*
http://www.rit.edu/academicaffairs/policiesmanual/d080

**Diversity**
RIT has an Office for Diversity and Inclusion (http://www.rit.edu/diversity/office-diversity-inclusion/) within the division of Academic Affairs solely dedicated to the successful recruitment of diverse faculty and professional staff to RIT. The Office of Faculty Recruitment oversees every faculty and professional staff search to ensure diverse applicant pools and equity in decision-making. All architecture faculty searches will adhere to hiring processes set up by this office and will make use of their resources.

The Office of Faculty Recruitment also maintains a database of minority and women graduate students. This database is used as a referral source for faculty openings and includes individuals in all stages of graduate study. With the recent internal approval of the Master of Architecture degree, architecture and related disciplines has been added to the database.

RIT has set ambitious goals for diversifying our undergraduate and graduate student populations. For the past few years, significant additional financial aid funds have been made available to competitive ALANA (African American, Latino/Hispanic, Asian and Native American) and female students. RIT has an active McNair Scholars Program, a federally-funded program that supports undergraduate students from under served populations who wish to attend graduate school (http://www.rit.edu/president/mcnair/program_overview.php).

Beginning in 2014, RIT launched its "AdvanceRIT" program, funded through a large institutional transformation grant from the National Science Foundation. The project's goals are to increase the representation of women STEM faculty at RIT and to increase their representation among our campus leadership.

The university is also home to a "Future Stewards Initiative"—an agreement between the university and American Indian/Alaska Native governments and communities for the purpose of providing educational and experiential programs for AI/AN scholars and facilitating their return to tribal communities (http://www.rit.edu/diversity/native-american-future-stewards-program-fsp).

Within the student population the, Master of Architecture program enrollment includes a diverse cross section of students covering gender, race, disability, and ethnicity. Statistical information is provided I.3.1 Statistical Reports.

### I.1.3 Response to the Five Perspectives

The five perspectives addressed in the discussion below correspond closely to RIT's "Educational and Access Goals," which reflect RIT's long-standing commitments to teaching, community engagement, application, and innovation. At the time of our program launch, all new academic programs must have demonstrably incorporated these goals into their educational objectives and learning outcomes; thus, they are addressed as part of every annual program assessment.

The program's five educational objectives (see p. 4), which are derived from these goals, speak both explicitly and implicitly to the five perspectives. Thus the five perspectives are tightly stitched into the cur-

riculum, extra-curriculum, and culture of the architecture program. Their similarity to RIT's Education and Access Goals further assures their continued centrality.

In the discussion that follows, the red superscript roman numerals correspond to the constituent elements of each of the five perspectives. The table following the discussion then demonstrates the correspondence between these constituents and the program's educational objectives.

**A. Architectural Education and the Academic Community**

RIT's commitment to the highest-quality teaching of innovative curricula derived from cutting-edge scholarship and practice is reflected in its tenure, promotion, and annual review policies. All full-time faculty in the architecture program are subject to one or more of these policies.

Teaching. The RIT tenure policy states, "the view that teaching is the foremost activity of the RIT faculty is deeply rooted in the institute's traditions. Teaching will continue to be a hallmark of RIT." The classroom effectiveness of every teaching faculty member is evaluated annually. "Evaluation of teaching must include a conscientious effort to obtain and consider information that relates directly to teaching and learning and makes effective classroom performance possible. This includes the review of student and peer evaluations." All faculty in the Department of Architecture, including senior tenured faculty, are evaluated annually, and if their teaching does not meet expectations, they will be required to develop, in consultation with their department head, a specific performance improvement program.

Professors-of-practice (adjunct faculty from the professional community) are routinely requested to attend a series of workshops in studio and team-teaching in our program and through RIT's Innovative Learning Institute's Teaching and Learning Services program. Adjunct teaching is regularly evaluated by students and by full-time program faculty.

Scholarship and service. In addition to teaching excellence, tenured and tenure-track faculty must meet pre-determined thresholds of scholarship and service. The RIT tenure policy defines "scholarship" as "research and *creative activity* [emphasis added] in a professional specialty, writing and publication in a specialized area, development of new courses and curricula, modification of existing courses or programs and investigation of alternative learning strategies" (https://www.rit.edu/academicaffairs/policiesmanual/e050) and (http://www.rit.edu/academicaffairs/policiesmanual/e060). During the first five to seven years of a program hire, all full-time faculty will be tenure-track or tenured.

RIT has a tradition of faculty-student collaboration in research, scholarship, and applied projects. Because of the close association of the architecture program with the Golisano Institute for Sustainability, faculty and student projects are intended to reflect the innovative technologies studied and developed there. We envision many collaborations between GIS faculty, GIS graduate students (M.S. and Ph.D.) and architecture faculty and students. [I, II]

Community engagement. Architecture faculty, staff, and students routinely and continually engage with the Rochester community. Professors-of-practice bring their experience as community professionals to the studio and classroom. Full-time faculty co-teach with professors-of-practice, oversee student projects in the city of Rochester, recruit community architects for juries, and promote the architecture program within AIA Rochester. [VI]

Holistic, practical, and liberal arts-based education. The required sustainability courses, the "Urban and Regional Planning" course, and the social science and art history electives bring considerable interdisciplinary breadth and depth to student learning. The integrated pedagogy, in which course material is inserted recursively on an as-needed basis, encourages holistic and integrated thinking, as do the five courses as the "Integrated Building Systems" sequence. With the high level of community engagement, students experience the academic and professional realms as fully integrated.

Practice-based learning is a hallmark of the RIT education. RIT students in all programs learn theory in the classroom and then have repeated opportunities to put that theory into practice—in later courses and in their multiple co-op placements. The majority of student assignments will be completed in a practicum setting—either the studio, a local architecture firm, a project site in Rochester, or co-op placement. [VII]

**B. Architectural Education and Students**

The second of the program's five learning objectives is particularly germane to this second perspective: the program will "provide students with the technical and practical knowledge necessary to develop innovative and sustainable solutions to urban problems." Because of this focus on urban architecture, students will be required to explore diverse city neighborhoods and identify and respond to the needs of a wide range of socio-economic and cultural backgrounds.

Because our students come from a variety of undergraduate majors, they bring multiple problem-solving approaches to bear on each project, yielding a rich and integrated end product. We foresee that our students will learn from one another as the circumstances require.

A key goal of the RIT Strategic Plans continue to provide innovation, creativity, research, and scholarship opportunities to 100% of our students. A variety of university resources has been developed to help us achieve this goal, including a Student Innovation Center, a growing undergraduate research program, an annual Innovation and Creativity Festival (ImagineRIT), a Student Entrepreneur House, and a business incubator (Venture Creations). Architecture faculty, staff, and students are encouraged to participate in the many opportunities made possible by these programs. [III, IV]

Student research, which includes not just the gathering of factual information but also the study of values, conventions, and assumptions influencing a problem or project, is stressed in years two and three of the program. The Research Seminar/Thesis Prep course will stress investigation, analysis, and exploration. Fourth year students may choose a research option (as opposed to design) for their final thesis. Regardless of the chosen option, the thesis studios will prepare students to work closely with a faculty committee during the preparation of their thesis. [V]

Each student will ultimately participate in at least two on-site projects within the city of Rochester, under the supervision of community professionals and RIT faculty. With no other architecture program in the metropolitan area and an urban building stock in need of creative attention, students and faculty from the program have many opportunities to propose and implement sustainable preservation and adaptive reuse solutions in the city of Rochester. [VIII]

All students are required to spend at least one term engaged in architecture-related work and/or study at an international location. Through affiliations with other universities and organizations (Syracuse University, Arcadia University, CIEE), students may study in western Europe, India, China, and South Korea and elsewhere. Students will be eligible to participate in architecture programs offered at Syracuse University centers in London and Florence and at the SUNY Alfred State program in Sorrento, Italy. The American University at Kosovo in Pristina is a strong RIT partner and offers tremendous potential for visiting architecture students. Kosovo is currently faced with the re-building and renovation of hundreds if not thousands of national monuments and historic buildings. The University of Pristina offers an architecture program and a masters in Urban Planning and Management, both of which are highly project-based. RIT's strong presence in Pristina promises a host of unique opportunities for our students.

The Studio Culture Policy insists upon the practice of mutual respect, diverse problem solving methodologies, faculty-student and student-student interaction and support, and independent thinking. Adherence to this policy will be regularly and routinely reinforced. To succeed in their studio work and in on-site group projects, students need to work productively with peers from diverse backgrounds, to negotiate respectfully differences of opinion, method, and practice, and to make and adhere to principled decisions. The faculty's continuous modeling of, and teaching about, the requirements of successfully integrated practice will enable students to work productively within cross-professional teams and to practice the leadership skills necessary to the team's success. The integrated practice emphasis will also serve as a model for global interaction in the business world. The Student Review Committee (SRC) (see I.1.5) evaluates student progress in these areas on an annual or biannual basis. [IX]

The program's sustainability focus and its integration within an active sustainability research organization (GIS) encourages intellectual growth and agility. Students are first-hand witnesses to the swift pace of technological solutions to sustainability challenges, thereby recognizing the importance not only of knowledge currency, but of a capacity for understanding and applying new technologies. [X]

### C. Architectural Education and the Regulatory Environment

One of the major goals of the curriculum is to prepare students for the licensure exam, and beginning with new student orientation, licensure and registration are constant themes of the program. A number of courses address the many layers and rationales of building regulations, including (but not limited to) the ARCH-771 Professional Practice course, the ARCH-741/4 Integrated Building Systems series, and the ARCH-763 Sustainable Building Metrics course.

Students' mandatory co-op assignments provide them with contemporary examples of internship work. Out-of-state and international co-op assignments will expose students to other regulatory environments. All students have the opportunity to work with licensed architects and other professionals, thus gaining a first-hand understanding of the range of opportunities available to both. [XI]

AIA Rochester, one of the strongest regional AIA chapters, has excellent relationships with key NYS licensing officials and regularly helps organize strategically-timed information sessions for the students on the topics of internship, licensure, and NYS regulations.

RIT and AIA Rochester have encouraged and supported the creation of an AIAS chapter. Participation in AIAS continues to broaden the students' understanding of both the IDP process and the necessity of continuing education in architecture-related issues.

### D. Architectural Education and the Profession

Students' required international experience is an important first step in the road to becoming global architects and thus global citizens. The program focus on urban architecture is expressed in a number of case studies involving international cities with distinctive sets of economic, cultural, and political forces. As the students' analytical toolbox grows (through coursework and practicum experience) they bring increasingly multi-disciplinary perspectives to the consideration of complicated urban problems. This is particularly important as we recognize current shifts in the profession with a growing expansion in areas such as design build, integrated project delivery, and global practice.

The sustainability focus repeatedly reinforces how sustainable design can have a positive aesthetic and environmental impact on the diverse populations of contemporary cities. The number one educational objective of the program (the achievement of which will be regularly assessed) is to "develop in…students a first-principle commitment to a fully sustainable built environment." It is our intent that by the time they graduate, students will have developed a deep environmental ethic that is indivisible from design. [XII, XIII]

The architecture program focuses on methods of integrated practice in such courses as the Integrated Building Systems sequence and Professional Practice, and it routinely enlists the teaching and advisory services of individuals from related professions. This includes contractors, builders, and architects who successfully deploy professional integration in major projects, as well as all our professors-of-practice (adjunct faculty). Through the diverse composition of our professors-of-practice, our advisory board, and our project juries, students are regularly exposed to the priorities and perspectives of professionals from related fields. In their group project work, students practice leadership, facilitation, and implementation skills. [XIV] Their close association with faculty and students in the Golisano Institute for Sustainability allow them to experience practitioner-researcher relationships.

The program's close association with AIA Rochester puts students in regular contact with professionals fully dedicated to the growth and development of the profession, as will their co-op placements. Participation in AIAS accustoms students to connect to current leadership as they help mold the future of the profession.

### E. Architectural Education and the Public Good

RIT's unusually strong ties with the Rochester community is already being reflected in the architecture program. It is largely within the framework of the greater Rochester community that our students learn what it means to be an architect and a contributing community member. This means regular interaction not only with area professionals, but with city leaders, with highly diverse city neighborhoods, and with active city organizations. As communication skills are emphasized, students are taught to be effective listeners to clients and appropriately respond to their expressed needs.

Among the courses supporting this perspective is ARCH-752 Urban and Regional Planning. This course provides students with the skills necessary to examine critically a number of contemporary social issues related to the practice of architecture, including but not limited to universal design, ethnicity in the urban form, ethical decision-making, and the role of the architect in society. In this course, students work with area planning organizations and/or agencies to provide community service in the design process for neighborhoods. The degree to which every course is successful in achieving its learning outcomes will be regularly assessed. [xv]

The required sustainability courses develop in students a deep appreciation for the necessity and the challenges of sustainable building. Several courses in the design sequence, ARCH-763 Sustainable Building Metrics, and ARCH-762 Industrial Ecology Fundamentals equip students with the knowledge and analytical skills necessary to advocate and produce sustainable solutions. [xvi]

More generally, the many and varied but focused studio courses give students opportunities to experiment with the various roles of architectural practice: client, designer, funder, builder, and policy maker alike.

| **Program Educational Objectives Supporting the Five Perspectives** | **NAAB Five Perspectives** | | | | |
|---|---|---|---|---|---|
| | A.Academic Community | B. Students | C. Regulatory Environment | D. Profession | E. Public Good |
| First-principle commitment to a fully sustainable built environment | I | | | XII | XVI |
| Technical and practical knowledge necessary to develop innovative and sustainable solutions to urban problems | II | VII | | XIII | XV |
| Sophisticated skills in design, creative thinking, and problem solving; | III, V | | | | |
| Leadership in a briskly evolving profession requiring teamwork, business integration, and holistic thinking | IV | IX | | | |
| Knowledge and skills necessary to obtain professional licensure | VI, VII | X | XI | XIV | |

**Summary of Co- and Extra-Curricular Activities Supporting Five Perspectives:**

- Cooperative education placements in Rochester community
- Collaboration with GIS sustainability students and faculty regarding research and technological breakthroughs
- Participation of professors-of-practice (adjunct faculty) in the routine culture of the program
- Participation in AIAS
- International study/co-op
- Speakers' Series both university and community wide
- Neighborhood projects and community service
- Participation in local AIA programs, charrettes, neighborhood studies
- Connection through AIA with NYS IDP coordinator
- New student orientation each fall

## I.1.4 Long-Range Planning

### Continuous Improvement

In all of RIT's academic programs, continuous improvement is assured through the annual assessment process (see next section). The architecture program's original vision, mission, and educational objectives was derived from RIT's Education and Access Goals (EAG), continued by aligning with its recently concluded Strategic Plan (2005-2015), and is reinforced by its most recent Strategic Plan - *"Greatness Through Difference: RIT's 2015-2025 Strategic Plan"*. In turn, the program vision, mission, and objectives, along with the NAAB performance criteria, inform the program learning outcomes, which is where internal assessment and continuous improvement take place.

### Long-Range Planning

For the most part, it is at the level of the educational objectives that consideration of the long-range direction of the program will occur (see I.1.1). Three key groups responsible for continually testing and adjusting the direction of the program as reflected in these objectives are the Architecture Program Advisory Council (APAC) at a visionary/strategic level, the program faculty (full- and part-time) at both the visionary and execution levels, and the Curriculum Committee at the program and pedagogical level.

With its large number of professional and technology-dependent academic programs, RIT has become adept not only at reacting to external changes, but at anticipating them and adjusting curricula quickly and seamlessly. In most cases, these changes are identified through the collaboration of engaged professionals, including employers who hire our students for co-op and permanent employment, members of professional advisory boards, full-time faculty (for whom currency is an ongoing requirement reflected through research and scholarship), and part-time faculty (professors of practice). In other words, RIT is well-practiced in using its many industrial/professional advisors as critical bellwethers to ensure program currency.

Annually, the program holds a year-end retreat to critically review the programs successes and shortcomings and assess its direction and growth. We also hold an end-of-year student conversation forum, providing all students an opportunity to comment and provide feedback on their experience in the program, and the department head has meetings with student leadership at least once per semester.

### Data and Information Sources

The Architecture Program Advisory Council (APAC), identified above, is central in identifying a list of key indicators that will be analyzed at regular intervals. These indicators relate to salaries, hiring patterns, economic forecasts, hardware/software developments, and technological innovation, to name only a few. Sources for these data are intended to be from professional and government organizations, research results, conference presentations, and professional publications.

Another important source of information are the results of the annual assessment of learning outcomes, which always have the potential to influence changes in the program. For example, consistent underperformance in an outcome would lead to re-thinking of program direction or admissions requirements or faculty-student ratios, while consistently meeting benchmarks will be evaluated to address raising standards as the program and profession evolves.

### Institutional Long-Range Planning

Since the early 1990's, RIT has relied upon a flexible strategic planning process to chart and correct the institutional direction. Strategic planning, which always begins at the institutional vision and mission, is a community process, with all constituencies represented in the development of a 10-year institutional blueprint. Strategic goals are assigned annual, quantifiable targets and a final target to be reached by the retirement of that strategic plan.

Flexibility is a hallmark of our strategic planning. Embedded in each plan is a process for changing goals and targets as necessitated by unforeseen changes in the external and/or internal environment. For example, when President Bill Destler came to RIT in 2008, he brought with him a vision of RIT as "the innovation university," one that, because of its unique program portfolio, can, in his words, "bring the right

and left brain together" to yield truly innovative interdisciplinary programs. The "innovation university" was entirely in keeping with the RIT tradition of career-oriented programs in the arts, technologies, and sciences, but it did drive some modifications to the existing strategic plan, including, for example, a new goal to "grow RIT's reputation in sustainability." The architecture program presented here is a product of this flexible, but always mission-faithful strategic planning, and continues through its current vision..

The recent adoption of the newest RIT strategic plan - *Greatness Through Difference: RIT's 2015-2025 Strategic Plan* (https://www.rit.edu/president/plan2025/greatness) was presented to the Board of Trustees in November of 2014 and approved for adoption this year. It boasts RIT being a world leader in experiential education, with its cooperative education program the fourth oldest and one of the largest in the world. It continues to commit to carbon neutrality, LEED certified buildings, and sustainability focused degree programs, and specifically mentions the architecture program as "among the first to consider sustainability as a curricular element equal in importance to design."

During the strategic planning conversations, five intersecting spheres evolved into the cornerstones of the plan:

- Career Education and Student Success – Cultivating student success through the academic enterprise with confidence in the "quality of teaching, learning, research, scholarship and academic support services that are the student's academic environment."
- The Student-Centered Research University – Through inter and cross-disciplinary collaboration, "combining activities of research, scholarship, artistic creation, creative inquiry, teaching and learning."
- Leveraging Difference – Recognizing the importance of diversity and inclusiveness, intentionally developing "practices, opportunities and programs that harness the power of difference to drive creative solutions, innovative combinations, and productive collaboration."
- Affordability, Value, and Return on Investment – Recognizing affordability by providing "the next decade's students with the skills and knowledge necessary to succeed I satisfying and remunerative careers."
- Organizational Agility – Moving quickly and efficiently to change, and staying "abreast of the latest research, to deploy the most current, appropriate, and efficient tools, and to move quickly in responding to sustainability imperatives."

**Role of five perspectives**

As mentioned earlier, the five perspectives are clearly reflected in the program's educational objectives. Long-range, strategic planning for the program will occur within a discussion of these objectives, which virtually guarantees that the perspectives will play a central role in this ongoing activity. As these perspectives evolve into the "Defining Perspectives" under the forthcoming *"2014 Conditions"*, we have begun to address our educational objectives within the context of the NAAB's evolving criteria.

**I.1.5 Self-Assessment Procedures**

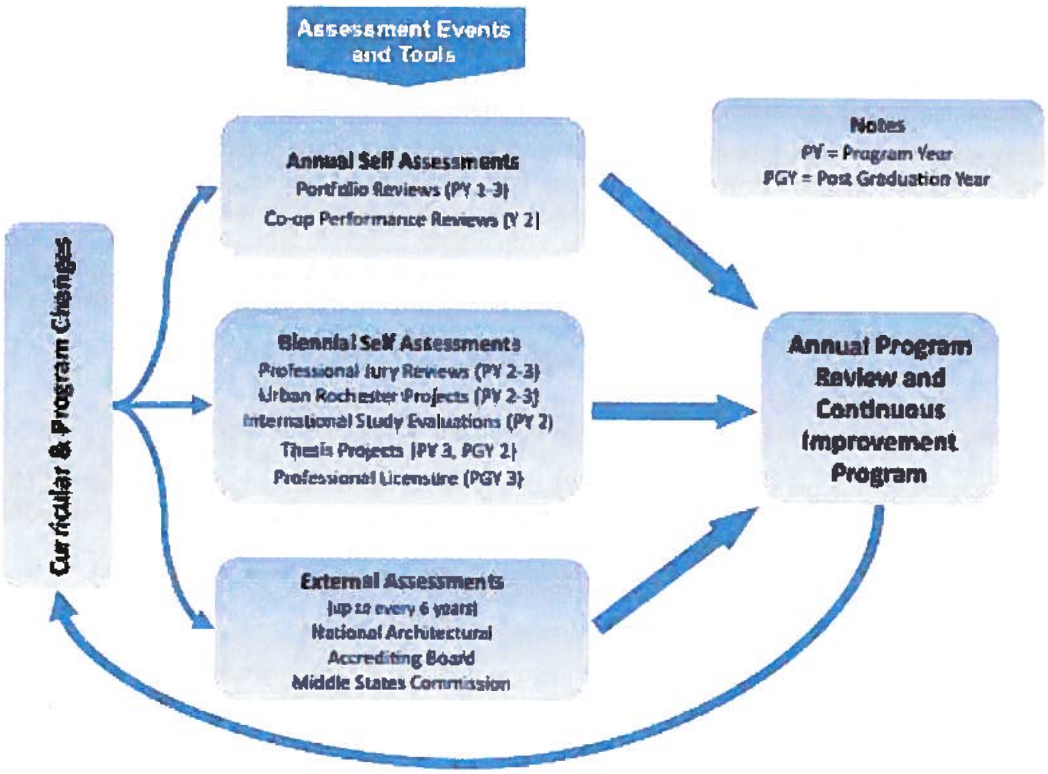
Any discussion of assessment in architecture education must recognize the role played by studio pedagogy in student learning. The design studio is the pulse of every architecture program: it is the setting for faculty instruction and feedback; for student-to-student mentoring; for collaborative design and problem-solving; and for the constantly critiqued iterations of every design experiment and project. Final course and project grades remain the summative forms of evaluation for architecture students, but equally, if not more important, are these continuous formative exchanges that are the engine of student learning.

The dominant idiom of the studio is the language of evaluation and assessment; student work, including incorporation and application of course content as well as the development of skills and abilities, is repeatedly subject to review, comment, suggestion, and evaluation by faculty, professors-of-practice, and peers. Progress in student learning is possibly more closely monitored in architectural (and art) studios than any other teaching venue. Learning (or its opposite) is everywhere evident and everywhere leveraged as the basis for new learning. In other words, the design studio epitomizes a learning culture of evidence.

***Thesis Committee.*** Constituted of program faculty and often an outside professional, the thesis committee advises students throughout the thesis process and the final thesis evaluation.

***Professional Juries/Invited Critics.*** Professional juries involve professionals in the field who have volunteered to critique student projects. While this practice is a convention of architecture education, it is a deliberate and focused intention to reinforce our integrated learning process.

The assessment plan and schedule are represented in the flowchart below and tables on the following three pages.




*Conceptual Assessment Flow Chart*

<u>Academic Program Review.</u> As with all RIT degree programs, the Master of Architecture program will regularly undergo Academic Program Review through the institutional review process. At the university level, the process has been revived by Academic Affairs, and it will assess each academic program every 4-5 years for such qualities as institutional fit, financial viability, quality, and enrollment.

**Assessment Results**

According to the Assessment Plan, an annual portfolio review should result with a goal of 80 percent or greater competency in 80 percent of the topic areas. At the close of the 2013-2014 academic year, 75 percent of the students in year one, 82 percent of the students in year two, and 100 percent of the students in years three met the 80 percent benchmark. Overall, combining all three years, 86 percent of the students bet the established criteria.

Another metric, the Global Experience requirement has achieved a 100% pass rate for those who have completed their international study requirement.

A third assessment benchmark is co-op success. Between 2013 and 2014 eighteen co-op placements occurred. Easily 100% of the students received satisfactory ratings from their employers consistently scoring "excellent" or "exceeds expectations" on the majority of questions. So successful were these co-op placements that every student except four were requested to work part-time after completing the co-op. And of those four, two were out of the area so continued employment was not possible.

These features of studio pedagogy do not obviate the need for formal review and assessment, but any formal assessment plan must derive from the highly applied, visible, and iterative learning that is the studio experience.

**Self-Assessment Process**

At the institute level, RIT requires a detailed assessment plan for all new program proposals, and the Architecture program adheres to these institutional assessment requirements. As mentioned above under Long Range Planning, it is a detailed, evidence-based assessment plan that provides a mechanism for continually reviewing and improving the program. Just as RIT's strategic goals and Education and Access Goals are founded in the RIT 2015 - 2025 vision and mission, the program learning outcomes derive from a program assessment superstructure—the vision, mission, and objectives presented in Section I.1.1—that is itself informed by the RIT vision, mission, and goals.

At the program level, a broad framework for self-assessment is in place and is being used as the basis for a more detailed self-assessment methodology and metric. The Department works with the Student Learning Outcomes Assessment (SLOA) Office, and through a series of meetings with SLOA we have outlined a set of objectives and characteristics for both program and student assessment. The tool being utilized is *Taskstream* and has embedded in it the various NAAB criteria for accreditation, providing clear, measurable metrics and outcomes. Each year we assess several outcomes and report to the SLOA office a set of evaluated metrics.

**Program Learning Outcomes**

Program learning outcomes are intended to encompass the broad criteria listed below:

1. Ability to apply the principles of sustainable design and practices to produce projects with the highest potential for conserving natural resources, providing healthy environments for users, and reducing the negative impacts of construction and operations.
2. Ability to apply historical lessons to contemporary urban problems.
3. Ability to conduct and present business analysis of design choices.
4. Ability to produce a comprehensive architectural product with the highest potential for sustainability within a professionally collaborative context.
5. Fluency with the goals and methods of architecture-related operations and the ability to integrate these productively.

<u>Assessment Responsibilities</u>. In addition to the program faculty, the following groups are involved in program review and assessment:

***The Architecture Program Advisory Council (APAC).*** APAC is a source of advice and counsel, consisting of professionals in local and national architecture and building positions, and architecture educators.The advisory board meets intermittently and serves in an oversight capacity to guide, advise, review and inform the make-up and construct of the program - discussing the degree to which the program aligns with developing expectations, the future direction of the profession, and to assist in identifying relevent metrics for assessment.

***Student Review Committee (SRC).*** Consisting of one to two full-time faculty members, a professor-of- practice, and a program associate (AIA member, co-op and/or full-time employer), a Student Review committee (SRC) is available to provide a resource of professionals to engage with students both formally and informally. The SRC advises students on course, co-op, and international study choices; track student progress and developing interests; conduct portfolio reviews; and serves as a pre-thesis guidance to students.

***Mentor Matching Program (MMP).*** During each year each incoming students meets with volunteer mentors through an interactive interview session. Following these"speed mentoring interviews", students are matched with an outside professional who serves as a professional guide to assist the student with her or his academic pursuits. As a matter of convenience, the MMP creates a stronger, more personalized link between the SRC and students.

**Program Goal 1:** The program will produce broad-thinking architects well-grounded in the principles and practices of sustainability.

| | | | | |
|---|---|---|---|---|
| **Learning Outcomes** | Students will be able to: | | | |
| | 1. Comprehend interrelated sustainability concepts from multiple disciplines such as economic, environmental science, engineering, policy, and social science.<br>*NAAB realms B & C* | 2. Formulate problem statements and then identify and ascertain the impact and design opportunities for the various influences (such as historic, social, cultural, etc.) on any given design problem.<br>*NAAB realm A* | 3. Comprehend the principles of project management, the resources applied to a project, and the process of guiding the project to successful completion.<br>*NAAB realm C* | 4. Analyze and synthesize diverse aspects of professional practice.<br>*NAAB realms A & B* |
| **Acad. Profile** | Alignment to the five RIT essential outcomes. | | | |
| | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies<br>Creative/Innovative Thinking | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies<br>Global Interconnectiveness<br>Creative/Innovative Thinking |
| **Data Source/Measure** | Assessment opportunity. | | | |
| | 1. Years 1-3<br>Final projects in sustainability courses<br>2. Years 1-3<br>Final line item in portfolio review form: "Demonstrates an understanding of the relationship between..." | 1. Years 2-4<br>Problem statements and design analyses from studio projects and thesis<br>2. Year 3<br>Urban Rochester project evaluated by team | 1. Years 2<br>Co-op performance reviews by employers<br>2. Years 2-3<br>Studio projects<br>3. Year 4<br>Thesis project | 1. Year 3<br>Final project in Professional Practice course<br>2. Year 6+<br>Professional licensing exam<br>3. Post Grad<br>Graduate employment survey by grads |
| **Benchmark** | Standard, target, or achievement level. | | | |
| | 1. ≥ 90% achieve grade of "B" or better on final project<br>2. ≥ 80% competency in 80% of topic areas | 1. 100% meet criteria<br>2. ≥ 90% positive feedback from sponsoring agency | 1. ≥ 90% satisfactory<br>2. ≥ 90% substantially complete projects by due date<br>≥ 90% successfully assume leadership role on team projects<br>3. ≥ 80% substantially complete thesis by planned deadline | 1. ≥ 90% achieve grade of "B" or better on final project<br>2. ≥ 80% pass professional practice part of exam<br>3. ≥ 80% respondents assess their skills in this area as competent |
| **Timeline** | When and how data are collected, aggregated, and analyzed. | | | |
| | 1. Annually<br>2. Annually | 1. Annually<br>2. Annually | 1. Annually<br>2. Annually<br>3. Alternate years | 1. Annually<br>2. Every five years<br>3. Alternate years |
| **Data Anal.** | Who is responsible and key findings. | | | |
| | 1. Faculty<br>2. SRC | 1. Faculty<br>2. Sponsoring agency and client | 1. Employers<br>2. Faculty<br>3. Thesis committee | 1. Faculty<br>2. Staff<br>3. Grads |
| **Results** | How results are used and shared, any recommendations or action items. | | | |
| | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. |

**Program Goal 2:** Graduates will be able to create comprehensive projects that solve problems at the intersection of architecture and sustainability.

| | | | | |
|---|---|---|---|---|
| **Learning Outcomes** | Students will be able to: | | | |
| | 1. Apply principles of sustainable design and practice to projects.<br>*NAAB realms B & C* | 1. Apply principles of sustainable design and practice to projects.<br>*NAAB realms B & C* | 3. Conduct and present business analysis of design choices.<br>*NAAB realm C* | 4. Coordinate diverse aspects of professional practice.<br>*NAAB realms A & B* |
| **Acad. Profile** | Alignment to the five RIT essential outcomes. | | | |
| | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies<br>Creative/Innovative Thinking | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies<br>Global Interconnectiveness<br>Creative/Innovative Thinking | Critical Thinking<br>Integrative Literacies | Critical Thinking<br>Ethical Reasoning<br>Integrative Literacies<br>Global Interconnectiveness<br>Creative/Innovative Thinking |
| **Data Source/Measure** | Assessment opportunity. | | | |
| | 1. Years 1-3<br>Annual portfolio reviews by SRC (rubric-based)<br>2. Year 2<br>a. Co-op performance reviews by employers.<br>b. Professional jury review (rubric-based)<br>3. Year 4<br>a. Professional jury review (rubric-based)<br>b. Thesis project evaluated by thesis committees | 1. Year 2<br>International study evaluation by students<br>2. Years 2-3<br>Urban Rochester project evaluation by team | 1. Year 2<br>Co-op performance reviews by employers<br>2. Years 4<br>Thesis project | 1. Year 4<br>a. Final portfolio review<br>b. Thesis project<br>2. Year 5<br>Professional licensing exam<br>3. Post Grad<br>Graduate employment survey by grads |
| **Benchmark** | Standard, target, or achievement level. | | | |
| | 1. ≥ 80% competency in 80% of topic areas<br>2. a. ≥ 90% satisfactory<br>b. ≥ 80% competency in 75% of topic areas<br>3. a. ≥ 90% competency in 90% topic areas<br>b. ≥ 90% pass rate | 1. 100% pass rate<br>2. ≥ 75% yes to summary question: "Would you recommend this experience…?" | 1. ≥ 90% satisfactory<br>2. ≥ 80% pass on oral client presentation simulation | 1. a. ≥ 90% competency in 80% of topic areas<br>b. ≥ 90% pass<br>2. ≥ 80% licensed<br>3. ≥ 80% grads employed in arch-related field |
| **Timeline** | When and how data are collected, aggregated, and analyzed. | | | |
| | 1. Annually<br>2. a. Annually<br>b. Alternate years<br>3. a. Alternate years<br>b. Every five years | 1. Alternate years<br>2. Alternate years | 1. Annually<br>2. Alternate years | 1. a. Annually<br>b. Alternate years<br>2. Every five years<br>3. Every five years |
| **Data Anal.** | Who is responsible and key findings. | | | |
| | 1. SRC<br>2. a. Employers<br>b. Jury<br>3. a. Jury<br>b. Thesis committees | 1. Students<br>2. Project team | 1. Employers<br>2. Thesis committees | 1. a. SRC<br>b. Thesis committees<br>2. Staff<br>3. Staff |

| | How results are used and shared, any recommendations or action items. | | | |
|---|---|---|---|---|
| **Results** | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. | Results discussed at faculty meetings, at annual program retreat, and with APAC. Results are posted on RIT Assessment website. |

## I.2 Resources

### I.2.1 Human Resources & Human Resource Development

**Introduction**

RIT has had little difficulty in attracting the personnel necessary to establish and maintain this architecture program. RIT has been included on the *Chronicle of Higher Education's* "Great Colleges to Work For" list numerous times since the award began in 2009 (https://www.rit.edu/overview/rankings-and-recognition). In recent years, new graduate programs at the university have recruited a number of internationally recognized faculty. RIT's reputation as an innovative, contemporary institution seems to have reached all sectors of the higher education landscape.

An international search for a program chair (head) commenced in June 2010 and concluded in July of 2011. Staffing for courses intends to include a total of four FTE faculty (in addition to the program head) plus professors-of-practice as adjuncts. Since the last site visit, courses have been taught by three full time architecture faculty, three full time GIS/Sustainability faculty, and adjuncts. The program recruited and hired one of the three full time faculty in 2014 following a national search, with an additional national search commencing in fall 2014. This new fall 2014 search results from a full time faculty who had been on extended leave since 2013 resigning at the end of 2014. In January 2015 there was an unexpected resignation of our new full time faculty member, thus the current search has expanded to two full time positions, keeping the program in line with its growth model for faculty to align with increased enrollment.

**Faculty-Course Matrix**

A Faculty-Course Matrix is included in Part Four - IV.4.3

**Faculty Resumés**

Resumés for faculty teaching in the program during the last two years are included in Part Four - IV.4.3.

Recent accolades for some faculty since the last site visit include:

NSF Career Grant (two faculty)

Heldrich-Dvorak Travel Fellowship

AIA Rochester Past President Award (two faculty)

AIA New York State Gold Medal

**EEO/AA for Faculty, staff, and students**

RIT and the proposed program are fully committed to equality and diversity as outlined in the following policies.
https://www.rit.edu/academicaffairs/policiesmanual/e011
https://www.rit.edu/emcs/seo/?/employers/handbook

**Additional Diversity Initiatives**

RIT is serious about increasing the diversity of its faculty, staff, and students. The Strategic Plan continues to set ambitious goals for ALANA ( African American, Latino/Hispanic, Asian/Pacific Islander, or Native American) representation among these three groups .

As noted in section I.1.2 of this document, RIT's Office of Faculty Recruitment provides comprehensive services to ensure the greatest possibility of hiring diverse faculty and professional staff. The success of

this office and its "Future Faculty" program has been cited in the *Chronicle of Higher Education*. The Office of Faculty Recruitment website is noted below.

https://www.rit.edu/academicaffairs/facultyrecruitment/faculty_program.php

RIT's Chief Diversity Officer and the Office of Diversity and Inclusion has developed over one dozen programs that recognize and celebrate diversity, including a Global Leadership Certificate program, and Partners in Pluralism, all to foster living, learning, and working environments that support and incorporate principles of equity, diversity, inclusion, and community.

**Human Resource Development (Professional Development)**

RIT's focus on emerging technologies places a premium on faculty currency. All programs accredited by professional organizations (e.g., engineering, design, business, computer science, physician's assistant) must demonstrate in their re-accreditation documentation the subject area currency of their faculty. RIT's policies on promotion, tenure, and annual review all include expectations for research and scholarship: "All tenured and tenure-track RIT faculty must be actively participating in the scholarship of their disciplines." (https://www.rit.edu/academicaffairs/policiesmanual/e040)

All colleges and the Golisano Institute for Sustainability have dedicated professional development funds available to faculty for travel to professional conferences and other activities demonstrably contributing to individual scholarship, development, research and creative exploration.

A number of internal programs and grants exist to support faculty in their research and scholarship. These include faculty leaves for professional/career development (sabbaticals), the Provost's Learning Innovation Grant for faculty projects, the Provost's Cultural Diversity Grant, Interactive Learning Grants, the Ronald D. Dodge Memorial Endowment Fund Faculty Grant, Faculty Evaluation and Development Grants, and the FYE/NTID Extracurricular Opportunity Grant.

RIT's Teaching and Learning Center (TLC) in the Innovative Learning Institute (ILI) is charged with promoting and supporting student learning through faculty development and teaching excellence. The TLC supports faculty's disciplinary currency through a number of initiatives and resources, including the Center for Professional Development. Additionally, the Wallace Center houses is the hub for research and information exchange, housing traditional and digital research materials. The Wallace Center is best described as a high technology, multimedia resource center offering access to a vast array of information resources as well as a place for the RIT community to gather, talk, connect, explore new ideas and more.

The TLC also serves as a clearinghouse for information about college teaching and student learning, an advocate for effective teaching, and a provider of programs and services. Services include individual consultation, classroom observation, classroom videotaping, a teaching learning website, informal classroom assessment techniques, formative feedback, small group instructional diagnosis, the Faculty Institute on Teaching, Learning and Technology, experienced faculty workshops, and departmental workshops.

Over the last two academic years, faculty have engaged in a variety of scholarly and professional activities both locally, nationally, and internationally. A summary of some of the various activities and events includes the following:

AIA National Convention

AIA New York State Convention

AIA Rochester Workshop: Digital Architectural Practice, jointly sponsored by AIA Rochester and the Master of Architecture Program

AIA Knowledge Leadership Assembly

Congress for the New Urbanism 22

Colegio de Arquitectos del Perú, Lima Perú

Landmark Society New York State Conference

Community Design Center Rochester, various activities

Asian Conference on the Arts humanities and Sustainability

Fifth International Conference on the Constructed Environment

IDP Educator Coordinator Conferences

ACSA Administrator's Conference

The Malmö University - RIT Partnership - both at RIT and in Malmö, Sweden

**Faculty Appointment, Promotion, and Tenure**
RIT Provides a clear set of policies on faculty appointments, promotion and tenure.

| | |
|---|---|
| Faculty employment: | https://www.rit.edu/academicaffairs/policiesmanual/e040 |
| Tenure policy: | https://www.rit.edu/academicaffairs/policiesmanual/e050 |
| Faculty rank: | https://www.rit.edu/academicaffairs/policiesmanual/e060 |

**Students: Evaluation for Admissions**
Admissions assessments and application evaluations are made by the Admissions and Recruitment Committee, consisting of architecture, sustainability and CIAS faculty. In turn, recommendations are made to the department head for a final acceptance decision. As in all such decisions, candidate strengths demonstrated through one or more admissions requirements may compensate for weaknesses in others. While student portfolios often do not include examples of architectural drawing/design, evidence of creative talent and potential is particularly important and emphasized

Students lacking required coursework in math and science or deemed to be particularly inexperienced in drawing may be admitted conditionally, with the requirement that a grade of B or better is earned in the recommended course(s) before matriculation.

Admissions requirements for the program include the following:

- Undergraduate cumulative GPA of B (3.0) or better
- GRE scores (verbal and quantitative)
  - Recommended minimum: 1000 total
  - Greater than 500 verbal
- TOEFL scores for students not receiving their bachelor's degree in an English-speaking institution
  - Recommended computer-based score: 250
  - Recommended paper-based score: 600
- One semester of college math and one semester of college science
- Portfolio of Creative Work
  - Applicants may submit sketches, constructions, graphics, and/or photographs
- Personal Statement of Purpose
  - 1,000-1,500 essay summarizing student's reasons for pursuing the Master of Architecture and career intentions, with a recent addition to include a video submission
- Three letters of recommendation (including former instructors and professional employers). References should comment on the student's communicative, collaborative, and leadership abilities.

**Recruitment of Underrepresented Students**
See I.1.2 for discussion of the program's and university's plans for increasing student diversity.

**Student Support Services**
Students in the architecture program benefit both from a program-specific network of student support *and* existing services available to all RIT students.

Advising. Upon entry to the architecture program, all students are assigned a primary advisor and an

alternate advisor. During the course of the first year the Mentor Matching Program (MMP) commences and each student is matched with an outside professional as a mentor/advisor. Collectively, these teams are responsible for monitoring the student's progress, developing interests, and project assignments. Individual faculty members, and faculty advisors provide overall course advising, while practitioners provide co-op and career mentoring. Into the student's third year, a thesis committee is added, consisting of full- and part-time faculty with expertise in the students' projected thesis area.

Academic Support. The Academic Support Center (ASC) provides academic assistance to all RIT students, including workshops, classes, and labs in reading, writing, mathematics and study skills. The ASC provides services to all students, from incoming freshmen to graduate students.

The Academic Support Center faculty work closely with other RIT faculty members to determine how ASC can best provide support for students and academic courses. This collaboration has led to team-teaching, specialized labs, and effective referral systems. The ASC also maintains liaisons with other support programs on campus to provide a comprehensive network of services.

Co-op (internship) and career placement. As the fourth oldest and fifth largest cooperative education university in the country, RIT boasts extraordinarily effective placement services. The mission of the office of Career Services and Cooperative Education is to provide effective, high-quality services to RIT students and alumni that empower them to succeed in obtaining employment appropriate to their career objectives and personal goals. RIT accomplishes this mission by a commitment to outstanding customer service, the effective use of state-of-the-art technology, and the creative and effective use of human and fiscal resources (http://www.rit.edu/emcs/oce/).

The director of Co-op Services and Career Services routinely works with the department to discuss placement prospects for architecture students. In addition, the faculty, mentors, the professors-of-practice, and AIA Rochester actively contribute to the securing of placements for our students.

Office of Graduate Studies. RIT's Office of Graduate Studies "ensures that the educational needs of graduate students such as attentive mentoring, access to well-equipped laboratories, library support, and dedicated work space, are addressed. They also strive to enhance the environment for graduate study through provision of high quality services designed to serve the expectations of graduate students." (http://www.rit.edu/academicaffairs/gradstudies)

Study Abroad Office. Architecture students have access to the services of the Study Abroad Office. Some students have participated in existing opportunities—both through existing affiliation agreements and RIT programs. In addition, architecture-specific international placements are being developed by program faculty and associates, but always in close consultation with the study abroad office.

**Student Activities**

The architecture program budget has a student activities line that assists in supporting off-campus, professionally-related activities for students such as field trips, regional lectures, and professional conferences. The division of Student Affairs makes "Interactive Learning Grants" available to students and faculty, with the purpose of promoting a richer, more collegial interchange among faculty, staff and students by supporting such activities as field trips, gatherings, and discussion groups.

As mentioned earlier, AIA Rochester has committed to being an active partner in the total education of our students. Considering these emerging professions as the future success of the profession AIA Rochester has offered an open invitation to each of its program events. Students participate regularly with AIA Rochester's Emerging Rochester Architects (ERA) programs, and membership in the American Institute of Architecture Students (AIAS) is established. A local practitioner and one of our faculty adjuncts volunteers to serve both as a faculty/practitioner liaison to AIAS and as the IDP Auxiliary Coordinator. The IDP Auxiliary Coordinator attended the IDP Educator Coordinator Conferences in July of 2013 and 2014. In addition to these collaborations and the AIAS, GIS has a unit wide organization, the Student Coalition for Sustainability and Design (SCSD), which has leadership from both departments.

Students are routinely invited to all Community Design Center of Rochester (CDCR) events, and the Vignelli Design Conversation Series. At the time of this writing, the CDCR's Reshaping Rochester Lecture by Lee Quill, FAIA, architect and planner, is being sponsored by our program. This includes a lunch

meeting and conversation exclusively for our students. During summer of 2014 some of our students attended the Congress for the New Urbanism (CNU22) in Buffalo, New York. In fall of 2012 several students collaborated with MS and PhD students to submit an EPA grant proposal on Micro Hydropower, intended to study this unique approach to the rainwater system in the new GIS building. Students attended and presented results of their work in Washington DC in 2014. In winter of 2013 student leadership attended the AIAS National Forum.

A student initiated lecture series using Google+ Hangout. Titled *Conversation(s) - sustainable thoughts | designs | actions*, occurs throughout one or both semesters each year. This live, interactive, web-linked series has run informally for students in the program, on campus, abroad, and open to other professionals and interested parties. GIS has a regular lecture series each semester - the GIS Graduate Seminar Series - for all PhD, MS and architecture students in the program. The Department of Architecture launched its own lecture series this fall called archiTALKS.

Our students have gained valuable visibility and recognition as they continue to advance in the program. Recent student accolades include:

National Competition Honorable Mention - ACSA/AISC 14th Annual Steel Competition

AIA New York State Student of the year Award

AIA New York State Student Design Award (3 students)

EPA People, Prosperity and the Planet Grant Award (6 students)

AIA Rochester Emerging Architect Creative Excellence Award

AIA Rochester Scholarship (3 students)

### 1.2.2 Administrative Structure and Governance

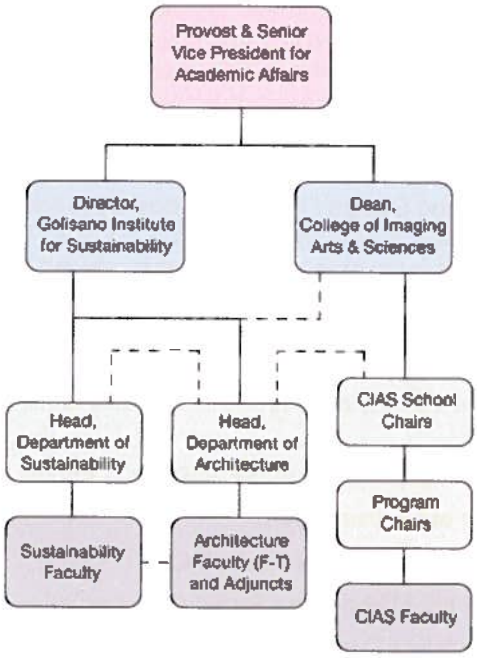
**Administrative Structure of Program and Home Units**

Program. The major academic unit at RIT is the college (GIS is formally considered equivalent to a college). Colleges contain both academic departments and academic programs. Sometimes programs are in departments, and sometimes they are free-standing. Programs are led by chairs and departments by heads, who are responsible for evaluating faculty, managing the budget, and maintaining the highest academic standards. Some programs also have associate chairs or coordinators, who normally perform administrative tasks related to students and oversee student advising.

The Master of Architecture program, in the Department of Architecture, is led by the department head. The head's responsibilities include supervising all faculty and staff (including annual evaluations); making final decisions about faculty and staff hiring; convening and chairing the Architecture Program Advisory Council meetings; curriculum oversight; accreditation oversight; budget management; coordinating development for fund-raising; and facilitating and directing the program's growth and vision.

Because the architecture program is jointly under the Golisano Institute for Sustainability and the College of Imaging Arts and Sciences, the head engages with both the GIS director *and* the CIAS dean, but the program is administratively housed within GIS. This unusual relationship bears some explanation. First, those full-time faculty who have taught during its first year were tenured in CIAS, so it made sense to begin with a strong tie to their college. Second, the discipline of architecture is closely related to the design-based programs in CIAS, and the Vignelli Center for Design Studies, which is also closely associated with the architecture program, resides in CIAS. At the same time, the focus on architectural sustainability is arguably the most unique and marketable feature of the program—a feature that is inextricably reflected by a formal relationship with GIS.

Ultimately, the program may evolve into a school housed in one or the other of these units. But the original program development committee, the provost, and the president strongly believed that the best way for the program to continue to grow and develop into its unique identity was to maintain its connection to both high-profile units through this arrangement.




Academic Affairs Administrative Structure

GIS Administrative Structure. The Golisano Institute for Sustainability is led by the Director and Associate Provost (one person). All research faculty report to the director, as does the Head of the Department of Sustainability - the sister department with the Department of Architecture. Currently, GIS has one Ph.D. program in Sustainability and a Master of Science program in Sustainable Systems.

GIS has its own tenure and promotion committee. Both the architecture and sustainability departments have their own curriculum committees which meet regularly for the development of the program and courses, and the Master of Architecture program and curriculum was approved by the New York State Education Department in 2011. The architecture program curriculum committee, consists of a chair, all full-time faculty, 1-2 extended faculty (full-time faculty from another RIT department teaching in the program), 1-2 adjunct faculty (professors-of-practice), and a student (elected by other architecture students). Any curricular changes (new, revised, or eliminated courses) must be approved by this committee. As coursework is proposed by our program, any substantial curricular changes (greater than 30% of the program) must be approved by the university-level graduate curriculum committee referred to as the Graduate Council, and - pending the nature of these changes - curriculum adjustments are often forwarded to the State Board of Education for review and approval.

CIAS Administrative Structure. CIAS is led by a dean, to whom that college's department chairs and many administrative and professional staff report. Some of the departments in CIAS exist within a school; in these situations, the school chair reports to the dean and the department chair to the school chair.

Academic Affairs Administrative Structure. RIT's eight deans and the GIS Director report directly to the Provost and Senior Vice President for Academic Affairs, who reports to the President. The chart below indicates how the architecture chair and faculty will fit into this arrangement.

**Governance Opportunities**

Architecture students are represented in student government through the Graduate Student Association, which is constituted of students elected from a range of graduate programs. Program student leadership meets with the department head at least once each term to discuss program progress, and student agenda items.

Faculty of the architecture program have been represented in the Academic Senate through CIAS faculty senators and staff through CIAS representatives to Staff Council. Recently however (in February of

2013), the Academic Senate voted to include the Golisano Institute for Sustainability (GIS) in the charter and with all policies where "colleges" are referred to. As such, GIS now has direct faculty representation in faculty governance and on university wide committees.

**Degree programs offered in home units**

CIAS degree programs. CIAS offers a number of degree programs at the BS, BFA, MS, and MFA level. See the college website for a complete listing: http://cias.rit.edu

GIS degree programs. In addition to the Master of Architecture, GIS offers a Ph.D. program in Sustainability and an M.S. in Sustainable Systems.

### I.2.3 Physical Resources

**General Description**

The RIT Master of Architecture program's facilities are being tailored to the growth plan of the program. RIT continues to provide key studio and support space for the program as well as departmental administrative offices, which are detailed below and supplemented by graphic diagrams. These core facilities are provided in Louise Slaughter Hall and in the Golisano Institute for Sustainability building (also called Sustainability Institute Hall), fully occupied in January of 2013. In addition, many facilities needed by the program continue to be available through the extensive existing physical resources of RIT, presently totaling more nearly 6 million gross square feet of academic, common, and residential space.

The Architecture program's primary dedicated studio spaces are in the existing Louse Slaughter Hall (157,000 g.s.f.). At the program launch in 2011, RIT renovated the current Bay 3 into studio and classroom/support space for the program. Bay 3 is clear-span, high bay space which is inherently flexible and architecturally interesting. The renovation added exterior fenestration to take advantage of the height and flexibility of the relatively new, but industrial-type, steel structure. The total space available in Bay 3 totals approximately 8,150 s.f.. In addition, Slaughter Hall has nine seminar/conference rooms totaling 8,185 s.f., which are available for architecture program events, studio reviews, seminars, etc. During the 2012/2013 academic year two additional areas were upgraded for studio use in fall 2013. This includes Slaughter 1220 totaling approximately 2,600 s.f. and Slaughter 2200 totaling approximately 1,900 s.f.

Each studio does provides work spaces of approximately 50 - 80 s.f. per student with drafting desks, work tables, shelving and storage as well as power and data connections (see diagrammatic plans below).

In January of 2013 the Department of Architecture administrative offices, totaling approximately 2,350 s.f., moved from Slaughter Hall into the new Golisano Institute for Sustainability (GIS) building. GIS - Sustainability Institute Hall - is a LEED Platinum, high-performance facility. As a living learning laboratory, this state of the art sustainable building totals nearly 81,000 s.f. and includes offices, classrooms, computing facilities, an auditorium, display and galleria areas. The Sustainable Building Materials Lab (SBML) is one of several labs and has regular usage with architecture students. Along with multiple hand held thermal and luminuous testing devices, it includes a plotter, laser cutter, heliodon, wind tunnel, and environmental chamber.

Presently, assigned architecture program spaces totals over 16,000 s.f. This is in addition to its shared use throughout Slaughter, GIS, and CIAS. The Master of Architecture program spaces are summarized below.

| Master of Architecture Program Spaces | |
|---|---|
| Bay 3 Studio and support areas | 8,150 s.f. |
| Slaughter 1220 Studio | 2,600 s.f. |
| Slaughter 2200 Studio | 1,900 s.f. |
| GIS Sustainable Building Materials Lab | 1,400 s.f. |
| Department of Architecture Suite | 2,350 s.f. |
| TOTAL | 16,400 s.f. |

**Shop Space**

The Master of Architecture program shares usage of the "3D Shop" with the Interior and Industrial Design programs in CIAS. This facility totals approximately 1,560 s.f. and has been an excellent resource for our students for small scale fabrication work and has been sufficient to meet current needs. It includes tools for scale wood, metal and plaster work. However, as our program continues to grow - along with additional CIAS needs - this shop resource has become increasingly confining. Because of this, and along with the NAAB comments reported in the 2011 VTR, we have been carefully monitoring his resource requirement. Since the 2013 site visit we have been exploring additional fabrication space options, both throughout the university as a whole, and within overall GIS space allocation in particular. This will allow us to expand fabrication space as student enrollment grows. At this time we are examining alternative locations for an additional fabrication space within GIS, and have included this as a budget request item at RIT's recent university-wide budget hearings.

**Institutional Space**

University wide, a breakdown if general physical space is listed below.

Classrooms. Various programs routinely rely on RIT's existing classroom inventory to supply general teaching spaces, auditoria, and seminar spaces as needed and through central scheduling.

Galleries. Major exhibits can be housed in either the Vignelli Design Study Center Gallery (approximately 6,885 s.f.) The Dyer Arts Center (5,750 s.f.), or the Bevier Gallery (3,500 s.f.). Routine pin-up space and critique areas are provided for in the program's own assigned spaces.

Library. Library resources are housed in RIT's Wallace Library (146,254 g.s.f.) as described in I.2.5. We have included a reading/library resource room within the Slaughter Bay 3 space.

Labs. RIT has many open computer labs and engineering testing facilities that may be used for materials testing, mock-up fabrication, and other probable needs of the Architecture program. In addition, the Architecture program has a dedicated Sustainable Building Material Lab located in GIS (previously identified above).

**Computing Resources**

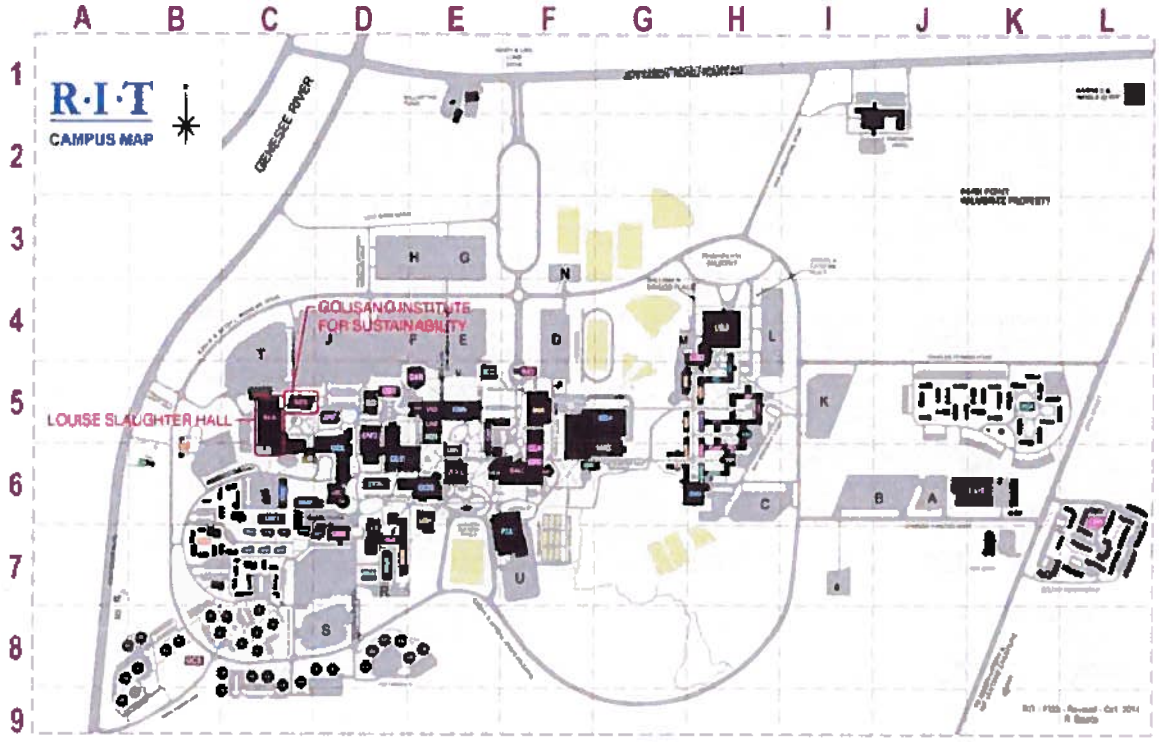
RIT is consistently ranked as one of the most "wired" campuses in the United States, and the university prides itself as being a leader in IT resources. RIT presently has 8 computer workstations in the architecture program area, as well as having access to two existing computer graphics labs in the College of Imaging Arts and Sciences. A printer, plotter, server and copier is provided in the program's Bay 3 area. Software includes SketchUp, Rhino, Maxwell, ArchiCAD, Vasari, the entire Autodesk suite, the Adobe Creative Suite, ArcGIS, Means Cost Data, Microsoft Office suite, a variety of scientific sustainability applications, and numerous miscellaneous applications and plug-ins.

In Sustainability Institute Hall, the Decision Theater is fully equipped with 32 work stations for continuous access to all GIS students in both the Sustainability and Architecture departments.

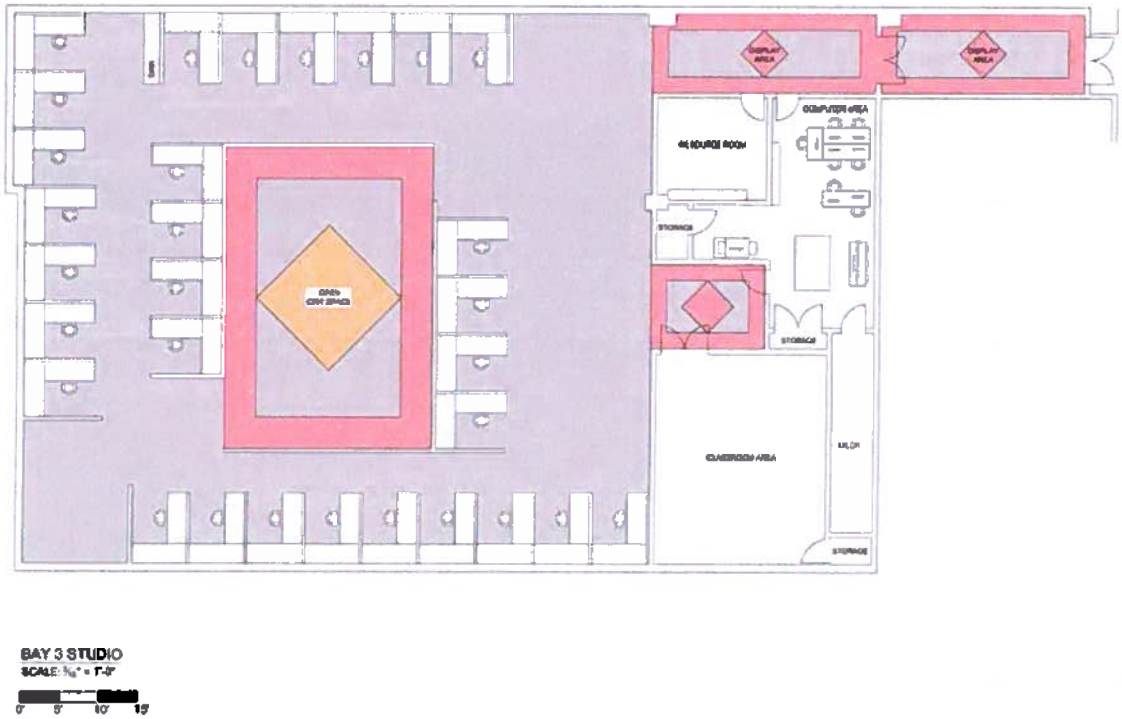
**Potential Problems**

None foreseen.

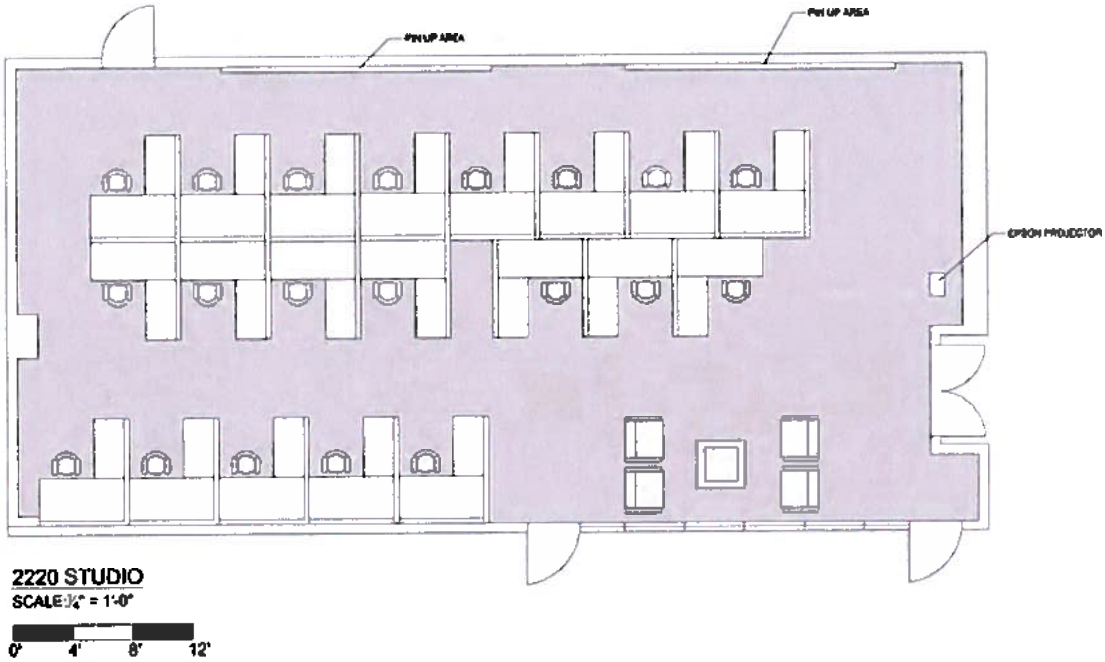
The following pages visually show some of the facilities mentioned above.



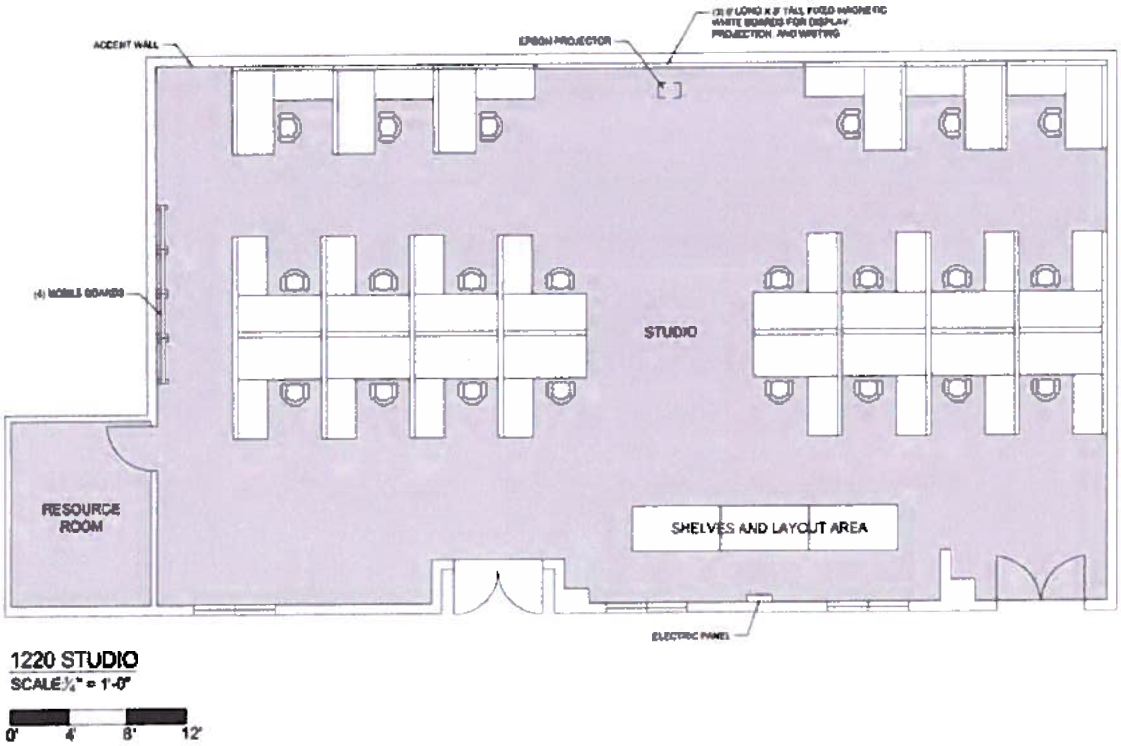

*RIT Campus Map*




*Bay 3 Studio in Slaughter Building.*

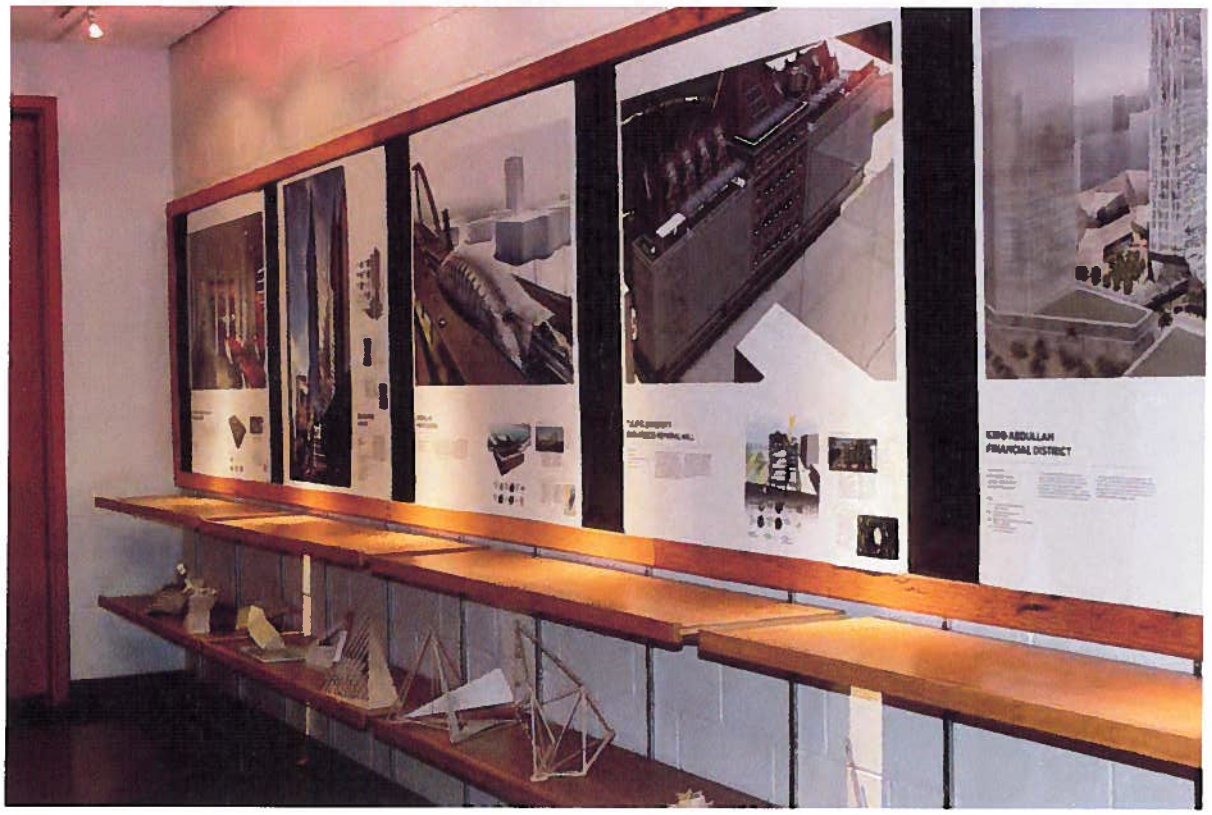



*Second Floor Studio in Slaughter Building.*




*First Floor Studio in Slaughter Building.*

*Guest speaker presenting in the Bay 3 Studio.*

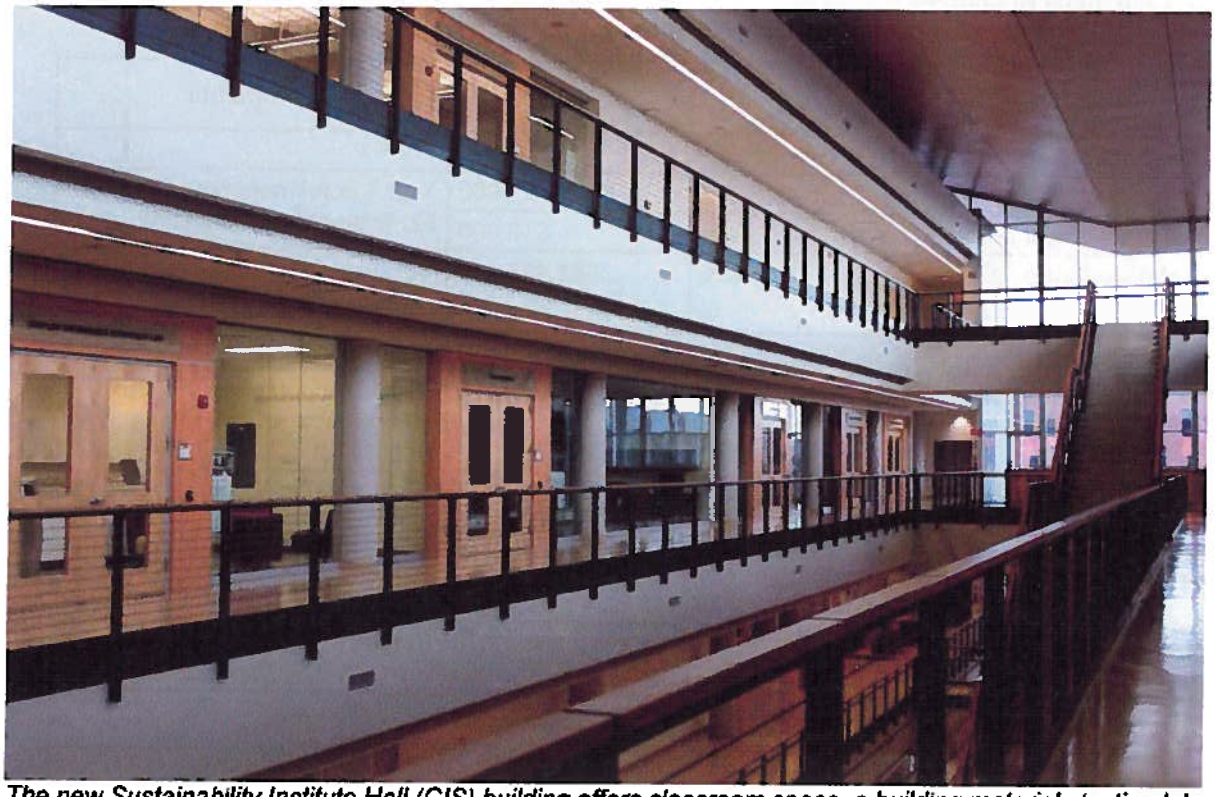



*The gallery space leading to the studio.*

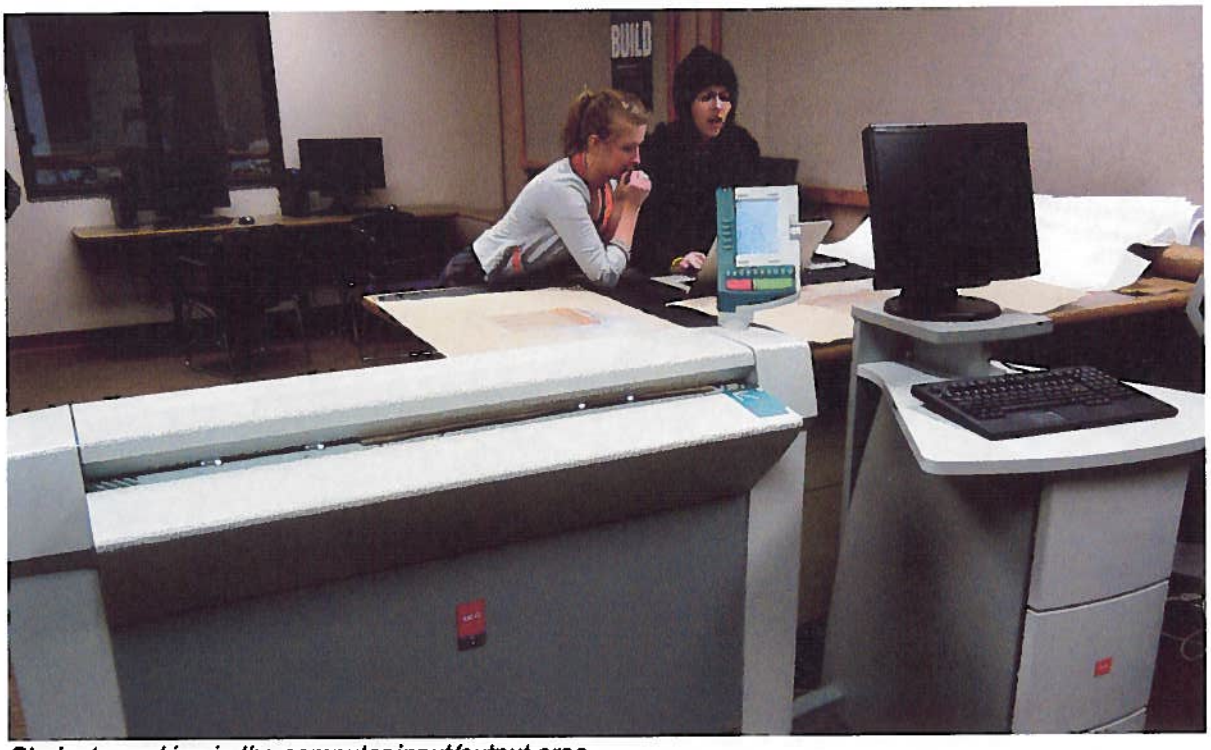
*The design crit, heart of the studio experience.*


*Students doing field work, in this case surveying a site.*

*Mentor and mentee work together.*



*The new Sustainability Institute Hall (GIS) building offers classroom space, a building materials testing lab, and numerous collaboration spaces.*




*Students working in the computer input/output area.*

### I.2.4 Financial Resources

Current fiscal year reports showing revenue and expenses from all sources are provided below.

| | Original Model 2014-2015 | Current Model 2014-15 | Comments |
|---|---|---|---|
| **Revenues** | | | |
| *Tuition* | $1,846,286 | $1,417,960 | Year 4 enrollment projection was 52. Actual enrollment is 45. |
| *Development* | $0 | $10,000 | |
| **Total Revenue** | **$1,846,286** | **$1,427,960** | |
| **Expenses** | | | |
| *Salaries & Benefits* | $752,369 | $629,224 | Admin support shifted to 2015-16 and Technical support shifted to 2016-17 |
| *General Operations* | $60,621 | $60,635 | |
| *Library* | $50,799 | $48,566 | |
| *Infrastructure* | $346,424 | $248,156 | Studio/Classroom and Administrative Office Space |
| *Administration/Other* | $376,730 | $442,878 | Shared Instructional Costs and Institute Administration |
| **Total Expense** | **$1,586,943** | **$1,429,459** | |
| **Net** | **$259,343** | **($1,498)** | |

**Program Forecast**

| 3-Year Projection | 2014-2015 | 2015-2016 | 2016-2017 |
|---|---|---|---|
| Revenue | $1,427,960 | $1,798,972 | $1,861,557 |
| Expense | $1,429,457 | $1,619,140 | $2,001,929 |
| Net | ($1,498) | $179,833 | ($140,372) |

**Comparative Report Since Last NAAB Visit**

| | 2012-2013 | 2013-2014 | 2014-2015 |
|---|---|---|---|
| **Revenues** | | | |
| *Operating Budget* | $755,788 | $1,404,956 | $1,417,960 |
| *Development* | $100,000 | $0 | $10,000 |
| **Total Revenue** | **$855,788** | **$1,404,956** | **$1,427,960** |
| **Expenses** | | | |
| *Salaries & Benefits* | $504,177 | $760,721 | $629,224 |
| *General Operations* | $32,536 | $51,195 | $60,635 |
| *Library* | $45,763 | $48,566 | $48,566 |
| *Infrastructure* | $415,226 | $487,333 | $248,156 |
| *Administrative/Other* | $669,396 | $391,165 | $442,878 |
| **Total Expenses** | **$1,667,098** | **$1,177,420** | **$1,429,459** |
| **Net** | **($811,310)** | **($334,024)** | **($1,498)** |

**Expenditure Data**

RIT measures the annual expenditures and total capital investments of degree programs by a college-based cost per credit hour. The architecture program is measured by the cost per credit hour generated by the Golisano Institute for Sustainability. The direct cost per credit hour in 2014-15 for each college of RIT is as follows:

Kate Gleason College of Engineering . . . . . $744
Saunders College of Business . . . . . $721
College of Imaging Arts & Sciences . . . . . $624
College of Science. . . . . $326
College of Liberal Arts . . . . . $258
College of Applied Science and Technology . . . . . $610
College of Health Sciences & Technology. . . . . $601
Golisano College of Computing and Information Sciences . . $564
**Golisano Institute for Sustainability . . . . . $2,180***

***Ph.D., M.S., and M. Arch. graduate programs only**

**Institutional Financial Issues**

Anticipated enrollment changes. RIT has no immediate plans for significant reductions or increases in enrollment with the current program in the next five years.

Anticipated changes in funding models. NA.

Other anticipated financial issues. Based on the enrollment profile in I.3.1 anticipated enrollments will continue to normalize to the numbers identified in our projections and the original cost model. This projection anticipates enrollments - at full capacity - of up to 16 - 20 students (accounting for attrition) in each of the 3.5 years of the program.

**I.2.5 Information Resources**

The Wallace Center of the Rochester Institute of Technology houses the RIT Libraries (Wallace Library,

Cary Collection, RIT Archives). RIT Libraries continues to strategically develop information resources in architecture and sustainability. Titles serving the architecture and sustainability program has grown to 240,847, with catalogued titles in the Library of Congress NA call number area equaling over 7,000 titles. The library maintains access to critical architecture and sustainability databases including, but not limited to, Avery Index to Architectural Periodicals, ARTstor, Building Green, Environmental Science and Pollution Management (Proquest), GreenFILE, JSTOR, Sustainability Science Abstracts (Proquest), and PAIS International (Proquest).

Along with this, the ConnectNY library consortium continues to grow and expand, and is becoming increasingly popular among students. The Connect NY program, initially funded by the Andrew Mellon Foundation has been in existence since 2003, and provides unprecedented access to monographs quickly and easily for RIT students and faculty. ConnectNY libraries include the following libraries with strong architecture holdings – Rennselaer Polytechnic Institute, St. Lawrence, Colgate and Pace University. In June 2015, Pratt Institute will join ConnectNY and will bolster the architectural holdings significantly.

ConnectNY also just expanded to include the New England Express (NExpress) libraries. "Peer to peer" requesting with NExpress, a consortium of six libraries that includes Colby, Bates, Bowdoin, Wellesley, Middlebury, and Williams was implemented in January 2015. Peer to peer requesting allows patrons from disparate INN-Reach systems to request material from the union catalogs of each of the participating INN-Reach Systems. This will greatly increase the titles that are available to our patrons for direct request by at least a few million. NExpress has an estimated collection of 4.7 million titles with an estimated 25% overlap with existing CNY titles.

Since 2014, the RIT Libraries has implemented a strong patron driven acquisition model within their Interlibrary Loan system whereby any student, faculty or staff member can select purchase as an option instead of borrow within the Interlibrary Loan system.

RIT Libraries has staff dedicated to support GIS and architecture needs, and continues to strive to provide and sustain a vibrant, growing collection to support the program in architecture.

## I.3. Institutional & Program Characteristics

### I.3.1 Statistical Reports

**Demographics for Architecture Students**

| | Gender | 12/13 | % | 13/14 | % | 14/15 | % |
|---|---|---|---|---|---|---|---|
| Non-Resident Alien | F | | | 2 | 7 | 4 | 8 |
| | M | | | 1 | 3 | 1 | 2 |
| Hispanic | F | 1 | 4 | 2 | 7 | 2 | 4 |
| | M | 1 | 4 | | | 1 | 2 |
| American Indian/ Alaskan Native | F | | | | | | |
| | M | | | | | | |
| Asian | F | 1 | 4 | 4 | 14 | 8 | 16 |
| | M | 1 | 4 | 2 | 7 | 9 | 18 |
| Black or African American | F | 1 | 4 | | | | |
| | M | 1 | 4 | | | | |
| Native Hawaiian/ Pacific Islander | F | | | | | | |
| | M | | | | | | |
| White | F | 7 | 29 | 7 | 24 | 10 | 20 |
| | M | 11 | 46 | 11 | 40 | 16 | 32 |
| Two or More Races | F | | | | | | |
| | M | | | | | | |
| Unknown | F | | | | | | |
| | M | | | | | | |
| **Total** | | **24** | **100** | **29** | **100** | **51** | **100** |

**Demographics for RIT Students Overall** (Note: totals include unknown gender)

| | Gender | 12/13 | % | 13/14 | % | 14/15 | % |
|---|---|---|---|---|---|---|---|
| Non-Resident Alien | F | 662 | 4 | 731 | 4 | 790 | 5 |
| | M | 1323 | 8 | 1502 | 9 | 1773 | 11 |
| Hispanic | F | 291 | 2 | 293 | 2 | 308 | 2 |
| | M | 556 | 3 | 574 | 3 | 589 | 4 |
| American Indian/ Alaskan Native | F | 20 | <1 | 16 | <1 | 18 | <1 |
| | M | 16 | <1 | 14 | <1 | 13 | <1 |
| Asian | F | 263 | 2 | 293 | 2 | 343 | 2 |
| | M | 509 | 3 | 544 | 3 | 585 | 4 |
| Black or African American | F | 300 | 2 | 277 | 2 | 278 | 2 |
| | M | 476 | 3 | 435 | 3 | 394 | 2 |
| Native Hawaiian/ Pacific Islander | F | 1 | <1 | 2 | <1 | 2 | <1 |
| | M | 9 | <1 | 8 | <1 | 6 | <1 |
| White | F | 2842 | 17 | 2856 | 17 | 2943 | 18 |
| | M | 6320 | 38 | 6347 | 38 | 6192 | 38 |
| Two or More Races | F | 104 | 1 | 137 | 1 | 151 | <1 |
| | M | 144 | 1 | 195 | 1 | 222 | 1 |
| Unknown | F | 887 | 5 | 765 | 5 | 606 | 4 |
| | M | 1628 | 10 | 1553 | 9 | 1255 | 8 |
| **Total** | | **16,606** | **100** | **16,904** | **100** | **16,545** | **100** |

**Demographics for Architecture Faculty** (Note: all faculty listed in 14/15 are licensed)

| | Gender | 12/13 | % | 13/14 | % | 14/15 | % |
|---|---|---|---|---|---|---|---|
| Non-Resident Alien | F | | | | | | |
| | M | | | | | | |
| Hispanic | F | | | | | | |
| | M | | | | | | |
| American Indian/ Alaskan Native | M | | | | | | |
| | F | | | | | | |
| Asian | F | | | | | 1 | 33 |
| | M | | | | | | |
| Black or African American | F | | | | | | |
| | M | | | | | | |
| Native Hawaiian/ Pacific Islander | F | | | | | | |
| | M | | | | | | |
| White | F | | | | | | |
| | M | 3 | 100 | 3 | 100 | 2 | 67 |
| Two or More Races | F | | | | | | |
| | M | | | | | | |
| Unknown | F | | | | | | |
| | M | | | | | | |
| **Total** | | **3** | **100** | **3** | **100** | **3** | **100** |

**Demographics for RIT Faculty (Instructional/Full-time) Overall**

| | Gender | 12/13 | % | 13/14 | % | 14/15 | % |
|---|---|---|---|---|---|---|---|
| Non-Resident Alien | F | 13 | 1 | 11 | 1 | 10 | 1 |
| | M | 17 | 2 | 19 | 2 | 28 | 3 |
| Hispanic | F | 12 | 1 | 14 | 2 | 15 | 2 |
| | M | 30 | 3 | 29 | 3 | 27 | 3 |
| American Indian/ Alaskan Native | M | 2 | <1 | 2 | <1 | 2 | <1 |
| | F | 6 | <1 | 6 | <1 | 5 | <1 |
| Asian | F | 20 | 2 | 26 | 3 | 28 | 3 |
| | M | 50 | 5 | 51 | 5 | 54 | 5 |
| Black or African American | F | 15 | 2 | 15 | 2 | 11 | 1 |
| | M | 26 | 3 | 25 | 3 | 24 | 2 |
| Native Hawaiian/ Pacific Islander | F | 0 | 0 | 0 | 0 | 0 | 0 |
| | M | 3 | <1 | 2 | <1 | 2 | <1 |
| White | F | 262 | 27 | 262 | 27 | 265 | 27 |
| | M | 506 | 52 | 497 | 51 | 493 | 49 |
| Two or More Races | F | 1 | <1 | 3 | <1 | 3 | <1 |
| | M | 1 | <1 | 3 | <1 | 4 | <1 |
| Unknown | F | 0 | 0 | 4 | <1 | 7 | 1 |
| | M | 0 | 0 | 10 | 1 | 18 | 2 |
| **Total** | | **964** | **100%** | **979** | **100%** | **996** | **100%** |

**Demographics for RIT Adjunct Faculty Professor, Assistant Professor, Instructor (Part-Time)**

| | Gender | 12/13 | % | 13/14 | % | 14/15 | % |
|---|---|---|---|---|---|---|---|
| Non-Resident Alien | F | 0 | 0 | 0 | 0 | 0 | 0 |
| | M | 0 | 0 | 1 | <1 | 0 | 0 |
| Hispanic | F | 1 | <1 | 0 | 0 | 0 | 0 |
| | M | 6 | 1 | 6 | 2 | 6 | 2 |
| American Indian/ Alaskan Native | M | 0 | 0 | 0 | 0 | 0 | 0 |
| | F | 1 | <1 | 1 | <1 | 0 | 0 |
| Asian | F | 10 | 3 | 9 | 3 | 10 | 3 |
| | M | 5 | 1 | 6 | 2 | 5 | 1 |
| Black or African American | F | 8 | 2 | 5 | 2 | 4 | 1 |
| | M | 5 | 1 | 2 | <1 | 4 | 1 |
| Native Hawaiian/ Pacific Islander | F | 0 | 0 | 0 | 0 | 1 | <1 |
| | M | 1 | <1 | 1 | <1 | 1 | <1 |
| White | F | 140 | 36 | 107 | 35 | 127 | 37 |
| | M | 209 | 54 | 166 | 55 | 185 | 54 |
| Two or More Races | F | 0 | 0 | 0 | 0 | 0 | 0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 |
| Unknown | F | 0 | 0 | 0 | 0 | 0 | 0 |
| | M | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | | **386** | **100%** | **979** | **100%** | **996** | **100%** |

### I.3.2 Annual Reports

Annual statistical report material is available through the NAAB from its annual report, submitted by the Master of Architecture program in November 2014, and also included in the Appendix B.

### I.3.3 Faculty Credentials

The original program proposal recommended four full-time faculty positions in addition to a chairperson. The credentials of the faculty and their assignments are outlined in the table on the following page which was included in the Candidacy application and program proposal. This table has been used as a general guide in directing our faculty search process to provide a balanced full-time faculty roster.

The Program Chair (now Head) was hired in the summer of 2011. He subsequently assigned two program committee members for the first two of the full-time faculty positions. This was logical given that they were the major writers of the curriculum, were familiar with the culture of the institute, provided continuity, and were made immediately available by their collaborative departments. Since that time we have continued to add full time faculty through a national/international search process, and are presently conducting a search for two tenure track positions to increase full-time faculty positions per the original program model. Credentials of existing full-time and adjunct faculty who have contributed to the program since the last site visit may be found in Part Four - IV.4.3 of this document.

| Title/Rank of Position | No. of New Positions | Minimum Qualifications (including degree and discipline area) | F/T or P/T | Percent Time to Program | Expected Course Assignments | Expected Hiring Date |
|---|---|---|---|---|---|---|
| Program Chair | 1 | M.Arch or higher, licensure, practitioner. LEED AP required. | Full-time | 100% | Design Theory<br>Thesis Preparation<br>Thesis Studio | Summer 2010 |
| Faculty A | 1 | M.Arch or higher plus involvement in scholarly activities and/or research. LEED AP preferred. | Full-time | 100% | Arch. Design I, II, III<br>Research Seminar: Urban<br>Research Seminar: Social<br>Thesis Studio<br>Innovative Architecture | Winter 2010-11 |
| Faculty B | 1 | M.Arch or higher or licensure/practitioner with another graduate degree. Strong technical background. LEED AP required. | Full-time | 100% | Understanding Sustainability<br>Integrated Bldg. Sys. I – VI<br>Sustainable Bldg. Metrics<br>Innovative Architecture | Spring 2012 |
| Faculty C | 1 | M.Arch or higher or licensure/practitioner with graduate degree. LEED AP required. | Full-time | 100% | Design Studio (all)<br>Thesis Studio | Spring 2012 |
| Faculty D | 1 | M.Arch or higher or licensure/practitioner with graduate degree. LEED AP required. | Full-time | 100% | Design Studio (all)<br>Thesis Studio | Spring 2013 |

## I.4. Policy Review

A complete set of documents will be provided in the team room during the upcoming fall 2015 visit, per Appendix 3 of the *"2009 Conditions"*. For the benefit of this report, a partial set of documents is included in Appendix C, and university and departmental links are noted below.

http://www.rit.edu/upub/pdfs/Graduate_Bulletin.pdf

http://www.rit.edu/gis/architecture/program/curriculum

https://www.rit.edu/programs/architecture-march

# Part Two (II): Educational Outcomes and Curriculum

## II.1. Student Performance—Educational Realms & Student Performance Criteria

### II.1.1 Student Performance Criteria

The vision, program goals, and learning objectives of this program have been outlined in Section I.1.5, Self-Assessment Procedures. The program has only one track, although it is a robust one emphasizing sustainability, urbanism, and integrated project delivery. All full course outlines written for internal approval contain a list of the NAAB criteria applicable to the course. The SPC matrix that follows represents the coverage of performance criteria by each course offered in the curriculum.

● = measurable
○ = introduced or reinforced

**Realm B:**
Integrated Building Practices, Tech. Skills and Knowledge

| | B.1 Pre-Design | B.2 Accessibility | B.3 Sustainability | B.4 Site Design | B.5 Life Safety | B.6 Comprehensive Design | B.7 Financial Considerations | B.8 Environmental Systems | B.9 Structural Systems | B.10 Building Envelope System | B.11 Building Service Systems | B.12 Building Mat'ls. & Assemb. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Student performance criteria expected to have been met in baccalaureate program.** | | | | | | | | | | | | |
| **Student performance criteria to be met in Master of Architecture program in the following courses.** | | | | | | | | | | | | |
| ARCH-611 Architectural Representation I | | | | | | | | | | | | |
| ARCH-612 Architectural Representation II | | | | | | | | | | | | |
| ARCH-621 Architectural History I | | | | | | | | | | | | |
| ARCH-622 Architectural History II | | | | | | | | | | | | |
| ARCH-631 Architectural Design I | | | | | | | | | | | | |
| ARCH-632 Architectural Design II | | | | | | | | | | | | |
| ARCH-641 Fundamentals of Building Systems | | | | | | | | ● | ○ | ○ | ○ | ○ |
| ARCH-699 Co-op Architecture | | | | | | | | | | | | |
| ARCH-731 Architectural Studio I: Site | | ● | ○ | ● | | | | | | | | |
| ARCH-732 Architectural Studio II: Urban | | ● | ○ | | | | ● | | | | | |
| ARCH-733 Architectural Studio III: Adaptive | ● | ● | ○ | | ○ | | | | | | | |
| ARCH-734 Architectural Studio IV: Integrative | | ○ | ○ | ○ | ○ | ● | | ○ | ○ | | | |
| ARCH-741 Integrated Building Systems I | | ○ | | ○ | | | | | | | ● | ● |
| ARCH-742 Integrated Building Systems II | | ○ | | | | ○ | ○ | ○ | ● | ● | ○ | ● |
| ARCH-743 Integrated Building Systems III | | ○ | | | ● | ○ | | ○ | ● | | ● | ● |
| ARCH-744 Integrated Building Systems IV | | | | | | ○ | | ● | | | ○ | |
| ARCH-751 Architectural Theory | | | | | | | | | | | | |
| ARCH-752 Urban and Regional Planning | | | | | | | | | | | | |
| ARCH-753 Research Seminar/Thesis Preparation | | | | | | | | | | | | |
| ARCH-761 Understanding Sustianability | | | ● | | | | | | | | | |
| ARCH-762 Industrial Ecology Fundamentals | | | ● | | | | | ○ | | | | |
| ARCH-763 Sustainable Buildings Metrics | | | ● | | | | | ○ | | | | ○ |
| ARCH-771 Professional Practice | ○ | | | | | | ○ | | | | | |
| ARCH-790 Thesis | ○ | | | | | | | | | | | |
| ARCH-791 Continuation of Thesis | ○ | | | | | | | | | | | |

● = measurable
○ = introduced or reinforced

| | **Realm A:** Critical Thinking and Representation | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | **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 System Skills | **A.9** Hist. Trad. Global Culture | **A.10** Cultural Diversity | **A.11** Applied Research |
| **Student performance criteria expected to have been met in baccalaureate program.** | | | | | | | | | | | |
| **Student performance criteria to be met in Master of Architecture program in the following courses.** | | | | | | | | | | | |
| ARCH-611 Architectural Representation I | | | ● | | | | | | | | |
| ARCH-612 Architectural Representation II | | | ● | ○ | | | | | | | |
| ARCH-621 Architectural History I | ● | | | | | | | ○ | ● | ● | |
| ARCH-622 Architectural History II | ● | | | | | | | ○ | ● | ● | |
| ARCH-631 Architectural Design I | | ○ | | | | ○ | | ● | | | |
| ARCH-632 Architectural Design II | | ○ | | ○ | | ● | | | | | |
| ARCH-641 Fundamentals of Building Systems | | | | | | | | ○ | | | |
| ARCH-699 Co-op Architecture | | | | | | | | | | | |
| ARCH-731 Architectural Studio I: Site | | ● | | | ○ | | ○ | | | | |
| ARCH-732 Architectural Studio II: Urban | | ● | | | ○ | | ● | | | | |
| ARCH-733 Architectural Studio III: Adaptive | | ● | | | ○ | | ● | | | | |
| ARCH-734 Architectural Studio IV: Integrative | | ○ | | ● | ○ | | ○ | ○ | ○ | | |
| ARCH-741 Integrated Building Systems I | | | | ○ | | | | | | | |
| ARCH-742 Integrated Building Systems II | | | | ○ | | | | | | | |
| ARCH-743 Integrated Building Systems III | | | | ○ | | | | | | | |
| ARCH-744 Integrated Building Systems IV | | | | ○ | | | | | | | |
| ARCH-751 Architectural Theory | ○ | | | | | | ● | | | | |
| ARCH-752 Urban and Regional Planning | | | | | | | | | | ○ | |
| ARCH-753 Research Seminar/Thesis Preparation | ○ | | | | ● | | | | | | ● |
| ARCH-761 Understanding Sustianability | | | | | ● | | | | | | ○ |
| ARCH-762 Industrial Ecology Fundamentals | | | | | | | | | | | |
| ARCH-763 Sustainable Buildings Metrics | | | | | | | | | | | |
| ARCH-771 Professional Practice | | | | | | | | | | | |
| ARCH-790 Thesis | | | | | | | | | | | ○ |
| ARCH-791 Continuation of Thesis | | | | | | | | | | | ○ |

● = measurable
○ = introduced or reinforced

| | **Realm C:** Leadership and Practice | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | **C.1** Collaboration | **C.2** Human Behavior | **C.3** Client Role in Architecture | **C.4** Project Management | **C.5** Practice Management | **C.6** Leadership | **C.7** Legal Responsibilities | **C.8** Ethics/Professionalism | **C.9** Social Responsibility |
| **Student performance criteria expected to have been met in baccalaureate program.** | | | | | | | | | |
| **Student performance criteria to be met in Master of Architecture program in the following courses.** | | | | | | | | | |
| ARCH-611 Architectural Representation I | | | | | | | | | |
| ARCH-612 Architectural Representation II | | | | | | | | | |
| ARCH-621 Architectural History I | | | | | | | | | |
| ARCH-622 Architectural History II | | | | | | | | | |
| ARCH-631 Architectural Design I | ○ | | | | | | | | |
| ARCH-632 Architectural Design II | | | | | | | | | |
| ARCH-641 Fundamentals of Building Systems | | ● | | | | | | | |
| ARCH-699 Co-op Architecture | ● | | | | | | | | |
| ARCH-731 Architectural Studio I: Site | | | | | | | | | |
| ARCH-732 Architectural Studio II: Urban | | ○ | | | | | | | |
| ARCH-733 Architectural Studio III: Adaptive | | | | | | | | | |
| ARCH-734 Architectural Studio IV: Integrative | | | | | | | | | |
| ARCH-741 Integrated Building Systems I | | | | | | | | | |
| ARCH-742 Integrated Building Systems II | | | | | | | | | |
| ARCH-743 Integrated Building Systems III | | | | | | | | | |
| ARCH-744 Integrated Building Systems IV | | | | | | | | | |
| ARCH-751 Architectural Theory | | | | | | | | | |
| ARCH-752 Urban and Regional Planning | ● | ○ | | | | ● | | ● | ● |
| ARCH-753 Research Seminar/Thesis Preparation | | | | | | | | | |
| ARCH-761 Understanding Sustianability | | ○ | | | | | | | |
| ARCH-762 Industrial Ecology Fundamentals | | ○ | | | | | | | |
| ARCH-763 Sustainable Buildings Metrics | | ○ | | | | | | | |
| ARCH-771 Professional Practice | | | ● | ● | ● | ● | ● | ● | ● |
| ARCH-790 Thesis | | | | | | | | | |
| ARCH-791 Continuation of Thesis | | | | | | | | | |

## II.2. Curricular Framework

### II.2.1 Regional Accreditation

The regional accreditation letter follows.

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

① copy for our files
② copy to Chris Leatzo & cc: J. Haefner 6/29/09

June 26, 2009

RECEIVED
JUN 29 2009
RIT
Office of the President

Dr. William W. Destler
President
Rochester Institute of Technology
1 Lomb Memorial Drive
Rochester, NY 14623-5603

Dear Dr. Destler:

At its session on June 25, 2009, the Middle States Commission on Higher Education acted:

> To accept the progress letter. The Periodic Review Report is due June 1, 2012.

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 letter, 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 Rochester Institute of Technology. If any further clarification is needed regarding the SAS or other items in this letter, please feel free to contact Ms. Linda A. Suskie, Vice President.

Sincerely,

Peter F. Burnham
Chair

### II.2.2 Professional Degrees and Curriculum

**Curriculum**

The Master of Architecture program began in 2011 as a 147 quarter credit hour (QcH) three year full-time program. Beginning with the 2013-14 academic year RIT fully converted to a semester system and the program became a three and one half year, 105 semester credit hour (ScH) program.

The curriculum mask may be found below and represents the current curriculum in its entirety. Course outlines may be found in Part Four - IV.4.2 of this document.

| | FALL SEMESTER | | SPRING SEMESTER | | S |
|---|---|---|---|---|---|
| Year 1 | ARCH-611 Architectural Representation I | 3 | ARCH-612 Architectural Representation II | 3 | Optional Coop |
| | ARCH-621 Architectural History I | 3 | ARCH-622 Architectural History II | 3 | |
| | ARCH-631 Architectural Design I | 6 | ARCH-632 Architectural Design II | 6 | |
| | ARCH-761 Understanding Sustainability | 3 | ARCH-641 Fundamentals of Building Systems | 3 | |
| | | 15 | | 15 | |
| Year 2 | ARCH-731 Architectural Studio I: Site | 6 | ARCH-734 Architectural Studio II: Urban | 6 | ARCH-699 Coop Arch. |
| | ARCH-741 Integrated Building Systems I | 3 | ARCH-742 Integrated Building Systems II | 3 | |
| | ARCH-751 Architectural Theory | 3 | ARCH-752 Urban and Regional Planning | 3 | |
| | Graduate Elective | 3 | ARCH-762 Industrial Ecology Fundamentals | 3 | |
| | | 15 | | 15 | |
| Year 3 | ARCH-733 Architectural Studio III: Adaptive | 6 | ARCH-735 Architectural Studio IV: Integrative | 6 | Global Experience |
| | ARCH-743 Integrated Building Systems III | 3 | ARCH-744 Integrated Building Systems IV | 3 | |
| | ARCH-753 Research Seminar/Thesis Prep. | 3 | Graduate Elective | 3 | |
| | ARCH-763 Sustainable Building Metrics | 3 | ARCH-771 Professional Practice | 3 | |
| | | 15 | | 15 | |
| Year 4 | ARCH-790 Thesis | 6 | | | |
| | Graduate Elective | 3 | | | |
| | Graduate Elective | 3 | | | |
| | Sustainability Elective | 3 | | | |
| | Credits | 15 | | | |
| | Total Semester Credits = 105 | | | | |

| | | |
|---|---|---|
| Graphics | 6 | 6% |
| Design | 42 | 40% |
| Technology & Practice | 18 | 17% |
| Sustainability | 12 | 11% |
| History/Theory/Planning | 15 | 15% |
| Graduate Electives | 12 | 11% |

**Architecture Concentration Options**
Students may use their four/five graduate electives to concentrate in one of the following areas. These courses are pre-approved, others may be selected by the student but must be approved by the department. The required sustainability elective may be chosen from the list at the bottom but note that the sustainability elective can not simultaneously satisfy a graduate elective.

**Environmental, Health and Safety Management**
ESHS-601 Fire Protection
ESHS-750 EHS and FM Project Management

**Facilities Management**
FCMG-660 Principles & Practice in Facilities Management
FCMG-720 EHS in Facilities Management
FCMG-740 Real Estate in Facilities Management
FCMG-760 Operation & Maintenance in FM

**Hospitality-Tourism Management**
HSPT-761 Strategic Planning & Development for HT Industry
HSPT-763 Resort Amenity and Attraction Development

**Art and Art History**
All the studio electives; CCER, CGEN, CGLS, CMTJ, CWFD, CWTD, and FNAS
ARTH-601 Forms of Inquiry
ARTH-605 Thinking About Making
ARTH-621 The Image
ARTH-671 Art & Architecture Ancient Rome
ARTH-676 Early Medieval Art
ARTH-677 Displaying Gender
ARTH-682 Medieval Craft

**Business**
ACCT-603 Accounting for Decision Makers
DECS-744 Project Management
ESCB-705 Economics & Decision Modeling
MGMT-740 Organizational Behavior and Leadership
MKTG-761 Marketing Concepts and Commercialization

**Public Policy**
PUBL-610 Technological Innovation & Public Policy
PUBL-700 Readings in Public Policy
PUBL-701 Graduate Policy Analysis
PUBL-702 Graduate Decision Analysis

**Environmental Science**
ENVS-650 Advanced Applications of Geographic Information Systems

**Sustainability Electives**
MGMT-710 Managing for Environmental Sustainability
ENVS-601 Environmental Science Graduate Studies
MECE-629 Renewable Energy Systems
MECE-733 Sustainable Energy Management
PUBL-630 Energy Policy
PUBL-810 Technology, Policy & Sustainability
STSO-621 Graduate Biodiversity and Society
STSO-750 Sustainable Communities
ESHS-765 Product Stewardship
ISUS-xxx all courses

**Off-Campus Programs**
NA at this time.

### II.2.3 Curriculum Review and Development

The Curriculum Committee is well established and meets at least once per semester or more often as needed. The committee consists of members of the program faculty, faculty within the GIS, outside professionals, faculty from the CIAS and a student representative. Over the last year its primary goal has been to critically review the entire curriculum - both from having now offered each required course at least once, and from advice and insight provided by the 2013 site visit. It has also addressed issues of curriculum flexibility; a clarification and revision of program goal(s), mission, and objectives; current admission requirements of calculus and physics; awarding of advanced standing to applicants; acceptable global experiences; and portfolio review evaluation. The Curriculum Committee recently has as one of its charges the task of formulating a formal process for annual program curriculum review and development plan to commence at the conclusion of the academic year. This has now become a requisite annual program retreat/advance at the end of each academic year.

For additional information, see I.1.4 "Long-Range Planning", I.1.5 "Self-Assessment Procedures", and III.3.1 "Progress Since the Last Site Visit" for additional information.

## II.3. Evaluation of Preparatory/Pre-Professional Education

Since this program is designed for students with non-architectural baccalaureate degrees there has been no need for evaluation of prior work outside the normal admission process. However, given the interest in the program from individuals with some architectural program, a review of processes and procedures is underway to provide course waiving and advanced standing opportunities, and a program policy is included in Appendix E.

The program works closely with the Office of Graduate and Part-time Enrollment Services to ensure that the requisite 45 credit hour requirement for general education is met for incoming students. In particular, for "advanced standing" candidates, each applicant now receives an additional screening for this requirement, above and beyond any SPC being met in pre-professional education. Should additional general education requirements be required, this will be noted in the admission letter and tracked for compliance prior to graduation. We also intend to modify our existing articulation agreements to indicate this requirement and further assure the condition is understood.

## II.4. Public Information

The Master of Architecture program maintains a website similar to those found for other programs at RIT. A "Public Information" link will lead to a page that contains the following statements and links noted below.

### II.4.1 Statement on NAAB-Accredited Degrees

All catalogues and promotional materials for this program include the Statement on NAAB-Accredited degrees, exactly as worded in Appendix 5 of the NAAB Conditions for Accreditation.

### II.4.2 Access to NAAB Conditions and Procedures

The following documents are directly linked to the RIT architecture program website:

https://www.rit.edu/gis/architecture/program/accreditation

2009 NAAB Conditions for Accreditation

NAAB Procedures for Accreditation (current edition)

The NCARB Handbook for Interns and Architects

Toward an Evolution of Studio Culture

### II.4.3 Access to Career Development Information

The following resources are linked to RIT's architecture program website:

www.NCARB.org

www.aia.org

www.aias.org

www.acsa-arch.org

www.epcompanion.org *(The Emerging Professional's Companion)*

**II.4.4 Public Access to APRs and VTRs**
The following documents pertaining to accreditation are available in the Department of Architecture office as they become available. These include:

All *Annual Reports*, including any narrative

Any NAAB responses to the *Annual Reports*

The final decision letter(s) from the NAAB

The most recent APR

The final edition of the most recent *Visiting Team Report*, including attachments and addenda

**II.4.5 ARE Pass Rates**
NA.

## Part Three (III): Progress Since the Last Site Visit

There has been significant progress since the 2013 Site Visit. Our program has grown substantially in the number of enrolled students, and we have graduated a small group from our first 2011 cohort. All courses have been offered at least once, and we have undertaken a comprehensive review of the curriculum, including course content, course coupling, and course re-alignment – with a number of the curricular adjustments, some made through recommendations from the previous, 2013 site visit.

Below is a section by section summary of responses to the team findings from the 2013 site visit.

### III.3.1 Summary of Responses to the Team Findings during the 2013 Visit

### III.3.1.i – Responses to Conditions Not Met/Not-Yet Met

**I.1.1., History and Mission:**
*The program must describe its history, mission and culture and how that history, mission, and culture is expressed in contemporary context. Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that history, mission, and culture is expressed in contemporary context.*

*The accredited degree program must describe and then provide evidence of the relationship between the program, the administrative unit that supports it (e.g., school or college) and the institution. This includes an explanation of the program's benefits to the institutional setting, how the institution benefits from the program, any unique synergies, events, or activities occurring as a result, etc.*

*Finally, the program must describe and then demonstrate how the course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects.*

**2013 Team Assessment:**
At the time of the visit the master of architecture program is in the fifth semester of a seven semester program. Evidentiary proof that the stated goals and mission of the program being fulfilled are still to be produced.

**Program Response (2015):**
As we enter the final set of semesters of the program, we are now identifying several successful benchmarks in support of our mission and goals. We are educating broad thinking designers who have embedded sustainability into design inquiry as a guiding principle, and our students and courses have become sought after resources for sustainable design advice and guidance throughout the community. Our link

within GIS to both the PhD and MS sustainability programs strengthens collaboration and interdisciplinary research opportunities. The Global Experience and Co-op (practical experience) requirements enriches each student's exposure with increased cultural diversity and service/professional offerings, solidifying the relationship between the academy, profession and local/global communities. Our program rigorously balances the notions of listening and learning, exploring and discovering, and seeing and doing.

**I.1.2, Learning Culture and Social Equity: Learning Culture:**
*The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments both traditional and non-traditional.*

*Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.*

*Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community: faculty, staff, and students are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.*

*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 a culturally rich educational environment in which each person is equitably able to learn, teach, and work. This includes provisions for students with mobility or learning disabilities. The program 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. Finally, the program must demonstrate that it has a plan in place to maintain or increase the diversity of its faculty, staff, and students when compared with diversity of the institution during the term of the next two accreditation cycles.*

**2013 Team Assessment: Learning Culture:**
Refer to specific 2013 Team Assessment comments in Causes of Concern from 2011 VTR: I.1.2, Studio Culture – and,

**2013 Team Assessment:**
The team found evidence that the program "encourages a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments."

Both faculty and staff graciously provide support/mentorship to students. While the Master of Architecture Program has authored a "Studio Culture" policy involving student feedback, it is not evident to be a living document within the community of the program; i.e., students were not involved in the initial crafting of the policy nor does it outline how grievances or deviations from the policy are handled. As the policy is up for revision next year, there is an opportunity to strengthen the language of the policy. This Team considers this cause of concern not fully resolved.

**Program Response (2015):**
As was reported in our "errors of fact" response to the draft VTR, we believe the statement on student non-involvement is inaccurate. We involved students, faculty and staff to derive a mutually acceptable Studio Culture Policy. Following an initial discussion for input, a draft document was generated by the faculty and then circulated and shared back with the students, requesting comments, feedback and input. With this information, a final Studio Culture Policy was prepared. Students have been, and will continue to be regularly engaged with all Studio Culture Policy documents. Most recently, all students were invited to participate in a discussion for comments which led to the updated Studio Culture Policy, and included a section on enforcement. This reciprocal arrangement is intended to continue.

**I.1.4, Long-Range Planning:**
*An accredited degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and, where appropriate, the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision-making.*

**2013 Team Assessment:**
Refer to specific 2013 Team Assessment comments on Causes of Concern from 2011 VTR: I.1.1, History and Mission – and,

**2013 Team Assessment:**
The APAC (Architecture Program Advisory Council) has been formed but not convened. It is central to development of advice regarding program currency with regard to the profession and data sources to be used for metrics in support of long-range planning. Also, the university is now embarking upon a strategic plan – which will require GIS and its units to update their own strategic plans. The Architecture program faculty group has yet to be formed for program long-range planning, though the chair is on the planning committee for GIS and would like the program to be pro-active. This Team considers this cause of concern not fully resolved.

**Program Response (2015):**
The APAC (Architecture Program Advisory Council) has been constituted and is considered central to providing oversight and guidance on the construct and evolution of the Master of Architecture program. Plans are underway to have the APAC convene during the spring term, and APAC members are engaging in an evaluation of the program as it has evolved to date.

As reported earlier in I.1.4 Long Range Planning , RIT has just completed a comprehensive strategic plan – *"Greatness Through Difference: RIT's 2015 – 2025 Strategic Plan"*, and this was endorsed by the Board of Trustees in November, 2014. During the formulation of the university wide strategic plan, GIS continued with its discussions around direction and scope for updating its own strategic plan, and – while directed - but kept these discussions informal - awaiting the final outcome of RIT's plan. Now that *"Greatness Through Difference"* is adopted, renewing and updating the current GIS strategic plan is underway, and is intended to be supportive with RIT's agenda, with the goal to have an updated GIS Strategic Plan in place during 2015.

**I.1.5, Self-Assessment Procedures:**
*The program must demonstrate that it regularly assesses the following:*

- *How the program is progressing towards its mission.*
- *Progress against its defined multi-year objectives (see above) since the objectives were identified and since the last visit.*
- *Strengths, challenges and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.*
- *Self-assessment procedures shall include, but are not limited to: o Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.*
- *Individual course evaluations.*
- *Review and assessment of the focus and pedagogy of the program.*
- *Institutional self-assessment, as determined by the institution.*
- *The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.*

**2013 Team Assessment:**
The program has developed a thorough program goal assessment rubric and conducted one annual student performance review. However, some of the groups identified for program assessment have yet to be formed or convened.

**Program Response (2015):**
See our response in I.1.4 above regarding the APAC. In addition, a Thesis Committee had been formulated with each thesis student, given our first cohort's present undertaking of thesis work. In a practical manner, the Mentor Matching Program (MMP) has also served as an overlap with - and conduit to - the Student Review Committee (SRC). Along with working directly with the students, this group has become an invaluable resource from the local professional community for self-assessment.

**I.2.1, Human Resources & Human Resource Development:**
*Faculty & Staff:*

- *An accredited degree program must have appropriate human resources to support student learning and achievement. This includes full and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions.*
- *Accredited programs must document the policies they have in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA) and other diversity initiatives.*
- *An accredited degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.*
- *An accredited degree program must demonstrate that an IDP Education Coordinator has been appointed within each accredited degree program, trained in the issues of IDP, and has regular communication with students and is fulfilling the requirements as outlined in the IDP Education Coordinator position description and regularly attends IDP Coordinator training and development programs.*
- *An accredited degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.*
- *Accredited programs must document the criteria used for determining rank, reappointment, tenure and promotion as well as eligibility requirements for professional development resources.*

**2013 Team Assessment:**
The program has three full-time tenured faculty at present, the same number as at the time of the last visit. The faculty staffing plan calls for two additional full-time tenure line faculty members. A search has been authorized for one new position – with the appointment scheduled to begin at RIT in fall 2014. The number of students has more than doubled since the previous visit and new faculty to deliver required curriculum, advance the research agenda of the program, and to provide service are needed. All but a few courses are delivered by part-time faculty associated with other units at RIT (an interdisciplinary plus) and adjunct faculty (a professional community plus in keeping with RIT objectives). However, adjunct faculty are often retained very close to the time of course delivery; there is little orientation to the program. Although there are financial resources available for faculty development, policies for faculty development funding do not appear to be in place. An overall review of hiring and orientation policies and faculty and staff professional development policies and resources is needed.

**Program Response (2015):**
As was reported in our "errors of fact" response to the draft VTR, adjunct faculty are not often retained very close to the time of course delivery. While prior to fall term, 2013 there were some adjunct hires close to course delivery due to last minute, unanticipated faculty leaves, adjunct faculty are almost always retained weeks, and often months ahead of course delivery. This recent last minute hire was an exception,

and not the rule. Adjunct faculty are also provided with information on RIT services and support and given information on tutorial sessions for various services. We also hold in-house sessions providing an overview of various university and departmental resources. On an annual basis, all full time faculty and staff are informed of available resources for professional development, including requests for travel, attending conferences and workshops, and professional dues, which can be made to the department head for review and approval. Adjunct faculty are also encouraged to submit requests for professional development, and on many occasions part time faculty receive some support.

**I.2.1, Human Resources & Human Resource Development:**
*Students:*

- *An accredited program must document its student admissions policies and procedures. This documentation may include, but is not limited to application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include first-time freshman, as well as transfers within and outside of the university.*
- *An accredited degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.*

**2013 Team Assessment:**
Admissions requirements are clearly spelled out on the university and program websites. However, they differ from the outlined detail in the APR. E.g., the APR indicates a focus in letters of recommendation on communicative, collaborative and leadership abilities while the website for architecture identifies focus on creativity. There is no explicit comment on general education requirements for the NAAB degree, i.e., 45 semester credit hours. Evidence indicated other fundamental opportunities such as student organization participation, field trips, participation in research projects, and access to student support services are being met. A financial aid pool of approximately 30% of gross tuition charges is provided to the program for distribution to students in the program.

**Program Response (2015):**
The program works closely with the Office of Graduate and Part-time Enrollment Services to ensure that the requisite 45 credit hour requirement for general education is met for incoming students. In particular, for "advanced standing" candidates, each applicant now receives an additional screening for her/his general education requirement, above and beyond any SPC being met in pre-professional education. Should additional general education requirements be required, this will be noted in the admission letter and tracked for compliance prior to graduation. We also intend to modify our existing articulation agreements to indicate and clarify this requirement and further assure the condition is understood.

**I.2.5, Information Resources:**
*The accredited program must demonstrate that all students, faculty, and staff have convenient access to literature, information, visual, and digital resources that support professional education in the field of architecture.*

*Further, the accredited program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research and evaluative skills, and critical thinking skills necessary for professional practice and lifelong learning.*

**2013 Team Assessment:**
Refer to specific 2013 Team Assessment comments on page 3: Causes of Concern from 2011 VTR: I.2.5, Information Resources – and,

**2013 Team Assessment:**
The library has purchased and maintains the Avery Index to Periodic Literature digital access and has

increased its share of recommended periodicals from 37% to 60% of the Association of Architectural Librarians recommended core list. The e-Library and online access to interlibrary loan is up and running with approximately a 24-hr turn around for article PDFs. Although expenditures including staff time allocation ran below projections in FY'12 and FY'13, strategic enhancements to the core collection were achieved. However, core collection development via acquisition needs to be continued to adequately serve the increasing number of students, growth in thesis project demands for research resources, and enriching materials for depth of concentrations in NA fields. This Team considers this cause of concern not fully resolved.

**Program Response (2015):**
RIT's Wallace Library continues to increase its share of the architectural and sustainability collection. To date and as reported in I.2.5 Information Resources, the current library catalogued titles in the architecture collection within the library system has grown to 240,847 with Catalogued titles in NA - 6,986. Along with this, the ConnectNY library consortium continues to grow and expand, and is becoming increasingly popular among students. Our current thesis students have not reported any difficulty in accessing necessary resources for thesis work.

**I.3.1, Statistical Reports.**
*Programs are required to provide statistical support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.*

*Program student characteristics.*

- *o Demographics (race/ethnicity & gender) of all students enrolled in the accredited degree program(s).*
- *o Demographics compared to those recorded at the time of the previous visit.*

*Demographics compared to those of the student population for the institution overall.*

- *o Qualifications of students admitted in the fiscal year prior to the visit.*

*Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.*

- *o Time to graduation.*

*Percentage of matriculating students who complete the accredited degree program within the "normal time to completion" for each academic year since the previous visit.*

*Percentage that complete the accredited degree program within 150% of the normal time to completion for each academic year since the previous visit.*

*Program faculty characteristics*

- *o Demographics (race/ethnicity & gender) for all full-time instructional faculty.*

*Demographics compared to those recorded at the time of the previous visit.*

*Demographics compared to those of the full-time instructional faculty at the institution overall.*

- *o Number of faculty promoted each year since last visit. Compare to number of faculty promoted each year across the institution during the same period.*
- *o Number of faculty receiving tenure each year since last visit. Compare to number of faculty receiving tenure at the institution during the same period.*
- *o Number of faculty maintaining licenses from U.S. jurisdictions each year since the last visit, and where they are licensed.*

**2013 Team Assessment:**
Statistical reports were provided using the I.3.1 Statistical Report Template, but additional data points were not. In particular, demographic data for the entire institution was not included.

**Program Response (2015):**
Our apologies for overlooking the additional data points and institution information during the last cycle. This information is now included in I.3.1 - Statistical Reports and in Appendix B, and will be available for the team during the upcoming site visit.

**Part One (I): Section 4 – Policy Review**
*The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than be appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 3.*

**2013 Team Assessment:**
The full complement of required documents was not provided in the team room.

**Program Response (2015):**
Again, our apologies. We assumed copies of all policies were in the team room, and accommodated the teams request when additional information was requested. We fully intend to have copies of all policies available in the team room during the upcoming visit, per the listing in Appendix 3 of the *"2009 Conditions"*.

**II.1.1 Student Performance Criteria: Realms A, B and C**
*Realm A: Critical Thinking and Representation:*

*Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:*

- *Being broadly educated.*
- *Valuing lifelong inquisitiveness.*
- *Communicating graphically in a range of media.*
- *Recognizing the assessment of evidence.*
- *Comprehending people, place, and context.*
- *Recognizing the disparate needs of client, community, and society.*

**Realm A. General Team Commentary:**
Although progress in being made in Realm A, the program is relatively new and students have only progressed through five of seven semesters of study required for graduation. Thus, substantial aspects of the criteria have yet to be established in the evidence of student work.

*Realm B: Integrated Building Practices, Technical Skills and Knowledge: Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:*

- *Creating building designs with well-integrated systems.*
- *Comprehending constructability.*
- *Incorporating life safety systems.*
- *Integrating accessibility.*
- *Applying principles of sustainable design.*

**Realm B. General Team Commentary:**
Although progress in being made in Realm B, the program is relatively new and students have only progressed through five of seven semesters of study required for graduation. As noted – several key courses identified as primary sources for particular SPCs have yet to be taught. Thus, substantial aspects of the criteria have yet to be established in the evidence of student work.

*Realm C: Leadership and Practice:*

*Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:*

- *Knowing societal and professional responsibilities*
- *Comprehending the business of building.*
- *Collaborating and negotiating with clients and consultants in the design process.*
- *Discerning the diverse roles of architects and those in related disciplines.*
- *Integrating community service into the practice of architecture.*

**Realm C. General Team Commentary:**
Very little progress is being made in Realm C, as the program is relatively new and students have only progressed through five of seven semesters of study required for graduation. As noted – the key professional practice course ARCH-771 identified as the primary source for many of the SPCs has yet to be taught. Thus, substantial aspects of the criteria have yet to be established in the evidence of student work.

**Program Response (2015):**
While it is clear that a number of the SPC were identified as "Not-Yet Met" given that the program is still relatively new, we have relied on the guidance from the previous site visit to critically review our curriculum and the SPC as we worked toward completion of offering our courses at least once. The proposed changes are primarily the result of two recommendations by the site visit but also stem from a comprehensive curriculum review that was conducted by the department faculty and curriculum committee after the initial three years of the program, i.e. after all the core courses had been run at least once. The changes primarily affect the design/studio sequence of courses (Architectural Design I, and II and Architectural Studio I - IV) and their co-requisite technical courses (Fundamentals of Building Systems, and Integrated Building Systems I - IV). These adjustments were incorporated to increase the value of content delivery overall, and to reinforce curricular alignment with the SPC.

The first recommendation was to add one more elective be added to the curriculum. To accommodate this, the Innovative Architecture course is eliminated as a requirement and its content distributed over the Integrated Building Systems courses.

A second recommendation was that we consider adding a "comprehensive" studio course as a capstone course rather than relying on the Thesis course. Thesis courses are problematic as comprehensive courses because if a student chooses a pure research thesis, she or he would not meet the requirement of executing a comprehensive and integrative project. In response to this, a new Architectural Studio IV: Integrated Design course is added as the final studio course. The displaced Architectural Studio IV: Urban course is relocated to the second year (and the name changed to Architectural Studio II: Urban) displacing Architectural Studio II: Tectonic. The content of the Tectonic studio is relocated and absorbed into Architectural Design I and II in the first year. This helps strengthen the first year design experience which was originally written as primarily a design sequence – architecture must always acknowledge its tectonic component.

The Integrated Building Systems courses are closely linked with the design/studio courses thus their content is rearranged and moved to match the changes noted above. Additionally, content is redistributed based on experience teaching the courses over the first three years. As also noted above, the content of the Innovative Architecture course is added into this course sequence.

Other, more minor changes were made to the following courses and are included so as to have up-to-date course outlines on record. They are as follows:

- The "thesis preparation" content of the Professional Practice and Thesis Prep course is moved to the Research Seminar course. These courses now become Professional Practice, and Research Seminar/Thesis Prep. This is much more logical since thesis preparation skills are closely linked to research methodologies and not so much with the practice of architecture. The content was originally placed in the Professional Practice course for timing purposes. Adjustment of the curriculum mask places Research Methods/Thesis Prep exactly where it needs to be – fall semester of year three.
- A Continuation of Thesis course is added. This is a necessary course for students who don't finish their thesis as scheduled and was not created when the program was initially written.
- The Thesis Studio course is re-named Thesis. This is consistent with Thesis courses elsewhere on campus and also reflects the option of students being able to complete a research thesis rather than a design-based thesis. This is also necessary because use of the term "studio" creates a conflict with the way in which credit hours are assigned.
- Integrated Building Systems I - V are renamed Fundamentals of Building Systems and Integrated Building Systems I - IV. In this way their numbers match those of their co-requisite design/studio courses.

The proposed changes do not affect enrollment/admissions, or resources. They may be viewed more as "mid-course corrections". They will however allow the program to more easily align with and satisfy NAAB criteria and better serve students.

**II.2.3 Curriculum Review and Development**

*The program must describe the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that licensed architects are included in the curriculum review and development process.*

**2013 Team Assessment:**

There is a standing curriculum committee chaired by a full-time tenured architecture professor that includes faculty members from GIS, the architecture program (tenured and adjunct), CIAS, and a student representative. It has been highly effective in developing the revised curriculum and enhancing elective options. However, per the APR, processes and procedures for curriculum assessment and modification have yet to be developed. This Team considers this cause of concern not fully resolved.

**Program Response (2015):**

The Department of Architecture Curriculum Committee consists of academics from related programs at RIT (the School of Design, and Civil Engineering Technology) and practicing architects from the community. As previously discussed, the committee meets regularly throughout the academic year and reports monthly to the faculty as a whole in its Faculty meetings. Annually, the faculty and the Curriculum Committee, along with other invited guests conduct a program retreat/advance to assess, reflect on and re-direct its program offering in support of the focus and mission of the program. Feedback over the first three years of the program has been instrumental an affecting critical modifications on an ongoing basis.

**Part Two (II): Section 3 – Evaluation of Preparatory/Pre-Professional Education**

*Because of the expectation that all graduates meet the SPC (see Section 1 above), the program must demonstrate that it is thorough in the evaluation of the preparatory or pre-professional education of individuals admitted to the NAAB-accredited degree program.*

*In the event a program relies on the preparatory/pre-professional educational experience to ensure that*

*students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the accredited degree program. This assessment should be documented in a student's admission and advising files.*

**2013 Team Assessment:**
Refer to specific 2013 Team Assessment comments earlier in this report: Progress Since the Last Site Visit (2011) 2009 Condition II.3, Evaluation of Preparatory/Pre-Professional Education – and,

**2013 Team Assessment:**
The APR states that there has been no need for evaluation of prior work outside the normal admission process, yet students in Fall 2013 were in fact admitted via "advanced standing." Further, the APR states that a review is underway and a policy is included; as such a Course Waiver / Advanced Standing Policy has been provided in the APR Appendix B. The policy outlines the process by which some applicants may be offered advanced standing.

However, as stipulated by the Conditions, there was no description for verifying the requisite 45 general education credits and how those credits compare with credits which may be awarded as part of advanced standing. Granted, the University requires a baccalaureate degree from an accredited institution for admission to the program, but did not outline the review of general education credits.

**Program Response (2015):**
As previously stated in the Program Response above in I.2.1, Human Resources & Human Resource Development: Students (p. 46), the program works closely with the Office of Graduate and Part-time Enrollment Services to ensure that the requisite 45 credit hour requirement for general education is met for incoming students. In particular, for "advanced standing" candidates, each applicant now receives an additional screening for her/his general education requirement, above and beyond any SPC being met in pre-professional education. Should additional general education requirements be required, this will be noted in the admission letter and tracked for compliance prior to graduation. We also intend to modify our existing articulation agreements to indicate and clarify this requirement and further assure the condition is understood.

**II.4.2 Access to NAAB Conditions and Procedures**
*In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents and faculty:*

*The 2009 NAAB Conditions for Accreditation*

*The NAAB Procedures for Accreditation (edition currently in effect)*

**2013 Team Assessment:**
While the Master of Architecture Program website (see below) listed the requisite websites as above, both links were not working properly.

http://www.rit.edu/gis/architecture/program/accreditation

**Program Response (2015):**
This error has been corrected and the links now produce the NAAB documents noted.

**II.4.5 ARE Pass Rates**
*Annually, the National Council of Architectural Registration Boards publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered to be useful to parents and prospective students as part of their planning for higher/post-secondary education. Therefore, programs are required to make this information available to current and prospective students and their parents either by publishing the annual results or by linking their website to the results.*

**2013 Team Assessment:**
Not applicable at this time.

**Program Response (2015):**
As of this date, students from our first cohort are now graduating, thus this section is still not applicable.

**III.3.1.ii – Responses to Causes of Concern**

**A. Mission and Implementation:**
The stated founding premise of the three and one-half-year architecture program is that it is "designed for students with an earned bachelor's degree in a non-architecture field." This approach has been selected "in order to assure that our students, who will be continually working in teams, will bring a rich breadth of academic background and intellectual problem-solving to the studio." As a practical matter, the program has emerged as of great interest to students who do have architecture and related design backgrounds, both here in the US and internationally. The past academic record of these applicants is thoroughly reviewed and may lead to advanced standing. Moreover, the program is considering articulation agreements for advanced standing with other universities and other academic programs within RIT. The folding in of advanced standing students may dramatically affect the anticipated culture grounded in the founding principles, levels of student learning needs and capacity in the same cohort, and should be carefully assessed going forward.

**Program Response (2015):**
The department as regularly discussed and assessed the integration of "advanced standing" students with new students having backgrounds other than in architecture and we continue to monitor this. There continues to be strong interest in our program from applicants with previous experience, and we have selectively admitted some of these students. To date, we have found that this mix has enriched the various student explorations in both backgrounds, where each population has mutually benefitted from one another. Students in year two of the program have come to expect newly enrolled "advanced standing" students to join them as they begin their developmental year.

**B. Comprehensive Design:**
In reviewing the Student Performance Matrix and the syllabi provided for courses yet to be taught, the team noted a potential for some students to successfully develop a research thesis and not complete design work required to meet the standards of Comprehensive Design (SPC B.6). At this time SPC B.6 is only noted as being met within ARCH-790: Thesis Studio.

**Program Response (2015):**
We have modified our curriculum to now have a comprehensive design component at the end of the third year – Architectural Studio IV – Integrated Design. Please refer to the previous Program Response above (II.1.1 Student Performance Criteria: Realms A, B and C - p. 49) for additional information.

**C. Student Stress:**
In conversations with students in the Master of Architecture program, the important issue of "stress" surfaced. When prompted, many (nearly all) students stated that the stress of pursuing their graduate degree while at the same time needing to work part-time positions for financial reasons. Unfortunately, students are sacrificing their academics to seek monies to assist with tuition, living and supply costs. While a typical architecture student certainly will experience stress during their studies, the team felt that the stress level was impactful on both the students and program.

**Program Response (2015):**
We continually monitor and are vigilant regarding stress related conditions within a student's challenges and responsibilities to achieving her or his program goals. While this is not something that is easy to eliminate, we have attempted to clarify our integrated curriculum approach to the program as one means

of minimizing work "overload" by building in ways for various assignments and projects to cross-relate among classes. We also remind students (and faculty) about university wide services to assist with stress and time management issues. While we do not encourage part-time work, we do have a required co-op, and often a student remains employed with the firm following the co-op experience. We consider this an added value to the program, and the students overall experience as she or he enters the workforce. Nonetheless, time management and work life balance are still items to pay attention to.

## Part Four (IV): Supplemental Information

### IV.4.1 Description of Policies and Procedures for Evaluating Student Work

All student work is evaluated by individual instructors in each course, following guidelines and policies established by RIT and as indicated by grading criteria described in each syllabus. Grades, along with written comments are provided for many assignments. When examinations are given, it is routine to have time allotted in class to review content on examinations.

Studio reviews and critiques are held for all projects assigned, and every primary studio review includes outside guests, and Professors of Practice (adjunct faculty) where appropriate. Evaluation of studio work is provided to each student both during a studio review and following a studio project. In a consensus building mode, written feedback is encouraged by each critic and these comments, along with any letter grade offered are used in determining a final grade by the instructor.

Annually, students are required to submit a portfolio of their work, and this work is evaluated by representation from the Student Review Committee (SRC), as a part of the program's review and self-assessment procedure.

### IV.4.2 Course Descriptions

As mentioned earlier, RIT has successfully transitioned to a semester system in the 2013/14 academic year, concluding its quarter system at the close of the 2012/2013 academic year. Curriculum for the semester courses have subsequently been approved by the New York State Department of Education. Course descriptions for the program in the Semester System immediately follow Part Four.

### IV.4.3 Faculty Resumés

The résumés' for full-time and adjunct faculty members participating in the program since the last site visit immediately follow Part Four (and course descriptions). This also includes a Faculty Listing Summary and Matrix of Courses Taught.

### IV.4.4 Continuing of Candidacy Visiting Team Report (VTR)

The Continuing of Candidacy Visiting Team Report for November, 2013 is provided in Appendix D.

### IV.4.5 Catalog

Refer to the following web catalogs for undergraduate and graduate programs.

https://www.rit.edu/academicaffairs/registrar/course-catalogs

**Number & Title of Course:** ARCH-611 Architectural Representation I, 3 credits

**Course Description:** Introduction to the range of architectural representation skills necessary to effectively document basic architectural form and space. Skill development will be both manual and digital.

**Course Goals:**

The goal of this course is to develop a student's basic architectural representation skills to be used as the primary tool in conveying design concepts.

- To develop the ability to free-hand sketch extemporaneously.
- To produce two-dimensional drawings manually and digitally.
- To building three-dimensional models manually and digitally.
- To become fluent in publishing (page layout, imaging, illustration) software.

**Course Objectives:**

- Select and utilize the appropriate drawing convention, type and graphical method(s) to represent geometric shapes.
- Measure, draw, scale, and dimension a drawing to accurately represent basic geometric and composite shapes.
- Select and draw appropriate lines in five thicknesses to industry standards to support the intended graphical representation.
- Letter drawings consistently, legibly, and to industry accepted standards.
- Lay out and execute basic object drawings to industry accepted standards.

**Student Performance Criterion/a addressed:**

**A3 – Visual Communication Skills**

**Topical Outline:**

Graphic Sequence (10%)
Accurate Graphic Representation (40%)
Line quality (10%)
Lettering (10%)
Layout and Publishing Software (30%)

**Prerequisites:**

None

**Textbooks/Learning Resources:**

American Institute of Architects. *Architectural Graphic Standards*. John Wiley and Sons. 2007
Chiavaroli, Jules. *AEC Drafting Fundamentals*. Cengage Learning.1994
Ching, Francis. *Architectural Graphics*. John Wiley and Sons. 2009
Cooper, Douglas.*Drawing & Perceiving*. John Wiley and Sons. 2007
Wallschlaeger, Charles. *Basic Visual Concepts and Principles*. McGraw-Hill. 1992
A basic 3-D modeling application such as Google SketchUp®
A 2-D/3-D computer drafting/modeling programs such as AutoCAD® and/or Revit Architecture®.
Page layout, illustration, and imaging software such as the Adobe Creative Suite®

**Offered (semester and year):**

Fall only; annually

**Faculty Assigned:**

Michelle Murnane (adjunct)

**Number & Title of Course:** ARCH-612 Architectural Representation II, 3 credits

**Course Description:** Deepens the study of architectural representation skills necessary to effectively document more complex architectural form and space. Skill development will be both manual and digital.

**Course Goals:**

The goal of this course is to further develop a student's architectural representation skills to be used as the primary tool in conveying more complex design concepts.

- To refine free-hand sketch skills.
- To produce complex two-dimensional drawings that relate to each other.
- To building sophisticated three-dimensional models.
- To become skilled with model editing and animation software.

**Course Objectives:**

- Create an architectural 3-D virtual model of a moderate sized building project using industry standard file creation techniques.
- Create photorealistic renderings from an architectural 3-D virtual model of a moderate sized building project.
- Create select working drawings from an architectural 3-D virtual model of a moderate sized building project.
- Publish a set of presentation drawings and a partial set of working drawings from an architectural 3-D virtual model.
- Create free-hand design and analytical drawings to industry accepted standards.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **A3 – Visual Communication Skills** | A4 – Technical Documentation |

**Topical Outline:**

Building Information Modeling Project Creation (60%)
File/Project Set-up, Editing, Manipulation (20%)
View Generation, Printing/Publishing (10%)
Advanced Sketching Techniques (10%)

**Prerequisites:**

ARCH-611 Architectural Representation I

**Textbooks/Learning Resources:**

A basic 3-D modeling application such as Google SketchUp®
A 2-D/3-D computer drafting/modeling program such as AutoCAD® and/or Revit Architecture®.

**Offered:**

Spring only; annually

**Faculty Assigned:**

Michelle Murnane (adjunct)

**Number & Title of Course:** ARCH-621 Architectural History I, 3 credits

**Course Description:** The history of western and non-western architecture from the beginning of human shelter and early communities through the end of the Medieval period in Europe.

**Course Goals:**

The goal of this course is to develop a student's appreciation for historically significant architecture from pre-history to the Medieval period, understand the influences that affected form, and to apply these principles to contemporary design problems.

**Course Objectives:**

From pre-history to the Medieval period:

- Identify by name, date, architect, and location – important examples of architecture for a given style.
- Identify and explain how various external influences helped create formal characteristics for a given style.
- Compare and contrast important examples of architecture within and between styles.
- Evaluate important examples of architecture, and architectural styles with respect to their ability to satisfy the economic, social, and environmental needs of their time.

**Student Performance Criterion/a addressed:**

**A1 – Communication Skills**
**A9 – Historical Traditions and Global Culture**
**A10 – Cultural Diversity**

Supported:

B8 – Ordering System Skills

**Topical Outline:**

Beginnings of Architecture and Community (5%)
Ancient Non-Western (10%)
Western Classical (35%)
Byzantine (5%)
Mature Far-Eastern (10%)
Western World (10%)
Romanesque and Gothic (10%)
Non-Western (15%)

**Prerequisites:**

None

**Textbooks/Learning Resources:**

A World History of Architecture; Moffett, Marian; Fazio, Michael; Wodehouse, Lawrence; 608 pp., London, Lawrence King Publishing, 2008.
Library and Interlibrary resources for supplementary sources

**Offered:**

Fall only; annually

**Faculty Assigned:**

Peter Gabak (adjunct), Alissa de Witt-Paul (adjunct)

**Number & Title of Course:** ARCH-622 Architectural History II, 3 credits

**Course Description:** The history of western and non-western architecture from the Renaissance through the present day. The sub-theme of sustainability will be explored in historic buildings.

**Course Goals:**

The goal of this course is to develop a student's appreciation for historically significant architecture from the Renaissance forward, understand the influences that affected form, and to apply these principles to contemporary design problems.

**Course Objectives:**

From the Renaissance to the present day:

- Identify by name, date, architect, and location – important examples of architecture for a given style.
- Identify and explain how various external influences helped create formal characteristics for a given style.
- Compare and contrast important examples of architecture within and between styles.
- Evaluate important examples of architecture, and architectural styles with respect to their ability to satisfy the economic, social, and environmental needs of their time.

**Student Performance Criterion/a addressed:**

**A1 – Communication Skills**
**A9 – Historical Traditions and Global Culture**
**A10 – Cultural Diversity**

Supported:

B8 – Ordering System Skills

**Topical Outline:**

Western Renaissance (15%)
Renaissance Transitions and Transformations (10%)
European Classical Revival (10%)
Non-Western (15%)
Romantic Revival and Eclecticism (10%)
Architecture of Engineering (5%)
Modernism (15%)
Post Modern (15%)
Official Taste and Popular Design (5%)

**Prerequisites:**

ARCH-621 Architectural History I

**Textbooks/Learning Resources:**

A World History of Architecture; Moffett, Marian; Fazio, Michael; Wodehouse, Lawrence; 608 pp., London, Lawrence King Publishing, 2008.
Library and Interlibrary resources for supplementary sources

**Offered:**

Spring only; annually

**Faculty Assigned:**

Peter Gabak (adjunct), Alissa de Witt-Paul (adjunct)

**Number & Title of Course:** ARCH-631 Architectural Design I, 6 credits

**Course Description:** A basic synthesis and application of visual and tectonic communication skills while analysis develops acuity of the students' awareness of formal/spatial principles.

**Course Goals:**

- Introduce students to the production of basic graphic communication tools and develop an understanding of how to read/interpret various data sources
- Cultivate the student's visual-based spatial awareness and cognition through observation and documentation of the built environment.
- Encourage students to explore the tectonic expression of data and observation based design approaches.
- Introduce students to drawing and making (constructing) as a mode of seeing and thinking by examining the connections between abstract design principles and the physical and visual environments.
- Provide a working forum for developing conceptualization, critical thinking, planning, and making.
- Introduce a range of possibilities for the making of both 2-D and 3-D environments.
- Begin exploration of contextual site as a mode for architectural investigation.
- Examine, apply, and master primary architecture-based concepts such as site, enclosure, separation, adjacency, circulation, utility; as well as facility with 3-dimensional platonic solids

**Course Objectives:**

- Describe the nature and role of the primary design elements in a successful design.
- Utilize primary design elements to create 2-dimensional and 3-dimensional design compositions.
- Describe the nature and impact each element of form has on an overall design.
- Utilize elements of form to create 2-dimensional and 3-dimensional design compositions.
- Utilize elements of form to create 3-D design compositions that respond to spatial requirements.
- Create a composite sketch.
- Create a basic color rendering of elemental forms.
- Photographically record built form to illustrate its various sub-components.

**Student Performance Criterion/a addressed:**

**A8 – Ordering System Skills**

Supported:

A2 – Design Thinking Skills
A6 – Fundamental Design Skills
C1 – Collaboration

**Topical Outline:**

Primary Design Elements (15%)
Color Rendering Basics (10%)
Form (20%)
Photographic Representation Basics (10%)
Form and Space (20%)
Transfers and Transfer Systems (5%)
Composite Sketching (15%)
Documenting Work/Digital File Mgt. (5%)

**Prerequisites:**

None

**Textbooks/Learning Resources:**

Various graphic software applications
Ching, Francis, D. K. Architecture: Form, Space, and Order, Wiley, New York: 2008.

**Offered:**

Fall; annually

**Faculty Assigned:**

David Chamberlain (adjunct), Michelle Murnane (adjunct), Alissa de Witt-Paul (adjunct)

**Number & Title of Course:** ARCH-632 Architectural Design II, 6 credits

**Course Description:** Students will analyze and solve building based architectural design problems with a focus on residential design and other wood based structures.

**Course Goals:**

- Introduce students to the process and skills necessary to design the built environment.
- Apply and master primary architectural building concepts such as structure, building skin, adjacency, and program.
- Synthesize historical, structural, and building technology components from corequisite courses into studio practice and exploration.
- Synthesizes design fundamentals with comprehensive residential architectural design.
- Use the theme of type and transformation to convert various aspects of architectural design-form, spatiality, materiality, structure, construction, use, context, aesthetics, zoning, codes, and cultural conditions.

**Course Objectives:**

- Given programmatic requirements, utilize basic design elements to design small wood-frame buildings.
- Study and apply residential design philosophy to create single family to multi-family residential building projects.
- Synthesize influences on residential form learned in pre and co-requisite courses into design projects.
- Create residential designs that respond to their natural and man-made environmental context.
- Identify and utilize sustainable methods of architectural communication.

**Student Performance Criterion/a addressed:**

**A6 – Fundamental Design Skills**

Supported:

A2 – Design Thinking Skills
A4 – Technical Documentation

**Topical Outline:**

Translating Geometric Forms to Buildings (15%)
Residential Design (50%)
Contextual Space (20%)
Sustainable Architectural Communication (15%)

**Prerequisites:**

ARCH-631 Architectural Design I

**Textbooks/Learning Resources:**

Various texts on residential design and sustainability.
2-D/3-D computer drafting/modeling programs.

**Offered:**

Spring only; annually

**Faculty Assigned:**

David Chamberlain (adjunct), Alissa de Witt-Paul (adjunct), Michelle Murnane (adjunct)

**Number & Title of Course:** ARCH-699 Coop Architecture, 0 credits

**Course Description:** This course provides a ten-week (350 hour) work experience in the field.

**Course Goals:**

- Gain work experience in the architecture, engineering, and/or construction industry.
- Provide students with a better understanding of career options, work conditions, and work expectations.
- Enable students to better select a career preparation focus for remaining program study.

**Course Objectives:**

- Demonstrate successful job attendance and punctuality.
- Explain work experiences with weekly on-the-job written communication.
- Self-evaluate work performance in design and technical aspects of the job.
- Communicate with the coop advisor using the JobZone website activity log and other strategies.

**Student Performance Criterion/a addressed:**

**C1 – Collaboration**

**Topical Outline:**

None

**Prerequisites:**

Second year program status.

**Textbooks/Learning Resources:**

None

**Offered:**

All terms; annually

**Faculty Assigned:**

Jules Chiavaroli (F/T)

**Number & Title of Course:** ARCH-731 Architectural Studio I: Site, 6 credits

**Course Description:** Investigation of the interconnection between architecture and the site as well as natural and man-made constraints. Basic landscape architecture topics will also be introduced.

**Course Goals:**

- To provide students with the opportunity to create designs that fully integrate state of the art site and architectural design principles.
- To provide students with the opportunity to expand their understanding of the relationship between the design process and the completed project.
- For students to articulate and successfully communicate the design parti as well as the subsequent practical aspects of the design.
- For students to successfully anticipate and prioritize user needs throughout the site and building design and articulate the same with professional level communication methods.

**Course Objectives:**

- Given an architectural program and project site, students will be able to produce a coherent and professionally presented solution that satisfies client needs.
- Student will be able to analyze site data as a prelude to the design process.
- Students will be able to apply site design best practices to create workable, economical, and sustainable site solutions.
- Student will be able to create a building design, and/or multiple building layout designs that integrate with site characteristics to produce an integrated site/building solution.
- Students will be able to create site designs that satisfy accessibility requirements.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **A2 – Design Thinking Skills** | A5 – Investigative Skills |
| **B2 – Accessibility** | A7 – Use of Precedents |
| **B4 – Site Design** | B3 – Sustainability |

**Topical Outline:**

Site analysis (25%)
Site/building design (75%)

**Prerequisites:**

ARCH-632 Architectural Design II

**Textbooks/Learning Resources:**

Ching, Francis, D. K. Architecture: Form, Space, and Order, Wiley, New York: 2008.
Pena, William Problem Seeking 4th Edition, Wiley, New York 2001.
Tufte, Edward The Visual Display of Quantitative Information, Graphics Press, New York, 2001.
A basic 3-D modeling application such as Google SketchUp®
A 2-D/3-D computer drafting/modeling program such as AutoCAD® and/or Revit Architecture®.

**Offered:**

Fall only; annually

**Faculty assigned:**

Mary Scipioni (adjunct)

**Number & Title of Course:** ARCH-732 Architectural Studio II: Tectonic, 6 credits

**Course Description:** This studio considers architecture both as a representation and as a built form by providing students with the opportunity to bridge the gap between theory and practice.

**Course Goals:**

- Students should be able to translate user needs and client demands into a tectonic, prioritized, and articulated space.
- Students should be able to explore alternative architectural and structural systems to evaluate the impact on architectural design.

**Course Objectives:**

- Create schematic design drawings that accurately communicate architectural solutions.
- Produce design development drawings that explore multiple technical solutions to a given design.
- Produce technical documentation that quantifies the technical solutions explored in the design development phase.
- Create basic working drawings and specifications for an element of an architectural design.
- Build an element of an architectural design from working drawings and specifications.

**Student Performance Criterion/a addressed:**

**B2 – Accessibility**
**B12 – Building Materials and Assemblies**

**Topical Outline:**

Schematic Design (20%)
Design Development (50%)
Contract Document (30%)

**Prerequisites:**

ARCH-731 Architectural Studio I: Site

**Textbooks/Learning Resources:**

Ching, Francis, D. K. Architecture: Form, Space, and Order, Wiley, New York: 2008.
Pena, William Problem Seeking 4th Edition, Wiley, New York 2001.
Tufte, Edward The Visual Display of Quantitative Information, Graphics Press, New York, 2001.
A basic 3-D modeling application such as Google SketchUp®
A 2-D/3-D computer drafting/modeling program such as AutoCAD® and/or Revit Architecture®.

**Offered:**

Spring only; annually

**Faculty assigned:**

Alissa de Witt-Paul (adjunct)

**Number & Title of Course:** ARCH-733 Architectural Studio III: Adaptive, 6 credits

**Course Description:** This course examines the adaptive reuse of existing spaces, with implicit exposure to the basics of historic preservation.

**Course Goals:**

- To provide students with the opportunity to create designs incorporating adaptive reuse and historic preservation principles.
- For student to develop an understanding of building design and the technical issues related to adaptive reuse and building rehabilitation.
- For students to develop an understanding of design and regulatory issues related to creating a certified rehabilitation project.
- For students to understand compatibility issues related to sustainability and historic resources.
- To provide students with the opportunity to examine adaptive rehabilitation from various decision-making viewpoints including those of development, architectural design and regulatory compliance.
- To provide students with the opportunity to interface with preservation agencies and governmental regulatory bodies.

**Course Objectives:**

- Accurately document and communicate as-built space.
- Analyze existing site and building data as a prelude to the design process.
- Utilize sustainability related analytic software to inform architectural design.
- Master professional-quality presentation skills.
- Create an adaptive reuse proposal that successfully responds to the client's program and the external design constraints.

**Student Performance Criterion/a addressed:**

**A2 – Design Thinking Skills**
**A7 – Fundamental Design Skills**
**B1 – Pre-Design**
**B2 – Accessibility**

Supported:

A5 – Investigative Skills
B3 – Sustainability
B5 – Life Safety

**Topical Outline:**

Pre-Design Analysis (30%)
Adaptive Reuse Design (70%)

**Prerequisites:**

ARCH-734 Architectural Studio II: Urban

**Textbooks/Learning Resources:**

A basic 3-D modeling application such as Google SketchUp®
A 2-D/3-D computer drafting/modeling program such as AutoCAD® and/or Revit Architecture®.A 3-D modeling/rendering/animation program such as AutoDesk 3D Max® or Maya®
Page layout, illustration, and imaging software such as the Adobe Creative Suite®
The Landmark Society of Western New York

**Offered:**

Fall only; annually

**Faculty assigned:**

Trevor Harrison (adjunct)
Ming Hu (F/T)

**Number & Title of Course:** ARCH-734 Architectural Studio II: Urban, 6 credits

**Course Description:** Investigation of architectural design as a response to the modern urban context. This includes an understanding of urban design and planning, as well as community involvement.

**Course Goals:**

- To understanding that placing an architectural design in the urban context is a component of sustainable architecture.
- To routinely interact with community agencies and the data they provide as a source to inform architectural design.
- To produce community-responsive designs within the context of historic preservation and zoning ordinances.
- To understand and respond with design solutions to other urban-related contexts such as suburban centers and small towns.

**Course Objectives:**

- Accurately communicate and document architectural space in the urban context.
- Identify basic urban design systems at an existing site.
- Interact with and manage community resources and communication skills with these constituencies.
- Create a building design within an existing urban setting to produce an integrated site/building solution.
- Use precedents to inform effective urban design solutions.

**Student Performance Criterion/a addressed:**

**A2 – Design Thinking Skills**
**A7 – Fundamental Design Skills**
**B2 – Accessibility**
**B7 – Financial Considerations**

Supported:

A5 – Investigative Skills
B3 – Sustainability
C2 – Human Behavior

**Topical Outline:**

Environmental Research and Documentation (30%)
Urban Design (70%)

**Prerequisites:**

ARCH-731 Architectural Studio I: Site

**Textbooks/Learning Resources:**

A basic 3-D modeling application such as Google SketchUp®
A 2-D/3-D computer drafting/modeling program such as AutoCAD® and/or Revit Architecture®.A 3-D modeling/rendering/animation program such as AutoDesk 3D Max® or Maya®
Page layout, illustration, and imaging software such as the Adobe Creative Suite®
Community Design Center of Rochester

**Offered:**

Spring only; annually

**Faculty assigned:**

James Yarrington (adjunct)

**Number & Title of Course:** ARCH-735 Architectural Studio IV: Integrative, 6 credits

**Course Description:** This studio provides the opportunity for students to execute a comprehensive and integrative project from schematic design through design development.

**Course Goal:**

- For students to produce a comprehensive and integrative architectural project that demonstrates the capacity to make design decisions across scales while integrating all major aspects of the design.

**Course Objectives:**

- Given a building program, create a comprehensive schematic design that:
- responds to the implicit historical/cultural traditions of the project location
- responds to the natural features presented by the site
- responds to the man-made constraints of zoning, building, and accessibility codes
- integrates architectural, civil/site, mechanical/electrical, and structural systems
- optimizes, conserves, or reuses natural and built resources while providing a healthy environment for users.
- Apply the principles of natural and formal ordering systems to the design and development of a construction project.
- Gather, assess, record, apply and evaluate relevant information throughout the design process.
- Produce the following design development drawings:
- Site plan(s) documenting site improvements, grading, water mgt., utilities, and accessibility.
- Floor plan(s) documenting code compliance (fire ratings, egress, and accessibility), building envelope design, interior construction, core elements (stairs, elevators, etc.) and schematic plumbing, HVAC, electrical and fire protection systems.
- Building and wall section(s) documenting building components shown on floor plans where applicable.
- Framing plans documenting structural configuration with calculations for a typical structural bay.

**Student Performance Criterion/a addressed:**

**B6 – Comprehensive Design**

**Topical Outline:**

Schematic Design (including site design) (35%)
- Investigation of design parameters
- Application of ordering system, historical traditions and global culture, and accessibility
- Incorporation of sustainability principles

Design Development (65%)
- Execution of technical documentation
- Application of life safety principles
- Selection of environmental systems, and structural systems

**Prerequisites:**

ARCH-733 Architectural Studio III: Adaptive

**Textbooks/Learning Resources:**

Applicable zoning codes, building codes, accessibility codes, etc.
Technical resources such as manufaturer's literature, Archtectural Graphic Standards, etc.
A building information modeling program such as ArchiCAD® or Revit®

**Offered:**

Spring only; annually

**Faculty assigned:**

Jules Chiavaroli (F/T)

**Number & Title of Course:** ARCH-641 Fundamentals of Building Systems, 3 credits

**Course Description:** Students will receive an overview of the various passive and active architectural and engineering systems that comprise a building project while focusing on wood frame construction.

**Course Goals:**

For students to:

- Gain a fundamental understanding of the various components of a building project's systems.
- Understand how these systems work individually, how they interrelate, and how they affect the overall design configuration.
- Learn, in an integrated way, the various ways in which components of a small scale building project's systems work.

**Course Objectives:**

- List sections of various building construction formatting systems.
- Recognize, classify, and compare the major components and assemblies of common architectural material assemblies.
- Explain or describe the function of various site components on a construction project.
- Explain basic concepts and perform simple structural calculations for a building project.
- Explain the purpose and describe the function of various heating, ventilating, and air conditioning components for a building project.
- Explain the purpose and describe the function of various plumbing components for a building project.
- Explain the purpose and describe the function of various electrical components for a building project.
- Explain the relationship and interaction between climate and human comfort.

**Student Performance Criterion/a addressed:**

**B8 – Environmental Systems**
**C2 – Human Behavior**

Supported:

A8 – Ordering System Skills
B9 – Structural Systems
B10 – Building Envelope Systems
B11 – Building Services Systems
B12 – Building Materials & Assemblies

**Topical Outline:**

Architectural Materials & Methods (30%)
Civil/Site Work (10%)
Structural Systems (10%)
HVAC Systems (10%)
Plumbing Systems (10%)
Electrical Systems (10%)
Climate and Comfort (10%)
Other Systems (10%)

**Prerequisites:**

None

**Textbooks/Learning Resources:**

A wide variety of technical resources on architecture, engineering, and construction.
Allen, *How Buildings Work: The Natural Order of Architecture,* Oxford University Press Inc., 2000

**Offered:**

Spring only; annually

**Faculty assigned:**

Dennis A. Andrejko (F/T)

**Number & Title of Course:** ARCH-741 Integrated Building Systems I, 3 credits

**Course Description:** A study of architectural materials and systems that comprise a building project's site work including civil engineering and landscaping, water management, soils/substructure, and exterior lighting.

**Course Goals:**

For students to:

- Understand the physical/natural characteristics of a building site and how to manage and utilize them.
- Understand the man-made constraints imposed on land use and comply with them.
- Understand the implications of and the practices necessary to place a building on a site.
- Become familiar with and apply the common materials and construction methods used in site construction with a focus on building sub structure.
- Understand water/waste/storm, and electrical systems found on building sites.
- Understand and apply energy rating systems as they relate to sustainable sites and water efficiency.
- Investigate current innovative architectural solutions that address building sites.

**Course Objectives:**

For students to:

- Recognize, classify, and select material composition, production methods, assembly methods, and common sizes and shapes for concrete, masonry, and metals.
- Describe and perform tasks for select civil/site topics such as topo maps and soil conditions.
- Explain the affect site design decisions have on the overall urban landscape.
- Describe and perform tasks for structural work related to foundations.
- Describe and perform tasks related to storm water management on a site.
- Perform basic lighting calculations for a building site and create a site lighting drawing.
- Compare sustainability characteristics for select materials and/or assemblies.
- Perform a square foot cost analysis for a building and its associated site improvements.
- Identify, analyze, and report zoning code regulations that affect site and building design.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **B11 – Building Services Systems** | A4 – Technical Documentation |
| **B12 – Building Materials & Assemblies** | B2 – Accessibility |
| | B4 – Site Design |

**Topical Outline:**

Engineering, Landscaping Materials and Methods; concrete, masonry, metals (25%)
Civil/Site Work; surveying and topographic maps (15%)
Structural Systems; soils and foundations (10%)
Material solar reflectance and albedo/ heat island effect (5%)
Storm water systems (10%)
Exterior power and lighting (5%)
Sustainability - LEED SS & WE (10%)
Construction Cost Controls (5%)
Building and Zoning Codes (15%)

**Prerequisites:**

ARCH-641 Fundamentals of Building Systems

**Textbooks/Learning Resources:**

A wide variety of technical resources on architecture, engineering, and construction related to site work.

**Offered:**

Fall only; annually

**Faculty assigned:**

Jules Chiavaroli (F/T)

**Number & Title of Course:** ARCH-742 Integrated Building Systems II, 3 credits

**Course Description:** A study of building envelopes and structural systems of non-residential buildings and their overall performance. Structural inquiry will fully cover the field of statics.

**Course Goals:**

For students to:

- Understand how external forces affect a structure and to develop the ability to solve structural problems using the principles of statics.
- Understand how natural phenomena affect a building and to develop the ability to design a building envelope to manage such while accommodating human comfort.
- Gain a further understanding of water/waste, and electrical power systems as they relate to building interiors.
- Understand and apply energy rating systems as they relate to location and transportation, and energy and atmosphere.
- Investigate current innovative architectural solutions that address building structure and envelope.

**Course Objectives:**

- Recognize, classify, and select material composition, production methods, assembly methods, and common sizes and shapes for structural and envelope building materials.
- Develop and detail building envelopes that meet all imposed constraints such as building codes and certification systems.
- Recognize and describe how steel frame, site-cast concrete, and precast concrete structural systems and their components work and be able to choose select structural components from manufacturers' literature.
- Explain and/or describe structural phenomena as it relates to the discipline of statics and perform equilibrium calculations.
- Analyze a project by certification standards for location and transportation, and energy and atmosphere.
- Perform comparative cost analyses for commercial construction materials and methods.

**Student Performance Criterion/a addressed:**

**B9 – Site Design**
**B10 – Building Envelope Systems**
**B12 – Building Materials & Assemblies**

Supported:

A4 – Technical Documentation
B2 – Accessibility
B6 – Comprehensive Design
B7 – Financial Considerations
B8 – Environmental Systems
B11 – Building Service Systems

**Topical Outline:**

Architectural Materials & Methods (30%)
Structural Systems (50%)
Building Services (5%)
Sustainability - LEED LT & EA (10%)
Construction Cost Controls (5%)

**Prerequisites:**

ARCH-741 Integrated Building Systems I

**Textbooks/Learning Resources:**

Allen, Iano. *Fundamentals of Building Construction: Materials and Methods*. John Wiley and Sons. 2014.
Onouye, Kane. *Statics and Strength of Materials for Architecture and Construction*. Prentice Hall. 2012.

**Offered:**

Spring only; annually

**Faculty assigned:**

Jules Chiavaroli (F/T)

**Number & Title of Course:** ARCH-743 Integrated Building Systems III, 3 credits

**Course Description:** Interior building components will be studied from subdivision of space to selection of finishes as related to building code regulations. Structural inquiry will continue with strength of materials.

**Course Goals:**

For students to:

- Understand how external forces affect a structure and to develop the ability to solve structural problems using the principles of strength of materials.
- Develop the ability to subdivide the interior space of a building while meeting all technical requirements.
- Understand and incorporate fire protection, and transportation systems into buildings.
- Understand and apply energy rating systems as they relate to materials and resources.
- Investigate current innovative architectural solutions that address interior building space.

**Course Objectives:**

- Recognize, classify, and select material composition, production methods, assembly methods, and common sizes and shapes for structural and interior walls, ceilings, and floors.
- Develop and detail building interiors that meet all imposed constraints such as building and accessibility codes, and certification systems.
- Understand requirements for and develop/detail building core elements such as stairs, shaftways, vertical transportation systems, and fire protection systems.
- Explain and/or describe structural phenomena as it relates to the discipline of strength of materials and perform select structural calculations.
- Analyze a project by certification standards for materials and resources.
- Perform comparative cost analyses for commercial construction materials and methods.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **B5 – Life Safety** | A4 – Technical Documentation |
| **B9 – Structural Systems** | B2 – Accessibility |
| **B11 – Building Service Systems** | B6 – Comprehensive Design |
| **B12 – Building Materials & Assemblies** | B8 – Environmental Systems |

**Topical Outline:**

Architectural Materials & Methods (25%)
Structural Systems (50%)
Building Services (10%)
Sustainability - LEED MR (10%)
Construction Cost Controls (5%)

**Prerequisites:**

ARCH-742 Integrated Building Systems II

**Textbooks/Learning Resources:**

Allen, Iano. *Fundamentals of Building Construction: Materials and Methods*. John Wiley and Sons. 2014.
Onouye, Kane. *Statics and Strength of Materials for Architecture and Construction*. Prentice Hall. 2012.

**Offered:**

Fall only; annually

**Faculty assigned:**

Jules Chiavaroli (F/T)

**Number & Title of Course:** ARCH-744 Integrated Building Systems IV, 3 credits

**Course Description:** Building environmental systems, acoustics, and illumination will be studied. Emphasis will be placed on natural illumination and reducing dependence on mechanical means of achieving human comfort.

**Course Goals:**

For students to:

- Understand human comfort and the range of passive and active systems available to incorporate into an architectural design.
- Develop the ability to recommend environmental systems for specific tasks.
- Understand principles of acoustics as they relate to architectural design.
- Understand the principles of illumination and apply them so as to enhance energy efficient building design.
- Understand and incorporate electrical lighting systems into buildings.
- Understand and apply energy rating systems as they relate to indoor environmental quality.

**Course Objectives:**

- For the systems listed, recognize and be able to explain the operation of such systems and be able to select appropriate components of commercial building for:
- Thermal control
- Electrical lighting
- Acoustic systems
- Security systems
- Explain the fundamentals of environmental systems and apply these principles to the design of space in order to achieve human comfort.
- Explain the fundamentals of architectural acoustics and apply these principles to the design of space in order to manage sound.
- Explain the fundamentals of architectural lighting and apply these principles to the design of space in order to manage both the quality and quantity of light, including artificial light and daylight.
- Calculate or explain building performance criteria of energy certification programs (such as LEED) for indoor environmental quality.

**Student Performance Criterion/a addressed:**

**B8 – Environmental Systems**

Supported:

A4 – Technical Documentation
B6 – Comprehensive Design
B11 – Building Services Systems

**Topical Outline:**

Lighting (30%)
Acoustics (20%)
Environmental Systems (40%)
Signal Systems (5%)
Sustainability - LEED EQ (5%)

**Prerequisites:**

ARCH-743 Integrated Building Systems III

**Textbooks/Learning Resources:**

A wide variety of technical resources on architecture, engineering, and construction.
Allen, *Fundamentals of Building Construction: Materials and Methods*, John Wiley and Sons, 2004

**Offered:**

Spring only; annually

**Faculty assigned:**

Jules Chiavaroli (F/T)

John Baum (adjunct)

**Number & Title of Course:** ARCH-751 Architectural Theory, 3 credits

**Course Description:** A survey of architectural theory and criticism with emphasis on contemporary architecture. Students will investigate, learn, and apply critical thinking, as well as communicate it to others.

**Course Goals:**

- The goal of this course is to develop in students the ability to critically analyze architecture and express this analysis verbally and in written form so as to aid them in the development of their own design process.

**Course Objectives:**

- Analyze, evaluate, and compare architectural texts on issues of architectural theory.
- Communicate architectural concepts clearly, concisely, and effectively in writing.
- Communicate architectural concepts clearly, concisely, and effectively using speech.
- Explain at least three contemporary architectural theories.
- Draft, refine, revise, and edit written material until it meets professional standards.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **A7 – Use of Precendents** | A1 – Communication Skills |

**Topical Outline:**

Architectural theory vs. architectural practice (15%)
Criticism (20%)
Architectural theory throughout history (25%)
Contemporary theories (40%)

**Prerequisites:**

ARCH-621 Architectural History I, ARCH-622 Architectural History II

**Textbooks/Learning Resources:**

Charles Jencks and Karl Kropf, *Theories and Manifestos of Contemporary Architecture*, Wiley Academy, 1997
Le Corbusier, *Toward a New Architecture*, New York: Dover Publications, 1986
Vitruvius, *The 10 Books of Architecture*, New York: Dover Publications, 1960
Robert Venturi, *Complexity and Contradiction in Architecture*, New York: MOMA, 1977
Louis Kahn, *Essential Texts*, New York: W.W.Norton & Company, 2003
K.Michael Hays, *Architecture | Theory | Since 1968*, Cambridge, MA: the MIT Press, 1998
Kate Nesbitt, *Theorizing a New Agenda for Architecture. An Anthology of Architectural Theory 1965-1995*, Princeton, NJ: Princeton Architectural Press, 1996
Michael Benedikt, *For an Architecture of Reality*, New York: Lumen Books, 1987
Leo Marx, *The Machine in the Garden*, New York: Oxford University Press, 2000

**Offered:**

Fall only; annually

**Faculty assigned:**

Michael Place (adjunct)

**Number & Title of Course:** ARCH-752 Urban and Regional Planning, 3 credits

**Course Description:** This course immerses students in the field of urban and regional planning by studying and actively engaging in the planning process through projects with community agencies.

**Course Goals:**

- To introduce students to the key issues (economic, social, environmental) facing the architectural and planning communities as well as the constituencies that they serve by providing them with real world interaction with all stakeholders in the urban/regional environment.

**Course Objectives:**

- Identify and explain the major influences on present day planning.
- Gather, analyze, and synthesize planning data from governmental and community agencies.
- As a member of a design team, create alternative concepts for an urban or regional design problem.
- Identify and explain the steps involved in the approval process for planning projects.
- Apply contemporary planning theory to an urban or regional design problem.

**Student Performance Criterion/a addressed:**

**C1 – Collaboration**
**C6 – Leadership**
**C8 – Ethics/Professionalism**
**C9 – Social Responsibility**

Supported:

A10 – Cultural Diversity
C2 – Human Behavior

**Topical Outline:**

Introduction and history of planning (20%)
The planning process (40%)
Planning theory (40%)

**Prerequisites:**

First year courses

**Textbooks/Learning Resources:**

Community Design Center of Rochester
AIA Rochester
Professionals from industry

**Offered:**

Spring only; annually

**Faculty assigned:**

Mary Scipioni (adjunct)

**Number & Title of Course:** ARCH-753 Research Seminar/ Thesis Preparation, 3 credits

**Course Description:** Students frame individual thesis proposals through various research approaches, critical readings, presentations and examinations of architecture; physicality, socially, culturally, historically and technologically.

**Course Goals:**

- To increase exposure to contemporary urban and social issues related to the practice and study of architecture.
- To provide the student with the skills necessary to critically examine these contemporary issues, their historic context, and identify the relevance of these issues to the practice their chosen profession and specialization.
- For students to develop the experience and confidence to discuss sensitive and complex issues in a productive manner in a collegial environment.
- To encourage research areas of personal and professional interest.
- To gain understanding, and examine issues from a variety of perspective —and not to further a political or ideological perspective.
- To prepare students for their culminating thesis.

**Course Objectives:**

- Understand basic frameworks for examining historic social and urban events and movements
- Apply accepted social and humanistic methods of analysis to readings.
- Demonstrate the ability to read, understand, and apply historic context to contemporary conditions and policy.
- Delineate between grassroots urban movements and policy-driven urban events.
- Deliver/exhibit professional-quality presentation and discussion skills.
- Create a management plan to follow in executing the thesis project.
- Synthesize reading and application of knowledge to a research-driven project.

**Student Performance Criterion/a addressed:**

**A5 – Investigative Skills**
**A11 – Applied Research**

Supported:

A1 – Communication Skills

**Topical Outline:**

Approaching a Social Issue
Labor and its Impact on Social Space
Managing Social Data
Analyzing Social Data
Making a Change: Materials
Making a Change: Alternatives
The Culture of Consumption
A World Without Us
Social Structures and Resultant Hegemony
Marketing the Urban Sphere
The Future Social Condition
Making a Change: Conceptual Approach
The Future Urban Condition
Thesis Preparation

**Prerequisites:**

Second year courses

**Textbooks/Learning Resources:**

A wide variety of books, periodicals, and literature

**Offered:**

Fall only; annually

**Faculty assigned:**

Alissa de Witt-Paul (adjunct)

**Number & Title of Course:** ARCH-761 Understanding Sustainability, 3 credits

**Course Description:** Students will study the interaction between industrial, environmental/ecological and social systems in the built environment by introduction of systems thinking and the multiple disciplines comprising sustainability.

**Course Goals:**

- To motivate and prepare students to include sustainability principles into the core design and technology courses of the M. Arch. program.
- To provide students with an understanding of the interaction between industrial, environmental/ecological, and social systems by training them in the scientific method as it applies to sustainability.
- Introduce students to systems thinking and the multiple scientific disciplines of sustainability, and prepare them to conduct research in sustainable architecture.
- Introduce students to multiple perspectives on sustainability such as strong and weak formulations, different scientific approaches to sustainability, and the importance of sustainability in relation to related research efforts in industrial ecology, ecological economics, sustainable design, ecological health, and public policy.

**Course Objectives:**

- Understand multiple perspectives on the fundamental concepts in sustainability.
- Understand the scientific basis behind current sustainability challenges and solutions.
- Understand relationships among and limitations to disciplinary and trans-disciplinary approaches to sustainability.
- Understand role of scholarly literature in sustainability and demonstrate ability to perform review and critique of scholarly literature.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **A5 – Investigative Skills** | A11 – Applied Research |
| **B3 – Sustainability** | C2 – Human Behavior |

**Topical Outline:**

Sustainability as a cultural construct
Sustainability as a wicked problem
Sustainability and critical/scientific thinking
Measuring sustainability
Sustainable design
Sustainability as a contested concept
Sustainability and systems thinking
Major challenges in sustainability
Ecological economics, weak vs. strong sustainability
Communicating sustainability science
Conducting sustainability science across the sustainability spectrum
Sustainable decision-making and policy challenges

**Prerequisites:**

None

**Textbooks/Learning Resources:**

A wide variety of scholarly articles

**Offered:**

Fall only; annually

**Faculty assigned:**

Callie Babbitt (F/T)

**Number & Title of Course:** ARCH-762 Industrial Ecology Fundamentals, 3 credits

**Course Description:** Students will learn how to assess the impact and interrelations of built environments on the natural environment by utilizing life cycle assessment tools and principles of sustainability.

**Course Goals:**

- To enhance students' understanding of the interaction between the built environment and environmental/ecological systems.
- To introduce students to the analytical tools necessary to quantify material and energy exchanges and the adverse environmental consequences of those.

**Course Objectives:**

- Define and describe industrial ecology.
- Demonstrate the relationships among production, Testing consumption, sustainability, and industrial ecology.
- Explain how industrial ecology serves as a framework for the consideration of environmental and sustainability related aspects of science and technology.
- Define and describe the tools, applications, and implications of industrial ecology.
- Apply industrial ecology as a framework for the consideration of environmental and sustainability-related aspects of science and technology.
- Compare and contrast characteristics of industrial and ecological systems that relate to sustainability and understand the implications of this eco-industrial analogue.
- Analyze material flows in an industrial ecosystem to demonstrate mastery of material flow analysis as an essential tool in industrial ecology.
- Compile and analyze inventory and environmental impact data for a product or process across its life cycle to demonstrate mastery of life cycle assessment as an essential tool in industrial ecology.
- Analyze and discuss sustainable design approaches, benefits, and challenges in a team-based setting.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **B3 – Sustainability** | B8 – Environmental Systems<br>C2 – Human Behavior |

**Topical Outline:**

Understanding Industrial Ecology (15%)
Life Cycle Assessment Methods (35%)
Software & methods studies (35%)
Industrial ecology examples and cases studies (15%)

**Prerequisites:**

ARCH-761 Understanding Sustainability

**Textbooks/Learning Resources:**

A wide variety of scholarly articles.
Graedel, T.E., Allenby, B.R., *Industrial Ecology and Sustainable Engineering*, 2009.
McDonough, D.E. and Orr, D.W., *Sustainable Design: Ecology, Architecture, and Planning*, Wiley.
McDonough, D. and M. Braungart, *Cradle to Cradle: Remaking the Way We Make Things*, North Point Press.

**Offered:**

Spring only; annually

**Faculty assigned:**

Tom Trabold (F/T)

**Number & Title of Course:** ARCH-763 Sustainable Building Metrics, 3 credits

**Course Description:** The measurement science, performance metrics, assessment tools, and fundamental data critical for the development and implementation of building systems associated with life-cycle operation of buildings while maintaining a healthy indoor environment.

**Course Goals:**

- The goal of this course is to introduce students to prevailing metrics and assessment tools pertaining to the built environment and to support the inclusion of these considerations into studio and technical courses.

**Course Objectives:**

- Describe the scientific measurement methods used in the evaluation of the built environment.
- Perform scientific measurements and calculations that relate to the built environment.
- Describe and utilize the assessment tools used in the evaluation of the built environment.
- List the main design guidelines for applicable green building standards.
- Complete select aspects of major green building certification systems.

| **Student Performance Criterion/a addressed:** | Supported: |
|---|---|
| **B3 – Sustainability** | B8 – Environmental Systems<br>B12 – Building Materials and Assemblies<br>C2 – Human Behavior |

**Topical Outline:**

Measurement science for the built environment. (15%)
Environmental and energy performance metrics for the built environment. (35%)
Assessment tools. (35%)
Certification processes and design guides. (15%)

**Prerequisites:**

ARCH-762 Industrial Ecology Fundamentals

**Textbooks/Learning Resources:**

Greensource, *Emerald Architecture: Case Studies in Green Building*, US Green Building Council
Brandon, P., *Evaluation of the Built Environment for Sustainability*, Taylor and Francis.
Leadership in Energy and Environmental Design (LEED) Green Building Rating System™, US Green Building Council

**Offered:**

Fall only; annually

**Faculty assigned:**

Mark Krystofyk (adjunct) & Jules Chiavaroli (F/T)
Gabrielle Gaustad (F/T) & Ming Hu (F/T)

**Number & Title of Course:** ARCH-771 Professional Practice, 3 credits

**Course Description:** Students will study the roles of stakeholders involved in architecture within the context of project management and business practices including legal responsibilities, and professional ethics.

**Course Goals:**

- For students to gain an understanding of business principles as they relate to architectural practice including management and advocacy.
- For students to learn to act legally, ethically, and critically for the good of the client, society, and the public.

**Course Objectives:**

For students to understand the:

- Relationship between the client, contractor, architect and other key stakeholders such as user groups and the community, in the design of the built environment.
- Responsibilities of the architect to reconcile the needs of the stakeholders noted above.
- Methods for selecting consultants and assembling teams, identifying work plans, project schedules and time requirements, and recommending project delivery methods.
- Basic principles of business practices within the firm including financial management and business planning, marketing, business organization, and entrepreneurialism.
- Architect's responsibility to the public and the client as determined by regulations and legal considerations involving the practice of architecture and professional service contracts.
- Ethical issues involved in the exercise of professional judgment in architectural design and practice.
- Role of the AIA Code of Ethics in defining professional conduct.

**Student Performance Criterion/a addressed:**

**C3 – Client Role in Architecture**
**C4 – Project Management**
**C5 – Practice Management**
**C6 – Leadership**
**C7 – Legal Responsibility**
**C8 – Ethics/Professionalism**
**C9 – Social Responsibilities**

Supported:

B1 – Pre-Design
B7 – Financial Considerations

**Topical Outline:**

Roles of the building team (15%)
Firm types, sizes, and configurations (10%)
Project delivery (25%)
Project management (20%)
Professional development (10%)
Legal and ethical responsibilities (20%)

**Prerequisites:**

Second year courses

**Textbooks/Learning Resources:**

AIA Rochester
AIA Publications
Professionals from the field

**Offered:**

Spring only; annually

**Faculty assigned:**

Trevor Harrison (adjunct)

**Number & Title of Course:** ARCH-790 Thesis, 6 credits

**Course Description:** Students will propose, design, and defend an architectural design or research problem, while working closely with a selected faculty committee.

**Course Goals:**

- The master's thesis should be evidence of the graduate students' ability to carry out independent investigation and to present the results in clear and systematic form.
- Preparing a thesis assures students' expertise in a chosen area of architecture and reinforces a systematic, critical approach to architectural design.
- To provide students with the opportunity to execute a design-based or a research-based thesis.

**Course Objectives:**

- To define an architectural problem.
- To propose and design a research or design-based process that leads to a solution.
- To execute and defend a thesis to peers and faculty.

**Student Performance Criterion/a addressed:** Supported:

A11 – Applied Research
B1 – Pre-Design

**Topical Outline:**

A comprehensive architectural solution or research investigation to a given problem/project as selected by the student.

**Prerequisite:**

ARCH-753 Research Methods/Thesis Preparation

**Textbooks/Learning Resources:**

Laurel, Brenda (ed.) *Design Research: Methods and Perspectives*. Cambridge, Mass.: MIT Press. 2003.
Robson, Colin. *Real World Research: A Resource For Social Scientists and Practitioner-Researchers*. Oxford, UK ; Madden, Mass.: Blackwell Publishers. 2002.
Lidwell, William, Kritina Holden, Jill Butler. *Universal Principles of Design*. Gloucester, Mass.: Rockport. 2003.
Kilment, Stephen A. *Writing for Design Professionals: A Guide to Writing Successful Proposals, Letters, Brochures, Portfolios, Reports, Presentations, and Job Applications for Architects, Engineers, and Interior Designers*. New York: W.W. Norton. 1998.
Terabian, Kate L. *A Manual for writers of Research Papers, Thesis, and Dissertations*. University of Chicago Press. 2013
A wide variety of databases and digital resources.
Other resources specific to the problem selected by the student.

**Offered:**

Fall, Spring, Summer; annually

**Faculty assigned:**

Dennis A. Andrejko (F/T)

**Number & Title of Course:** ARCH-791 Continuation of Thesis, 0-1 credits

**Course Description:** This course is for Master of Architecture students who require additional time to complete their thesis. Students should enroll for one credit unless otherwise instructed.

**Course Goals:**

- To allow students the opportunity to complete their thesis in progress.

**Course Objectives:**

Same as ARCH-790 Thesis:
- To define an architectural problem.
- To propose and design a research or design-based process that leads to a solution.
- To execute and defend a thesis to peers and faculty.

**Student Performance Criterion/a addressed:** Supported:

A11 – Applied Research
B1 – Pre-Design

**Topical Outline:**

A comprehensive architectural solution or research investigation to a given problem/project as selected by the student.

**Prerequisite:**

ARCH-790 Thesis

**Textbooks/Learning Resources:**

Laurel, Brenda (ed.) *Design Research: Methods and Perspectives*. Cambridge, Mass.: MIT Press. 2003.
Robson, Colin. *Real World Research: A Resource For Social Scientists and Practitioner-Researchers*. Oxford, UK ; Madden, Mass.: Blackwell Publishers. 2002.
Lidwell, William, Kritina Holden, Jill Butler. *Universal Principles of Design*. Gloucester, Mass.: Rockport. 2003.
Kilment, Stephen A. *Writing for Design Professionals: A Guide to Writing Successful Proposals, Letters, Brochures, Portfolios, Reports, Presentations, and Job Applications for Architects, Engineers, and Interior Designers*. New York: W.W. Norton. 1998.
Terabian, Kate L. *A Manual for Writers of Research Papers, Thesis, and Dissertations*. University of Chicago Press. 2013
A wide variety of databases and digital resources.
Other resources specific to the problem selected by the student.

**Offered:**

Fall, Spring, Summer; annually

**Faculty assigned:**

Dennis A. Andrejko (F/T)

**Name:** Dennis A. Andrejko, FAIA

**Courses Taught:**

ARCH-641 Integrated Building Systems I/Fundamental of Building Systems
ARCH-790 Thesis
ARCH-791 Continuation of Thesis
ARCH-799 Indepedent Study

**Educational Credentials:**

Bachelor of Architecture, Arizona State University, 1975
Master of Architecture in Advances Studies, MIT, 1977

**Teaching Experience:**

Visiting Assistant Professor, Arizona State University, 1981 - 1982
Associate Professor, University at Buffalo, 1983 – present
Senior Professor, Monteverde Institute, Costa Rica, Sustainable Futures Program, 1997 - present
Associate Professor, Rochester Institute of Technology, 2011- present

**Professional Experience:**

SEAgroup, The Sea Ranch/Nevada City, California, 1977 - 1981
Andrejko + Associates, Buffalo, New York, 1981 - present
Director and Interim Chairman, University at Buffalo, Department of Architecture, 1990 – 1999
Head, Department of Architecture, Master of Architecture Program, 2011 - present

**Licenses/Registration:**

Registered Architect: New York (active); Arizona, California (inactive)

**Selected Publications and Recent Research:**

International Green construction Code (IgCC) – (co-contributor as member of Sustainable Building Technology Committee (SBTC)) - 2010
The AIA Guide to the IgCC - (co-contributor as a member of the AIA Task Force) - 2012
An Architect's Guide to Integrating Energy Modeling in the Design Process - (co-contributor as a member of the AIA Task Force) - 2012
50 to 50 – AIA's Sustainability Resource for Carbon Neutral Design www.aia.org/fiftytofifty - (co- contributor/editor) - 2007
Seventh Generation Green Building: St. Regis Mohawk Tribe Environment Building Final Concept Studies - 2006
UB High Performance Building Guidelines, University at Buffalo UB Green Committee - (co -participant/ contributor) - 2005
Least Cost Cooling Study, Natural Cooling Optimization, University at Buffalo, with Wendel Duscherer, NYSERDA Research (co-contributor) - 2003
ARCHITECTURAL GRAPHIC STANDARDS – Passive Solar Design Concepts Page, 8th 9th 10th 11th Editions 1994 – 2009
PASSIVE SOLAR ARCHITECTURE: logic and beauty - 1982

**Professional Memberships:**

American Institute of Architects
Society of Building Science Educators
American Solar Energy Society

**Name:** Callie W. Babbitt, Ph.D.

**Courses Taught:**

ARCH-761 Understanding Sustainability
ISUS-704 Industrial Ecology
ISUS-710 Sustainable Product Design
ISUS-821 Applied Life Cycle Assessment

**Educational Credentials:**

Ph.D., Environmental Engineering, University of Florida, 2007
M.S., Environmental Engineering, University of Florida, 2003
B.S., Chemical Engineering, Georgia Institute of Technology, 2001

**Teaching Experience:**

Assistant Professor, Rochester Institute of Technology, Golisano Institute for Sustainability, 2009- present
Postdoctoral Associate, Arizona State University, Center for Earth Systems Engineering and Management (affiliate) and School of Human Evolution and Social Change, 2007-2009

**Professional Experience**

Project Manager, Arizona State University, Office of Sustainability Initiatives, 2006 - 2007
Project Manager, University of Florida, School of Building Construction, 2001 - 2003

**Selected Publications and Recent Research:**

Ryen, E.G., Babbitt, C.W., Williams, E.W. 2015. "Consumption-weighted life cycle assessment of a consumer electronic product community." Environmental Science & Technology, 49, 2549–2559.
Ryen E.G., Babbitt, C.W., Tyler, A.C., Babbitt, G.A. 2014. "Community ecology perspectives on the structural and functional evolution of consumer electronics." Journal of Industrial Ecology, 8, 708-721.
Richa, K., Babbitt, C.W., Gaustad, G., Wang, X. 2014. "A future perspective on lithium-ion battery waste flows from electric vehicles," Resources, Conservation, and Recycling 83, 63-76.
Wang, X., Gaustad, G., Babbitt, C.W., Richa, K. 2014. Economies of scale for future lithium-ion battery recycling infrastructure. Resources, Conservation and Recycling 83, 53-62. Impact factor 2.692.
Ganter, M.J., Landi, B.J., Babbitt, C.W., Anctil, A., Gaustad, G. 2014. "Cathode Refunctionalization as a Lithium Ion Battery Recycling Alternative." Journal of Power Sources 256, 274-280.
Krystofik, M., Babbitt, C.W., Gaustad, G. 2014. "When consumer behavior dictates life-cycle performance beyond the use phase: case study of inkjet cartridge end-of-life management." International Journal of Life Cycle Assessment 19, 1129-1145.
Ebner, J., Babbitt, C.W., Winer, M., Hilton, B., Williamson, A. 2014. "Life cycle greenhouse gas (GHG) impacts of a novel process for converting food waste to ethanol and co-products," Applied Energy, 130, 86-93.
Lobos, A., Babbitt, C.W. 2013. "Integrating emotional attachment and sustainability in electronic product design." Challenges 4, 19-33. http://dx.doi.org/10.3390/challe4010019
Anctil, A., Babbitt, C.W., Raffaelle, R.P., Landi, B.J. 2011. "Material and energy intensity of fullerene production." Environmental Science & Technology 45 (6), 2353–2359.
Babbitt, C.W.; Williams, E.; Kahhat, R. 2011 "Institutional disposition and management of end-of-life electronics." Environmental Science and Technology 45 (12), 5366–5372
Deng, L., Babbitt, C.W., Williams, E. 2011. "Economic-balance hybrid LCA extended with uncertainty analysis: case study of a laptop computer." Journal of Cleaner Production 19 (11), 1198-1206.
Babbitt, C.W., Kahhat, R., Williams, E., Babbitt, G.A. 2009. "Evolution of product lifespan and implications for environmental assessment and management: a case study of personal computers in higher education." Environmental Science and Technology 43: 5106-5112.

**Professional Memberships:**

American Center for Life Cycle Assessment
Air and Waste Management Association
International Society for Industrial Ecology

**Name:** John Baun, J.D., Ph.D.

**Courses Taught:**

ARCH-744 Integrated Building Systems IV

**Educational Credentials:**

Ph.D, University of Nebraska, Lincoln, NE
J.D., John Marshall Law School, Chicago, IL
M.F.A, Temple University, Philadelphia, PA
B.S., Clarkson University, Potsdam, NY

**Teaching Experience:**

Assistant Professor, State University College at Buffalo, 1997-2001; 2007-2010
Adjunct Professor, Rochester Institute of Technology, 2015-present

**Professional Experience:**

Consultant, JE Baun and Associates, Buffalo, NY, 1995-2010

**Licenses/Registration:**

NA

**Selected Publications and Recent Research:**

*Learning and Retention of Accelerated and Traditional Delivery*, 2009
Globalization of Education, 2009
*Proposal for a Master Class Program to Supplement and Expand the Quality of Teachers in English in the Russian Federation*, 2009
*Rights in Europe: Commentary on the Character of Fundamental Rights of the European Union*, 2010
*Professional Standards: Not Just for Career Colleges*, 2010
*Preparing Interior Design Students for Work*, 2010
*A New Look at Business Education*, 2010
*FERPA and Faculty*, 2012
*Adjunct Faculty: 7 Critical Considerations*, 2013
*Concentrated Learning: A tradition of non-traditional learning*, 2014

**Professional Memberships:**

American Society for Quality (ASQ)
American Society for Training and Development (ASTD)

**Name:** Stuart B. Chait Sr. AIA CSI NCARB

**Courses Taught:**

NA

**Educational Credentials:**

Bachelor of Architecture (with high honors), School of Architecture University of Tennessee, 1979

**Professional Experience:**

Intern, Giroux, Doran + Low Architects, 1977
Intern, Knutowicz Architects, 1979 - 1984
Associate, Fayko Architects, 1984 - 1989
Principal, Chait Studios, 1989-present

**Licenses/Registration:**

Registered Architect, NY, MA, ME, PA, VA, DC
NCARB Certified

**Selected Publications and Recent Research:**

"Western New York Projects" The Recent Past Preservation Network Bulletin, September 2007
"From the old downtown, a new downtown emerges" Rochester Democrat and Chronicle, September 2006
"Architects Learning 'Green' In Sustainable Designs" Rochester Business Journal, September 2004
AIA Committee for Historic Resources, 2003 to present
AIA Committee for Small Project Practitioners, 2003 to present
"New York State: Past, Present and Future" AIA Architect, August 1999
"Looking Back (And Forward)" Architectural Record, August 1999

**Professional Memberships:**

American Institute of Architects
Construction Specification Institute

**Name:** David Chamberlain

**Courses Taught :**

ARCH-631 Architectural Design I
ARCH-632 Architectural Design II

**Educational Credentials:**

M.L.A., University of Colorado, 2002
M.F.A., University of Pennsylvania, 1977
B.A., Princeton University, 1971
Certificate, Colorado College, 1973
Diplome, Centre Audio Visuel Langues Modernes, 1972

**Teaching Experience:**

Associate Professor, University of South Carolina, 1990-1991
Associate Professor, Clemson University, 2004-2005
Adjunct Professor, Rochester Institute of Technology, 2013- 2014

**Professional Experience:**

Landscape Architecture and Planning, Altgelt & Associates, Boulder, CO, 2002-2004
Nuszer, Kopatz & Associates, Denver, CO

**Licenses/Registration:**

N/A

**Selected Publications and Recent Research:**

Exhibitions
Muse a Muse' Gallery, Tokyo, Japan, 1997 & 1999
Consulate of Japan, San Francisco, CA, 1998 & 1999
Retrospective: "Solos, Duets & Concertos" Muskegon Museum, MI, 1996
"Duetts" Delaware Museum of Art, Wilmington, DE, 1995
MacLaren/ Markowitz Gallery, Boulder, CO, 1991
Retrospective: McKissick Museum of Art, Columbia, SC, 1990

**Professional Memberships:**

American Society of Landscape Archietcts (ASLA)
AIA (associate)
USGBC
Buckminster Fuller Institute
PennDesign

**Name:** Roger B. Chen, Ph.D.

**Courses Taught:**

ARCH 789: Race to Net Zero (elective)

**Educational Credentials:**

Ph.D. Civil and Environmental Engineering, University of Maryland, College Park, 2007
M.S. Civil and Environmental Engineering, University of Texas at Austin, 2003
B.S. Civil and Environmental Engineering, University of Texas at Austin, 2001

**Teaching Experience:**

Assistant Professor, Department of Sustainability, Rochester Institute of Technology, 2014-present

**Professional Experience:**

Research Assistant Professor, Dept. of Civil and Environmental Eng., Portland State University, 2010-2014
Adjunct Lecturer, Department of Urban Studies and Planning, Portland State University, 2010-2014
Traffic Engineer, Texas Transportation Institute, Texas A&M University, 1999-2000

**Licenses/Registration:**

NA

**Selected Publications and Recent Research:**

Chen, R. and H. S. Mahmassani (2014) Let It Rain: Weather Effects on Activity Stress and Scheduling Behavior, Travel Behavior and Society, in press.
Chen, R., Gehrke, S., Jang, Y., Liu, J. and K. Clifton (2013) Exploring Household Tenure and Type Choices and Activity Engagement, Transportation Research Record, no. 2344, pp. 68-78.
Mahmassani, H. S., Chen, R. B., Huang, Y., Williams, D. and N. Contractor (2010) Time to Play: Activity Engagement in Multiplayer Online Role Playing Games. Transportation Research Record, no. 2157, pp. 129-137.
Chen, R. B. and H. S. Mahmassani (2009) Learning and Risk Attitudes in Route Choice Behavior Dynamics. in The Expanding Sphere of Travel Behavior, R. Kitamura, T. Yoshii and T. Yamamoto eds., Pergamon Press.
Hamdar, H., Mahmassani, H, S. and R. B. Chen (2008) Aggressiveness Propensity Index for Driving Behavior at Signalized Intersection. Accident Analysis and Prevention, vol. 40, no. 1, pp. 315-326.
Chen, R.B., and H. S. Mahmassani (2004) Travel Time Perception and Learning Mechanisms in Traffic Networks. Transportation Research Record, no. 1894, pp. 209-221.

**Professional Memberships:**

Transportation Research Board: Committee on Travel and Information and Communication Technologies (ICT)

**Name:** Jules Chiavaroli, AIA

**Courses Taught:**

ARCH-699 Co-op Architecture
ARCH-735 Architectural Studio IV: Integrative
ARCH-741 Integrated Building Systems I
ARCH-742 Integrated Building Systems II
ARCH-743 Integrated Building Systems III
ARCH-744 Integrated Building Systems IV
ARCH-763 Sustainable Building Metrics
ARCH-789 ST: Contract Documents with BIM
ARCH-789 ST: Digital Architectural Practice
ARCH-799 Independent Study

**Educational Credentials:**

Bachelor of Architecture (with honors), University of Notre Dame, 1972
Master of Business Administration, Rochester Institute of Technology, 1983

**Teaching Experience:**

Assistant Professor, 1978-1984; Associate Professor, 1984-2004; Professor, 2004-present
Rochester Institute of Technology
1978-2008
National Technical Institute for the Deaf, Construction Technologies Department, Architectural Technology Program; Arts and Imaging Studies Department
2008-2011
College of Imaging Arts and Sciences, School of Design, Interior Design Program
2011-present
Golisano Institute for Sustainability, Department of Architecture

**Professional Experience**

Intern Architect, Northrup Kaelber and Kopf Architects Engineers, Rochester NY, 1972-1975
Intern Architect, Kohlstaedt and Fredrickson Architects and Planners, Canandaigua NY, 1975
Intern Architect, Earl J. DeRienzo Architect, Rochester NY, 1975
Project Architect, Northrup Kaelber and Kopf Architects Engineers, Rochester NY, 1976-1978
Principal, Julius J. Chiavaroli Architect, Pittsford NY, 1978-present

**Licenses/Registration:**

Registered Architect, New York
NCARB Certified
LEED AP

**Selected Publications and Recent Research:**

*AEC Drafting Fundamentals*. Cengage Learning. 1994
*AEC Drafting Drawings*. Cengage Learning. 1994
*Graphics Software Packages as Instructional Tools*. American Annals of the Deaf. 1985

**Professional Memberships:**

American Institute of Architects
New York Upstate Chapter, U.S. Green Building Council
Landmark Society of Western New York

**Name:** Alissa de Wit-Paul

**Courses Taught:**

ARCH-621 Architectural History I
ARCH-622 Architectural History II
ARCH-632 Architectural Design II
ARCH-732 Architectural Studio II: Tectonic
ARCH-753 Research Methods/Thesis Preparation
ARCH-789 Eco-Architecture, A History (elective)

At other institutions:
Art History 103 and 104
Drawing 110/111
2-D Design 105

**Educational Credentials:**

PhD in the History and Theory of Art and Architecture ABD, Binghamton University, 2015
Master of Architecture, State University of New York at Buffalo, 19??
B.S. in Design and Environmental Analysis, Cornell University, 19??

**Professional Experience**

Designer, Various small residential projects
Architect, Clark Patterson Assoc., Rochester, NY, 2001-2002
Architect, Chait Studios, Rochester, NY, 2000-2001
Project Management, Bausch & Lomb, Global Facilities Department, Rochester, NY, 1997-1999

**Licenses/Registration**

Registered Architect, New York
NCIDQ Certified
LEED AP

**Selected Publications and Recent Research**

Editor, *Fashion Forward*, Inter Disciplinary.net
"Sustainable Building Fashion "abstract in National PCA/ACA conference in St. Lewis, MO 2001
Co-authored with John Baun "Preparing Interior Design Students for Work" *QED News*
"Sustainable Fashion in the Building Design Professions" Proceedings from the *Fashion Exploring Critical Issues*, Oxford UK, Inter-Disciplinary Press, September 25-27 ISBN 978-1-84888-001-6
"Building Sustainably Today" National Magazine The NAIWIC Image, August/September
"Vernaculars: Creation of Modern Vernacular Traditions" IASTE 2014 Conference December, 2014.
"Apocalyptic Texts and the Rise of Ecological Architecture in New Mexico" South West PCA/ACA Conference 2015

**Professional Memberships:**

Society of Architectural Historians
College Art Association

**Name:** Peter Gabak

**Courses Taught:**

ARCH-621 Architectural History I
ARCH-622 Architectural History II

**Educational Credentials**

A.A. Liberal Arts, Cayuga Community College, Auburn NY
B.A. Major: Art History, Minors: Museum Studies/French, SUNY College at Oswego, Oswego, NY
M.A. Major: Art History, Syracuse University, Syracuse, NY

**Teaching Experience:**

Rochester Institiute of Technology, Adjunct 2008-present

**Professional Experience:**

NA

**Licenses/Registration:**

NA

**Professional Memberships**

NA

**Name:** Gabrielle Gaustad, Ph.D.

**Courses Taught:**

ARCH-763 Sustainable Building Metrics
ISUS-808: Multi-criteria Decision Analysis
ISUS-806: Risk Analysis
ISUS-810: Applied Programming

**Educational Credentials:**

Massachusetts Institute of Technology PhD, Materials Science and Engineering
MS, Computation for Design and Optimization
New York State College of Ceramics at Alfred University
Bachelor of Science, Ceramic Engineering, Magna Cum Laude with Departmental Honors Alfred University Scholar, Minor in Chemistry & Fine Arts, Concentration in Composites

**Teaching Experience:**

Assistant Professor, Rochester Institute of Technology, 2009-Present
Teaching Assistant, Massachusetts Institute of Technology, 2005-2007

**Selected Publications:**

J. Lin, G. Gaustad, T. Trabold (2013), "Profit and Policy Implications of Producing Biodiesel-Ethanol-Diesel Fuel Blends to Specification", Applied Energy, v 104, 936-944.
X. Wang, G. Gaustad (2012), "Prioritizing Material Recovery for End-of-Life Printed Circuit Boards", Waste Management. v 32, 1903-1913.
C. Schauerman, M. Ganter, G. Gaustad, C. Babbitt, R. Raffaelle, B. Landi (2012), "Recycling Single-Wall Carbon Nanotubes from Lithium Ion Batteries", Journal of Materials Chemistry, v 22, 12008-12015.
G. Gaustad, E. Olivetti, R. Kirchain (2012), "Improving aluminum recycling: a survey of sorting and impurity removal technologies", Resources, Conservation, and Recycling, v 58, 79-87.
G. Gaustad, E. Olivetti, R. Kirchain (2011), "Towards sustainable material usage: evaluating the importance of market motivated agency in modeling material flows", Environmental Science & Technology, v 45 n 9, 4110-4117.
E. Olivetti, G. Gaustad, F. Field, R. Kirchain (2011), "Characterizing the Source and Drivers of Benefit from Explicit Consideration of Quality Variation in Process Management for Materials Production", Environmental Science and Technology, v 45 n 9, 4118-4126.
G. Gaustad, R. Kirchain (2010), "Design for recycling: evaluation and efficient alloy modification", Journal of Industrial Ecology, v 14, n 2, 286-308.
G. Gaustad, P. Li, and R. Kirchain (2007), "Modeling Methods for Managing Raw Material Compositional Uncertainty in Alloy Production", Resources, Conservation, & Recycling, v 52, n 2, 180-207.
R. Derosa, E. Telfeyan, G. Gaustad, S. Mayes (2005), "Strength and microscopic investigation of unsaturated polyester BMC reinforced with SMC-recyclate", Journal of Thermoplastic Composite Materials, v 18, n 4, 333-349.

**Funded Research:**

National Science Foundation Environmental Sustainability Program (ENG-CBET). Collaborative Research Reducing the Burden of Global Materials Manufacture: Enabling increased use of secondary and renewable materials in production planning. $79,237. Sept. 2011-Current. PI.
National Science Foundation Environmental Health and Safety of Nanomaterials Program (ENG-CBET). Quantifying environmental risks and opportunities for nano-scale LiFePO4 and LiMnO2 cathode battery technologies at end-of-life. $293,000. Sept. 2011-Current. PI.
Pollution Prevention Institute. Developing environmentally benign battery recycling processes: characterizing "green" leaching agents. $150,000. Sept. 2011-Current. PI.
NYSERDA PON 1704 Environmentally Preferable End-of-Life for Li-Ion Battery Technologies $195,869. August 2010-December 2012. PI.
AT&T – Sustainable Design for Evolving ICT Devices. $25,000. May 2011–May 2012. co-PI (PI:Babbitt)
Pollution Prevention Institute. Computational Imaging-Based Sorting Technologies for Recycling. $48,900. August 2012-Current. co-PI (PI:Gu).

**Name:** Trevor M. Harrison, AIA

**Courses Taught:**

ARCH 733 Architectural Studio III: Adaptive Reuse
ARCH-771 Professional Practice

**Educational Credentials:**

Bachelor of Professional Studies – Architecture, SUNY Buffalo, 1990
Completed NCARB Broadly Experienced Architect program, 2008

**Teaching Experience:**

Adjunct Professor, Rochester Institute of Technology, 2013-Present

**Professional Experience:**

Intern Architect, Fayko Johanson and Fortier, Rochester, NY, 1990-1994
Architect, Handler Gross Durfee Bridges, Rochester, NY, 1994-1998
Partner, Handler Gross Durfee & Associates, Rochester, NY, 1998-2000
Founding and Managing Partner, HBT Architects, LLP, Pittsford, NY, 2000-Present

**License/Registrations**

Registered Architect: NY, NJ, PA, CT, WV, NC, MA, MD (Pending)

**Professional Memberships**

American Institute of Architects
US Green Building Council

**Name:** Ming Hu, AIA

**Courses Taught:**

ARCH-733 Architectural Studio III: Adaptive
ARCH-763 Sustainable Building Metrics

**Educational Credentials:**

Bachelor of Architecture, Southeast University (China), 1998
Master of Architecture in Historic Preservation, Tingshua University, 2001
Master of Architecture, University of Notre Dame, 2003

**Teaching Experience:**

Adjunct Faculty, Frederick Community College, 2011
Adjunct Faculty and Visiting Lecturer, Catholic University of America, 2012-2013
Assistant Professor, Rochester Institute of Technology, 2014

**Professional Experience:**

Torti Gallas and Partners, CHK, Silver Spring, Maryland, 2003-2008
KGP Design Group, LLC, Washington D.C., 2008
HOK, INC, Washington D.C., 2008-2014

**Licenses/Registration:**

Registered Architect, New York
LEED BD+C

**Selected Publications and Recent Research:**

Façade Design for Super High-rise Building in Subtropic Region in China, CAADRIA2013, ACSA Fall Conference (2013)
Performance-Based Design, CAADRIA open systems (2013)
Translation of The Architecture of Community by Leon Krier (2011)
Translucent Life, China Architecture Design and Research Group (2011)
Introduction of Leon Krier and his book Choice or Fate (2007)
The Problem Analysis- the obstacle of Vernacular Architecture Preservation (2001)
The Preservation Planning of the Qi Kou Town (2001)
The Preservation Planning of the Guo Yu Village (2000)
Xiwenxing-Remains of Consanguineous Settlement (2000)
The Ancient Village, Zhan Qi (1998)

**Professional Memberships:**

American Institute of Architects

**Name:** Mark A. Krystofik, Ph.D.

**Courses Taught:**

ARCH-763 Sustainable Building Metrics

**Educational Credentials:**

Ph.D., Sustainability, Golisano Institute for Sustainability at the Rochester Institute of Technology, 2013
M.S., Industrial Engineering, State University of New York, University at Buffalo, 1992
B.S., Industrial Engineering, SUNY, University at Buffalo, 1987
B.S., Mathematics, SUNY, College at Fredonia, 1986

**Teaching Experience:**

Adjunct Professor, Rochester Institute of Technology, Golisano Institute for Sustainability, Fall 2013 and Summer 2014
Adjunct Assistant Professor, Monroe Community College, Spring 2014

**Professional Experience**

Senior Program Manager for the Center of Excellence in Sustainable Manufacturing, Rochester Institute of Technology, Golisano Institute for Sustainability, 2014 - present
Postdoctoral Research, Rochester Institute of Technology, Golisano Institute for Sustainability, 2013 - 2014
Graduate Research Asst., Rochester Institute of Technology, Golisano Institute for Sustainability, 2009 - 2013
Regional Director of Operations, The Advantage Group Enterprise, Inc., Romulus, NY, 2007 – 2009
Operations Manager, Retrotech, Inc., Victor, NY, 1999 – 2006
Manufacturing Manager, Gorbel, Inc., Victor, NY, 1992 – 1999
Manufacturing Engineer then Manager, Rochester Instrument Systems, Rochester, NY, 1989 – 1992
Manufacturing Engineer, Qualitrol Corporation, Inc., Fairport, NY, 1988 - 1989

**Selected Publications and Recent Research:**

Krystofik, M., and Gaustad, G., "Tying product reuse into tying arrangements: competitive advantage by closing the loop", in preparation

Krystofik, M., Wagner, Jeffrey and Gaustad, G., "Leveraging intellectual property rights to encourage green product design and remanufacturing for sustainable waste management", submitted to Resources, Conservation and Recycling, accepted with minor revisions, February 2015.

Krystofik, M., Babbitt, C.W. and Gaustad, G., "When consumer behavior dictates life-cycle performance beyond the use phase: case study of inkjet cartridge end-of-life management", May 2014, Volume 19, Issue 5, pp 1129-1145.

Krystofik, M., et al, "Chapter 14-Worker Productivity and Ergonomic Assists", Volume 9-Material and Part Handling in Manufacturing Tool and Manufacturing Engineers Handbook, edited by Philip E. Mitchell, Society of Manufacturing Engineers, Dearborn, Michigan, 1998.

**Name:** Michelle M. Murnane, AIA

**Courses Taught:**

ARCH-611 Architectural Representation I
ARCH-612 Architectural Representation II
ARCH-632 Architectural Design II

**Educational Credentials:**

Bachelor of Science, Magna Cum Laude, Kent State University, 1998
Bachelor of Architecture, Cum Laude, Kent State University, 1999

**Teaching Experience:**

Adjunct Professor, Rochester Institute of Technology, 2011-present

**Professional Experience:**

Intern, Sullivan Gray Bruck, 1998
Project Coordinator, Moody/Nolan Ltd., Inc, 1999-2001
Project Coordinator, Karlsberger Companies, 2001-2004
Project Architect, Clark Patterson Lee, 2004-2010
Consultant, LMC Codes, LLC, 2010-present

**Licenses/Registration:**

Registered Architect, New York
NCARB Certified
LEED AP

**Professional Memberships:**

American Institute of Architects

**Name:** Michael Place

**Courses Taught:**

ARCH-751 Architectural Theory
ARCH-789 Race to Net Zero (elective)

At other institutions:
ARC 234 History of Architecture 2-Renaissance to Modern
SA101 Foundation Design
HT101 Design Principles

**Educational Credentials:**

Danish International School, Copenhagen, Denmark, 2005
Bachelor of Science in Architecture, University of Cincinnati, 2006
Master of Architecture, State University of New York at Buffalo, 2011

**Teaching Experience:**

Adjunct Professor, Boston Architectural College, 2007-2008
Teaching Assistant, State University of New York at Buffalo, 2009-2011
Adjunct Professor, Rochester Institute of Technology, 2013-present

**Professional Experience:**

Intern Architect, Frank Shirley Architects, Cambridge, MA, 2006-2007
Intern Architect, Arrowstreet Architecture Inc., Somerville, MA, 2007-2008
Intern Architect, Signer Harris Architects, Boston, MA, 2008
Intern Architect, John Senhauser Architects, Cincinnati, OH, 2008-2009
Project Manager, ArchStetics Architecture, Rochester, NY, 2011-2013
Architectural Designer/ Project Manager, LaBella Associates, DPC, Rochester, NY 2013-present

**Licenses/Registration:**

**Selected Publications and Recent Research:**

Purity of Thought and the Realities of Architecture, 2009
The Effects of Location and Context: The Work of Aldo Rossi and Robert Venturi, 2009
A Brief Consideration for the Material of Concrete, 2010
Case Study: The Inner City Arts Addition, Los Angeles, California, 2010
Case Study: The Village of Arts and Humanities, Philadelphia, Pennsylvania, 2010
The Effects of Treating Sustainable Design as a Checklist of Architectural Options, 2011
Materialism in Architecture: Sustainable Futures Through Material Re-Use, 2011
A Systems Approach to Materialism in Architecture, 2011-present
The Sustainable House, 2011-present
Deleuze Through Delanda: Researching the material philosophy of Gille Deleuze, 2011-present

**Professional Memberships:**

Construction Specification Institute (CSI)

**Name:** Mary Adelaide Scipioni, AIA Affiliate

**Courses Taught:**

ARCH-731 Architectural Studio I: Site
ARCH-752 Urban and Regional Planning

**Educational Credentials:**

BFA, Rochester Institute of Technology, 1979.
MLA, University of Massachusetts Amherst, 2002.

**Teaching Experience:**

Adjunct Professor, Rochester Institute of Technology, 2013-2015.
Adjunct Professor, Mount Holyoke College, Architectural Studies, 2005-2007.
Adjunct Professor, Hampshire College, Urban and Cultural Studies, 2005.
Adjunct Professor, University of Massachusetts Amherst, Department of Landscape Architecture and Regional Planning, 2006.

**Professional Experience:**

Designer, Carson, Lundin and Thorson PC Architects, NYC 1979-1981.
Designer, Architetto Daniela Volpi, Milan, Italy 1981-1983.
Designer, Architetto Andrea Branzi, Milan Italy 1983-1985.
Program Coordinator, Domus Academy Graduate Design Program, Milan, Italy 1984-1986.
Principal, Intercomm Associati, Milan, Italy 1986-1988.
Consultant, Mozart, srl, Milan Italy 1986-1988.
Consultant, Transatlantic srl, Milan, Italy 1988-1989.
Consultant, Parini Associati, Milan, Italy 1990-1992.
Landscape Designer, Walter Cudnohufsky Associates, Ashfield, MA 2002-2003.
Landscape Designer, Mary Adelaide Scipioni 2003-2007.
Project Manager & Landscape Architect, Environmental Design and Research, Rochester, NY 2007-2011.
Owner, Pebble-stream design consultants, 2011 to present.

**Licenses/Registration:**

Licensed Landscape Architect, New York, Connecticut (inactive).

**Selected Publications and Recent Research:**

Integrating Stormwater Management with Landscape Design and Development. Southern New England Chapter, Natural Resources Conservation Service, 2000).
Historical Legitimacy and Historicism in Landscape Design. Mark Roskill Memorial Symposium, University of Massachusetts Amherst, 2002).
Ecology and Landscape Architectural Culture: Practice, Education and Research. (University of Massachusetts Amherst: 2002).
Measure of Success: Wetland Mitigation and Monitoring. American Society of Landscape Architects, Upstate NY Chapter, 2008).
The Least You Need to Know About Landscape, (Amazon Books, 2011).
Resiliency: Dynamic Urban Sustainabilty Strategies (iBook, 2014).

**Professional Memberships:**

The American Institute of Architects (Affiliate).

**Name:** Thomas Trabold, Ph.D.

**Courses Taught:**

ARCH.762 Industrial Ecology Fundamentals
ISUS-702 Fundamentals of Sustainability Science
ISUS-701 Independent Study: Sustainable Building Systems

**Educational Credentials:**

Bachelor of Science (with distinction), Chemical Engineering, Clarkson University, 1984
Doctor of Philosophy (Ph.D.), Chemical Engineering, Clarkson University, 1989

**Teaching Experience:**

Research Faculty, Rochester Institute of Technology, 2009-2011
Associate Professor, Rochester Institute of Technology, 2011-present

**Professional Experience:**

Senior Engineer, General Electric/Lockheed Martin, Schenectady, NY, 1989-1998
Senior Engineer, Xerox Corp., Rochester, NY, 1998-2001
Laboratory Group Manager and Technical Fellow, General Motors Corp., Honeoye Falls, NY, 2001-2009

**Licenses/Registration:**

N/A

**Selected Publications and Recent Research:**

1. M.G. Waller, M.R. Walluk and T.A. Trabold, "Operating envelop of a short contact time fuel reformer for propane catalytic partial oxidation," Journal of Power Sources, Vol. 274, 149-155 (2015).
2. M.R. Walluk, M.A, Bradley, T.A. Trabold, D.F. Smith, C. Junaedi and S. Roychoudhury, "Comparison of reforming performance of JP-8 and HRJ-5 for fuel cell applications," Fuel, Vol. 139, 35-39 (2015).
3. M.R. Walluk, J. Lin, M.G. Waller, D.F. Smith and T.A. Trabold, "Diesel autothermal reforming for solid oxide fuel cell systems: Anode off-gas recycle simulation," Applied Energy, Vol. 130, 94-102 (2014).
4. M.G. Waller, E.D. Williams, S.W. Matteson* and T.A. Trabold, "Current and theoretical maximum well-to-wheels exergy efficiency of options to power vehicles with natural gas," Applied Energy, Vol. 127, 55-63 (2014).
5. J.P. Owejan, T.A. Trabold and M.M. Mench, "Oxygen transport resistance correlated to liquid water saturation in the gas diffusion layer of PEM fuel cells," International Journal of Heat and Mass Transfer, Vol. 71, 585-592 (2014).
6. J. Lin, T.A. Trabold, M.R. Walluk and D.F. Smith, "Bio-fuel reforming for solid oxide fuel cell applications. Part 1: Fuel vaporization and reactant mixing," International Journal of Hydrogen Energy, Vol. 38, 12024-12034, 10.1016/j.ijhydene.2013.07.009 (2013).

**Professional Memberships:**

American Institute of Chemical Engineers
American Society of Mechanical Engineering
International Association for Hydrogen Energy

**Name:** James Yarrington, AIA

**Courses Taught:**

ARCH-734 Architectural Studio II: Urban
ARCH-734 Architectural Studio IV: Urban

**Educational Credentials:**

Bachelor of Arts, Eisenhower College, 1976
Master of Architecture, Harvard University, 1981

**Teaching Experience:**

Adjunct Professor, Rochester Institute of Technology, 2013-present

**Professional Experience:**

Doran·Yarrington & Moran Architects, Rochester, NY, 2000 – 2001 - Principal
Principal, Doran·Yarrington Architects, Rochester, NY, 1995-2000
Principal, Bantel·Yarrington Architects, Rochester, NY, 1991-1994
Principal, Burwell, Bantel, Yarrington Architects, Rochester, NY, 1989-1991
Associate, Burwell & Bantel, Rochester, NY, 1988-1989
Intern Architect, Handler/Grosso Architects/Engineers, Rochester, NY, 1982-1988
Intern Architect, Mark B. Mitchell Architectural Associates, Cambridge, MA, 1982

**Licenses/Registration:**

Registered Architect, Active: New York, Inactive: IL, MD, VA, MA, PA
NCARB Certified

**Selected Publications and Recent Research:**

*Wyoming County: An Architectural Tour.* Canandaigua, NY: The Humphrey Press, 1985
*The American Right of History*, Preservation Magazine January- March, 1976. First prize, national essay contest.
*Sentinel: The Design, Fabrication, and Installation of the Monumental Sculpture by Albert Paley at Rochester Institute of Technology*. Rochester, NY, The Carey Graphic Arts Press, 2005

**Professional Memberships:**

American Institute of Architects
Association of University Architects
Landmark Society of Western New York

**Faculty Listing Summary**

| | |
|---|---|
| Dennis A. Andrejko, FAIA | Teaching, research, service and practice experience with a focus on architecture and the built environment, renewable energy and high performance buildings, and community and regional design assistance. |
| Callie Babbitt, PhD | Expertise in environmental assessment using life cycle assessment and carbon footprint techniques, with recent research focus on consumer electronics, batteries, nanomaterials, and biofuels. |
| John Baun, PhD | Design, Interior Design, Education, Law and Theatre experience with a focus on technology in the classroom - including environmental systems, education principles, distance programming and adult education theory, including environmental systems. |
| Stu Chait, AIA | Specializes in adaptive reuse and preservation. Noted abstract watercolorist merging artistic and color composition applications with architecture. Recipient of local and NYS AIA Design Awards. |
| David Chamberlain | Focuses on the human compositional process - how we perceive, think and make things, believing that we are designed to create, and created to design: that building things is in our genes. T |
| Roger Chen, PhD | Travel Behavior Analysis, Travel Demand Modeling, Transportation Planning, Information and Communication Technologies (ICT), Econometrics, Statistical Experimental Design, Games, Simulation. |
| Jules Chiavaroli, AIA | Over thirty years experience practicing architecture and as a professor. Author of a graphics text. Expertise in the business of architecture and socially responsible design. |
| Peter Gabak | A generalist, particularly attuned to how historical periods influence the recent past and present. Gabak presents each architectural monument within historical context and social milieu. |
| Gabrielle Gaustad, PhD | Conducts research exploring the environmental and economic trade-offs of recycling and resource recovery at end-of-life. Projects include topics such as resource recovery hierarchy, large-scale solar panel production, technologies improving scrap streams, and properly incentivizing waste collection. |
| Trevor Harrison, AIA | Blends professional practice experience into the studio environment; creating a supportive, "personal development" approach to learning about the creative process and the practice of architecture. |
| Ming Hu, AIA | Teaching and research interests center on sustainable design, high performance design, and new digital design technology, including BIM technologies and environmental simulation tools. |

| | First Year Courses | | | | | | | | Second Year Courses | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Architectural Representation I | Architectural Representation II | Architectural History I | Architectural History II | Architectural Design I | Architectural Design II | Understanding Sustainability | Fundamentals of Building Systems | Architectural Studio I: Site | Architectural Studio II: Tectonic | Architectural Studio II: Urban | Integrated Building Systems I | Integrated Building Systems II | Architectural Theory | Urban and Regional Planning | Industrial Ecology Fundamentals | Coop Architecture |
| Dennis A. Andrejko, FAIA | | | | | | | | 1,2 | | | | | | | | | |
| Callie Babbitt, PhD | | | | | | | 1,2 | | | | | | | | | | |
| John Baun, PhD | | | | | | | | | | | | | | | | | |
| Stu Chait, AIA | | | | | | | | | | | | | | | | | |
| David Chamberlain | | | | | 1,2 | 1 | | | | | | | | | | | |
| Roger Chen, PhD | | | | | | | | | | | | | | | | | |
| Jules Chiavaroli, AIA | | | | | | | | | | | | 1,2 | 1,2 | | | | 1,2 |
| Peter Gabak | | | 1 | 1 | | | | | | | | | | | | | |
| Gabrielle Gaustad, PhD | | | | | | | | | | | | | | | | | |
| Trevor Harrison, AIA | | | | | | | | | | | | | | | | | |
| Ming Hu, AIA | | | | | | | | | | | | | | | | | |
| Mark Krystofik, PhD | | | | | | | | | | | | | | | | | |
| Michelle Murnane, AIA | 1,2 | 1,2 | | | | 2 | | | | | | | | | | | |
| Michael Place | | | | | | | | | | | | | | 1,2 | | | |
| Mary Scipioni, Assoc. AIA | | | | | | | | | 1,2 | | | | | | 1,2 | | |
| Thomas Trabold, PhD | | | | | | | | | | | | | | | | 1,2 | |
| Alissa de Wit-Paul | | | 2 | 2 | | 2 | | | | 1 | | | | | | | |
| Jim Yarrington, AIA | | | | | | | | | | | 2 | | | | | | |

1 = academic year 2013-14
2 = academic year 2014-15

| | |
|---|---|
| Mark Krystofik, PhD | Over 20 years supervising engineering and manufacturing operations with small to midsize privately held firms. Research areas include: life cycle engineering, life cycle assessment, manufacturing process optimization, building & product design and sustainability. |
| Michelle Murnane, AIA | Over a decade of practice in the specialty of healthcare architecture. Focus on IDP program and the path to licensure as program's IDP Educator Coordinator. Service experience through the AIA; recipient of local AIA Emerging Architect of the Year award. |
| Michael Place | Seven years architecture practice experience, actively seeking professional licensure. Has taught design studios and architectural theory courses. Author of many essays on contemporary theory, sustainable systems, and building materials. |
| Mary Scipioni, Assoc. AIA | Dedicated to the assimilation of ecological and energy sensitive landscape architecture into the aesthetic foundation of architecture, and the integration of practice, education, and research in a trans-disciplinary environment. |
| Thomas Trabold, PhD | Research focus on fuel cells , various waste-to-energy processes, including anaerobic digestion, transesterification, pyrolysis, and bioelectrochemical systems; with attention to energy use reduction and pollution mitigation. |
| Alissa de Wit-Paul, AIA | Currently working on her PhD in the History and Theory of Art and Architecture at Binghamton University. Her dissertation concentrates on the history of Eco-Architecture. Of particular interest is the time period surrounding the 1973 Oil Embargo and its effects on encouraging sustainable design. |
| James Yarrington, AIA | Covers a broad design spectrum ranging from private homes to institutional buildings and historic preservation with particular expertise in adaptive re-use and additions to existing structures including registered landmarks. Has particular expertise in American architectural history and the historic architecture of Upstate New York. |

| | Third Year Courses | | | | | | | | Fourth Year Courses | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Architectural Studio III: Adaptive | Architectural Studio IV: Urban | Architectural Studio IV: Comprehensive | Integrated Building Systems III | Integrated Building Systems IV | Reserach Seminar/ Thesis Prepartation | Professional Practice | Sustainabile Building Metrics | Thesis | Continuation of Thesis |
| Dennis A. Andrejko, FAIA | | | | | | | | | 1,2 | 1,2 |
| Callie Babbitt, PhD | | | | | | | | | | |
| John Baun, PhD | | | | | 2 | | | | | |
| Stu Chait, AIA | | | | | | | | | | |
| David Chamberlain | | | | | | | | | | |
| Roger Chen, PhD | | | | | | | | | | |
| Jules Chiavaroli, AIA | | | 2 | 1,2 | 1 | | | | | |
| Peter Gabak | | | | | | | | | | |
| Gabrielle Gaustad, PhD | | | | | | | | 1,2 | | |
| Trevor Harrison, AIA | 1 | | | | | | 1,2 | | | |
| Ming Hu, AIA | 2 | | | | | | | 2 | | |
| Mark Krystofik, PhD | | | | | | | | 1 | | |
| Michelle Murnane, AIA | | | | | | | | | | |
| Michael Place | | | | | | | | | | |
| Mary Scipioni, Assoc. AIA | | | | | | | | | | |
| Thomas Trabold, PhD | | | | | | | | | | |
| Alissa de Wit-Paul | | | | | | 2 | | | | |
| Jim Yarrington, AIA | | 1 | | | | | | | | |

1 = academic year 2013-14
2 = academic year 2014-15

## Appendices

The remiander of the document contains the following:

Appendix A: RIT Education and Access Goals

Appendix B: Annual Statistical Report – 2014

Appendix C: Program Policies and Miscellaneous Program Material

Appendix D: Continuation of Candidacy Visiting Team Report – November, 2013

## RIT Educational and Access Goals

1. **Career Education:** RIT students will receive career education responsive to the dynamics of emerging technologies and the global economy. Professional programs based on a distinctive combination of experiential and academic learning will give students opportunities for career discovery and will prepare them to assume leadership roles throughout their careers.

2. **Liberal Learning:** RIT students acquire those foundation skills essential for success in the professional fields for which RIT prepares graduates. These skills will include expressive and receptive communication (oral, written, and visual); intellectual inquiry; scientific, mathematical and technological literacy; ethical, social and global awareness; and creativity, innovation and artistic literacy.

3. **Excellence:** RIT students pursue their studies in an environment of high standards and expectations. The RIT community and curriculum provide students with concepts and examples of professional excellence, personal integrity, and ethical behavior. RIT students are expected to commit themselves to professional excellence, personal integrity, and ethical behavior and to demonstrate this commitment in their academic and personal conduct.

4. **Community and Personal Growth:** RIT students will be encouraged to develop an increased sense of the global community including empathy for others, civic awareness and responsibility, an understanding of the interaction between the global community and the natural environment, and an appreciation of human diversity. RIT students will be provided opportunities to participate I a range of activities and programs that will foster self-discovery and personal responsibility, enhance interpersonal skills, promote career awareness, and expand their intellectual, social, and cultural experiences.

5. **Access:** RIT students will be provided opportunities to participate meaningfully in the learning and living offerings of the university by appropriate accommodation for their learning and living needs.

**NAAB – Annual Report -- Part I – Statistical Report** Submitted November 2014

## SECTION A. INSTITUTIONAL CHARACTERISTICS

**1. Program Contact Information:**

| | |
|---|---|
| Name | Rochester Institute of Technology |
| Title | Golisano Institute of Sustainability |
| Office Phone Number | |
| Fax Number | |
| Email | |

**2. Institution Type:**

Private Not for profit

**3. Carnegie Classification:**

| | |
|---|---|
| **a. Basic Classification:** (larger programs) | Master's/L: Master's Colleges and Universities |
| **b. Undergraduate Instructional Program:** higher transfer-in | FT4/MS/HTI: Full-time four-year, more selective, |
| **c. Graduate Instructional Program:** | Doc/STEM: Doctoral, STEM dominant |
| **d. Size and Setting:** | L4/HR: Large four-year, highly residential |

**4. Which regional accreditation agency accredits your institution?**

Middle States Association of Colleges and Schools (MSACS)

**5. In which ACSA region is the institution located?**

North East

**6. Who has direct administrative responsibility for the architecture program?**

| | |
|---|---|
| Name | Dennis A. Andrejko, FAIA |
| Title | Head, Department of Architecture |
| Office Phone Number | 585.475.4990 |
| Fax Number | 585.475.4980 |
| Email | daaarch@rit.edu |

**7. To whom should inquiries regarding this questionnaire to be addressed?**

| | |
|---|---|
| Name | Dennis A. Andrejko, FAIA |
| Title | Head, Department of Architecture |
| Office Phone Number | 585.475.4990 |
| Fax Number | 585.475.4980 |
| Email | daaarch@rit.edu |

**8. Who is the university administrator responsible for verifying data (and completing IPEDS reports) at your institution?**

| | |
|---|---|
| Name | Ms. Joan E. Graham, PhD |
| Title | Assistant Vice President |
| Office Phone Number | 585.475.7922 |
| Fax Number | 585.475.7950 |
| Email | jegirp@rit.edu |

**9. Institutional Test Scores**

**a. SAT**

*Critical Reading*

25th percentile SAT score:

75th percentile SAT score:

*Mathematics*

25th percentile SAT score:

75th percentile SAT score:

*Writing*
25th percentile SAT score:
75th percentile SAT score:

**b. ACT**
25th percentile ACT score:
75th percentile ACT score:

**c. Graduate Record Examination (GRE)**
Verbal: 148 (200-800)
Quantitative: 157 (200-800)
Analytical: 3.3 (0.0 – 6.0)

**SECTION B – NAAB-ACCREDITED ARCHITECTURE PROGRAMS**

**1. DEGREE PROGRAMS**

**a. Which NAAB accredited / candidate degree programs were offered during the last fiscal year?** (B. Arch, M. Arch, D. Arch)

**Accredited**
N/A
**Candidate**
M. Architecture Cand

**b. Did your institution offer any pre-professional architecture degree programs during the last fiscal year?** No

| Degree Type | Available? | Full Degree Title |
|---|---|---|

**c. Did your institution offer any post-professional architecture degree programs during the last fiscal year?**

| Full Degree Title |
|---|

**2. Does your institution have plans to initiate any new NAAB-accredited degree programs?**
Yes

**3. Does your institution have plans to discontinue any of its NAAB-accredited degree programs?**
No

**4. What academic year calendar type does your institution have?**
2 Semesters or Trimester

**5. Credit Hours for Completion for each program:**

a. Indicate the total number of credit hours taken at your institution to earn each NAAB accredited/candidate degree program offered by your institution:
   a. M. Architecture undergraduate (five years, no baccalaureate degree awarded prior): 0
   b. M. Architecture Pre-Professional (degree designed for candidates who have a pre-professional degree in architecture): 0
   c. M. Architecture Non-Pre-Professional (degree designed for candidates who have an undergraduate degree in a descipline other than architecture): 105
   d.
b. By degree, what is the distribution of credit hours in the following: General Education, Professional, and Electives?
   a. M. Architecture undergraduate:
   b. General Education: 0

c. Professional: 0
d. Electives: 0
e. M. Architecture Pre-Professional:
f. General Education: 0
g. Professional: 0
h. Electives: 0
i. M. Architecture Non-Pre-Professional:
j. General Education: 0
k. Professional: 90
l. Electives: 15
m.

**6. Average credit hours per student per term by degree program?**
M. Architecture undergraduate: 0

M. Architecture Pre-Professional: 0

M. Architecture Non-Pre-Professional: 15

**7. Is your degree program(s) offered in whole, or in part, at more than one campus or location?**
**[no response needed in ARS print out]**

**SECTION C –TUITION, FEES AND FINANCIAL SUPPORT FOR STUDENTS IN NAAB-ACCREDITED PROGRAMS**

1. Tuition is defined as "the amount of tuition and required fees covering a full academic year most frequently charged to students for instructional services."
   a. What were the tuition and fees for the institution for the last fiscal year?

   b. Does the institution offer discounted or differential tuition for a NAAB-accredited degree program? No

   c. Is a summer session required for any portion of your accredited degree program(s)? If yes, what is the additional tuition and fees for the summer program? No

   d. Does the institution offer discounted or differential tuition for summer courses for a NAAB accredited degree program? No

**2. Financial Aid:** What was the percent of students financial aid at both the institutional and architecture program levels (grants, loans, assistantships, scholarships, fellowships, tuition waivers, tuition discounts, veteran's benefits, employer aid [tuition reimbursement] and other monies [other than from relatives/friends] provided to students to meet expenses? *This includes Title IV subsidized and unsubsidized loans provided directly to student) provided by the institution to students enrolled in each program(s) leading to a NAAB accredited degree during the last fiscal year.*

| Grant Type | % Students Receiving Aid | Average Amount by Types of Aid |
|---|---|---|
| a. Institution Federal Grants | 2% | 20000 |
| a. Institution State/Local Grants | 1% | 3560 |
| a. Institution Institutional | 74% | 11600 |

| Grants | | |
|---|---|---|
| a. Institution Student Loans | 27% | 16250 |
| b. Architecture Program Federal Grants | 0% | 0 |
| b. Architecture Program State/Local Grants | 0% | 0 |
| b. Architecture Program Institutional Grants | 100% | 12000 |
| b. Architecture Program Student Loans | 60% | 16250 |

3. **Graduate Assistantships** (What was the total number of graduate-level students employed on a part-time basis for the primary purpose of assisting in classroom or laboratory instruction or in the conduct of research during the last fiscal year (Jul 1 – Jun 30) within the NAAB-accredited programs offered by your institution? *Please include: graduate assistant, teaching assistant, teaching associate, teaching fellow or research assistant in your calculation.* 5

**SECTION D – STUDENT CHARACTERITICS FOR NAAB-ACCREDITED AND PREPROFESSIONAL DEGREE PROGRAMS**

1. **Entering Students:**
M. Architecture: 14

| Race | Male Full Time | Male Part Time | Female Full Time | Female Part Time | TOTAL Full Time | TOTAL Part Time | GRAND TOTAL |
|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 1 | 0 | 4 | 0 | 5 | 0 | 5 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| White | 5 | 0 | 2 | 0 | 7 | 0 | 7 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 1 | 0 | 1 | 0 | 1 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 6 | 0 | 8 | 0 | 14 | 0 | 14 |

2. **Total undergraduate/graduate architecture enrollment in NAAB accredited program by race/ethnicity.**
M. Architecture 28

| Race | Male Full Time | Male Part Time | Female Full Time | Female Part Time | TOTAL Full Time | TOTAL Part Time | GRAND TOTAL |
|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 1 | 0 | 4 | 0 | 5 | 0 | 5 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 2 | 0 | 2 | 0 | 2 |
| White | 10 | 1 | 6 | 1 | 16 | 2 | 18 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 1 | 0 | 2 | 0 | 3 | 0 | 3 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 12 | 1 | 14 | 1 | 26 | 2 | 28 |

**SECTION E – DEGREES AWARDED**

**1. What is the total number of NAAB-accredited degrees that were awarded in the last fiscal year?**
M. Architecture:

| Race | Male | Female | TOTAL |
|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 |
| White | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 |

**2. Time to Completion/Graduation**
**a. Time to completion equals the total number of semesters/quarters to complete the degree:**
M. Architecture UG 0, M. Architecture Pre-Professional 0, M. Architecture Non-Pre-Professional 7

**b. Percentage of students that graduate in "normal time to completion":**
M. Architecture UG 0%, M. Architecture Pre-Professional 0%, M. Architecture Non-Pre-Professional 0%

**3. Graduation rate for B. Arch programs:**

**SECTION F – RESOURCES FOR NAAB-ACCREDITED PROGRAMS**

**1. What is the total number of permanent workstations (studio desks) that can be assigned to students enrolled in design studios?** 72

**2. Please indicate which of the following: labs, shop, and other learning resources available to all students enrolled in NAAB-accredited degree program(s).** Yes

3. Please indicate which of the following learning resources are available to all students enrolled in NAAB-accredited degree programs(s). [no response needed in ARS print out]

**4. Financial Resources**

**a. Total Revenue from all sources** $688012

**b. Expenditures**

i. Instruction $665855
ii. Capital $207215
iii. Overhead $468762

**c. Per Student Expenditure:** What is the average per student expenditure for students enrolled in a NAAB accredited degree program. *This is the total amount of goods and services, per student, used to produce the educational services provided by the NAAB-accredited program.*

**NAAB – Annual Report -- Part I -- Statistical Report**

**Instruction + Overhead / FTE Enrollment: 40552**

**SECTION G - HUMAN RESOURCE SUMMARY (Architecture Program)**

**1. Credit Hours Taught (needs definition and perhaps example)**

a. Total credit hours taught by full time faculty: 21
b. Total credit hours taught by part time faculty: 9
c. Total credit hours taught by adjunct faculty: 60

**2. Instructional Faculty**

**a. Full-time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor):**

Full Time Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 1 |

Full Time Associate Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 2 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 2 |

Full Time Assistant Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**NAAB – Annual Report -- Part I – Statistical Report**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

**b. Part-Time Instructional Faculty (Professor, Associate Professor, Assistant Professor, Instructor).**

Part Time Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

Part Time Associate Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| White | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 1 |

Part Time Assistant Professor

| Race | Tenured Male | Tenured Female | Tenure-Track Male | Tenure-Track Female | Non-Tenure-Track Male | Non-Tenure-Track Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Black or African American | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Hispanic/Latino | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 2 |

**NAAB – Annual Report – Part I – Statistical Report**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| White | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Two or more races | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Nonresident alien | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Race and ethnicity unknown | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| TOTAL | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 2 |

**c. Adjunct Faculty Professor, Associate Professor, Assistant Professor, Instructor):**

| Race | Professor Male | Professor Female | Associate Professor Male | Associate Professor Female | Assistant Professor Male | Assistant Professor Female | Instructor Male | Instructor Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|---|---|
| American Indian or Alaska Native | | | | | | | | | 0 | 0 | 0 |
| Asian | | | | | | | | | 0 | 0 | 0 |
| Native Hawaiian or other Pacific Islander | | | | | | | | | 0 | 0 | 0 |
| Black or African American | | | | | | | | | 0 | 0 | 0 |
| Hispanic/Latino | | | | | | | | | 0 | 0 | 0 |
| White | | | | | | | | | 5 | 3 | 8 |
| Two or more races | | | | | | | | | 0 | 0 | 0 |
| Nonresident alien | | | | | | | | | 0 | 0 | 0 |
| Race and ethnicity unknown | | | | | | | | | 0 | 0 | 0 |
| TOTAL | | | | | | | | | 5 | 3 | 8 |

**3. Faculty Credentials:**

| Highest Degree Achieved | Professor Male | Professor Female | Associate Professor Male | Associate Professor Female | Assistant Professor Male | Assistant Professor Female | TOTAL Male | TOTAL Female | GRAND TOTAL |
|---|---|---|---|---|---|---|---|---|---|
| D. Arch. (accredited) | | | | | | | 0 | 0 | 0 |
| M. Arch. (accredited) | | | | | | | 4 | 2 | 6 |
| B. Arch. (accredited) | | | | | | | 1 | 0 | 1 |
| Ph.D. in architecture | | | | | | | 0 | 0 | 0 |
| Ph.D. in other discipline | | | | | | | 3 | 2 | 5 |
| Post-professional graduate degree in architecture | | | | | | | 0 | 0 | 0 |
| Other degrees | | | | | | | 1 | 1 | 2 |
| Registered in U.S. Jurisdiction | | | | | | | 0 | 0 | 0 |

**4. Salaries**

| Instructional Faculty Type | Number | Minimum | Average | Maximum | University Average |
|---|---|---|---|---|---|
| Professor | 1 | 104882 | 104882 | 104882 | 117258 |
| Assoc. Prof. | 2 | 70290 | 86953 | 103666 | 90826 |
| Assist. Prof. | 0 | 0 | 0 | 0 | 60972 |
| Instructor | 0 | 0 | 0 | 0 | 75496 |

ARCHITECTURE

2014 Version

# Master of Architecture Program and Studio Culture Policy

## Ethos / Overview

Enrollment in the Master of Architecture Program and studio environment is a privilege granted to students majoring in our Program. As such, each student is bound to uphold this standard, through personnel performance as well as in concert with others. The term "studio" refers to a series of specific, uniquely structured courses as well as a physical place founded on the educational ideals and the belief in an environment that fosters critical thinking, explorative forming and testing of ideas, and professional development. Interwoven into these ideals is that sustainability is a fundamental requirement of all building design and operation, and architects are positioned to propel and ensure the highest quality instantiations of sustainable design, materials and construction. Overall, our Program is grounded in these ideals and underscores the following essential values (referenced from the AIAS Studio Task Force Report):

A Culture of Optimism – Hopeful that architecture will make a difference to society, and confident that success within the profession or related discipline is possible.

A Culture of Respect – Respect for the individual, the community, ideas, diversity and the physical space.

A Culture of Sharing – Collaboration, interdisciplinary connections and successful oral and written communication are embraced.

A Culture of Engagement – Promoting leadership to foster engagement within communities, among clients and users, and around social issues.

A Culture of Innovation – Encouraging critical thinking, fostering risk taking, and promoting creativity.

## Criteria / Standards / Principles

The model studio environs go much further than merely to establish a place of inspiration and collegiality. It upholds a mutual attitude of respect and tolerance among faculty and students, embracing diversity and understanding that cooperation between, and discourse among diverse perspectives within the Program is one of our greatest assets. Our working model asserts a culture of respect and innovation within the Program by allowing ideas, processes, and products to develop freely.

1) Students must conduct themselves in a professional manner at all times and show consideration for fellow studio residents and faculty. The RIT Code of Student Conduct shall be adhered to.

2) Students should remain alert and mentally attentive. Smoking is prohibited at all times – both within the studio environment and throughout adjoining corridors and exterior spaces.

3) Students must respect the work, materials and work areas of fellow students by maintaining clean, orderly and organized commons areas and not interfering with work areas belonging to others.

4) Students must observe the principles of good citizenship by being active and contributing participants; and being respectful of the contributions and perspectives by others.

5) Collaboration, discussion of diverse opinions, critical thinking, creative inquiry and expression around design are encouraged to promote a culture of innovation, exploration, and discovery.

6) In instances of conflict, the highest standards of ethical, professional behavior – as outlined in the RIT Code of Student Conduct – will be our guides. All issues will be handled in a constructive manner with respect, discretion, and humility.

7) Students must maintain a healthy lifestyle to contribute to a healthy and productive studio environment. It is the instructor's responsibility to distribute an equitable and balanced workload throughout the semester, while being mindful of a student's overall academic, professional and personal growth and development. It is the student's responsibility to develop, adopt and employ personal time-management skills to meet responsibilities in and beyond the classroom.

## Operation

- Operation

  1) All RIT tools and equipment must remain accessible to students for use in class and the studio.

  2) Substantive changes to the physical studio layout, changing space assignments, or moving furniture to other locations is not permissible without the consent of the program chair or a studio instructor.

  3) On a regular basis, students using common work areas must clean up when finished and return tools and equipment to their proper storage locations.

  *4)* Behavior in studio should follow a model of respectful collaboration providing each student and faculty the possibility of a pleasant and productive work environment. It is each student's right to have workspace setting conducive to a healthy learning environment.

  5) Plotting and work preparation should be done well in advance of routine desk crits or presentations.

  6) Attendance and participation in all assigned reviews is required. Active dialogue is encouraged among critics, professors, and students with the common goal of discovery and invention. In order to benefit from reviews, students and faculty must be considerate of each other's time by participating in thoughtful discussions specific to the topic.

- Safety

  Students must observe all safety criteria and regulations as outlined and enforced by RIT Facilities Management and Occupational Health and Safety.

- Security

  All students registered for design studios will have swipe card access. Open access by others not officially a part of our Program is prohibited.

- Storage

  Care of drawings, models and all other work through proper storage on or in desks, or in assigned areas for long term storage, is required at all times.

  All academic work shall be thoroughly documented and students shall prepare and submit digital files of all curricular work – both from studio and classes - on a disk to their respective faculty at the conclusion of the Spring semester. Any work identified by faculty as archival or as exhibits for accreditation will be collected by faculty and in consultation with the student, and stored separately for appropriate documentation or preparation.

- Disposal

  Dispose of trash in receptacles rather than on the floor. Practice principles of sustainability on a daily basis. Dispose of and recycle all materials properly, safely and sustainably.

  *Upon competing the studio at the end of a term* - Leave the studio as clean and as orderly as you found it. Models, drawings, and other material left in studio beyond the due date for their removal at the end of each semester, intersession or summer term, will be discarded.

- Furniture

  *Desks and Drawing Equipment* - Your assigned desk, the walls, partitions and immediate space it occupies is assigned during a school term for your personal use related to academic inquiry and should be treated accordingly. Any theft should be reported to campus security immediately. All students are to have the necessary tools to work at all times. No motorized tools, other than those approved by a studio instructor are allowed in the studio space at any time.

- Space / walls

  All studio space and wall areas, other than those areas as a part of a studio work station is understood to be common property and use of these areas subject to the determination of the faculty and shall not be used for any other purpose.

## Faculty, Student and Staff Engagement

The Studio is the centerpiece of architectural education and the vehicle from which to impart the Program's pedagogy. Studio conduct must therefore be of the highest ethical standard and the instructor must be held as a model of such behavior.

Studios may engage in real projects, but only for the academic benefits of such engagement to both the student and the community and in keeping with all University policies regarding such matters.

Throughout the program where quasi-professional work is often the form of community service and/or assistance, special care should be taken to ensure clarity of purpose for the exercise and identify associated costs and fees, ahead of the service event.

An instructor's engagement in design studio teaching should be selfless pursuit imparting knowledge of architecture and searching collectively for new and time honored ways in which design improves the quality of life, protects the settings where life unfolds and stimulates the universal human desire for beauty.

Faculty/Staff Interaction – Student/Staff Interaction -

Faculty and Students understand that staff is assigned work by other faculty, administration and university programs, departments and centers, and shall be respectful of their time and professional duties.

Faculty/Student Interaction –

Good judgment in deciding when, where and how to converse, communicate and document information with students regarding sensitive issues should be exercised. All dialogue shall be non - confrontational and professional with wording and communication, and operate within RIT policy and standards.

Faculty/Faculty Interaction –

Faculty understand that the university setting is an environment where ideas can be discussed in a courteous and collegial manner, and differences of opinion should be respected.

Faculty Workload Expectations –

All faculty are expected to make time outside of class for additional contact time with students through identified office hours.

Student/Student Interaction –

As a professional program, it is understood that all students are expected to interact in a professional, respectful and collegial manner, similar to faculty/faculty interaction described above.

## Enforcement

Addressing deviations from this policy shall be through professional and collegial dialogue and exchange among participants. Should concerns by students regarding adherence to the items in this document remain unresolved, attention should be brought to the course instructor and/or advisor for resolution. Faculty and staff should address concerns with the department head.

## Review

This document will be reviewed and updated every spring semester in even numbered years by a committee representing both faculty and the student body.

## Date Adopted/Updated

September, 2012
August, 2014

RIT ARCHITECTURE

# Course Waiver/Replacement Petition Form

**What is this form?**
Use this form to petition to waive or replace a required course from the existing RIT Architecture curriculum with a course that you have taken within the last 6 academic years at another accredited college or university. Courses must be very similar in *content*, not just in *name*. All petitions will be considered by an faculty committee and the decision of the committee is final.

**Instructions.** Please read carefully. Incomplete forms or forms missing information will be rejected.

1. Use one form for each course you are petitioning to replace. Please print clearly.
2. Complete this form in its entirety, do not leave any spaces blank.
3. Attach (use a paperclip do not staple) to this form a copy of the original syllabus for the course you are asking to be considered for waiver. For architecture (not sustainability or elective) courses, the original syllabus must contain NAAB performance criteria information (look for a list with numbers the begin with letters, e.g., A9, B7, C4, etc. If you don't see this contact the original instructor or school to get the relevant information.
4. Attach to this form a copy of the transcript (it can be an unofficial transcript) with the relevant data for this course circled, including course number, course name, semester completed, final grade issued, and credit hours received for the course.
5. Scan all documents as one single PDF and send to your advisor as a PDF (each PDF must be less than 1.5mb to be accepted.)
6. Retain this original copy of all for your records until you graduate.

| | |
|---|---|
| **Student Name** | |
| **RIT e-mail address** | |
| **UID** | |

| | **RIT Course Information**<br>I would like to replace this required course... | **Other University Course Information**<br>...with this course that I've completed. |
|---|---|---|
| **Course Number** | 5010 / ARCH | |
| **Full Course Name** | | |
| **Course Catalog Description**<br>(you can usually find this online) | | |
| **Graduate or undergraduate?** | ☐ Graduate ☐ Undergraduate | ☐ Graduate ☐ Undergraduate |
| **Calendar Type** | ☐ Quarter ☐ Semester | ☐ Quarter ☐ Semester ☐ Trimester |
| **Credit Hours** | ☐ 3.0 ☐ 4.0 ☐ Other _____ | ☐ 3.0 ☐ 4.0 ☐ Other _____ |
| **Date Course Completed** | | |
| **Where did you take this course** | | |
| **Final Grade Received** | | |

I attest that the above information is correct. I have read and understand the RIT Policy on Academic Integrity and confirm that this request is in accordance with the relevant policy stated therein.

Student Signature _____ Date _____

RIT ARCHITECTURE

# Course Waiver/Replacement Decision Form

| | |
|---|---|
| **Student Name** | |
| **RIT e-mail address** | |
| **UID** | |
| **re: Waiver for Course Number** | |
| **This petition has been** | ☐ Approved ☐ Denied (see below) |
| **Justification for Denial** | ☐ Insufficient Documentation Provided<br>☐ NAAB Criteria Missing<br>☐ NAAB Criteria Not Equivalent<br>☐ Does Not Meet Current NAAB Criteria<br>☐ Credit Hours Not Equivalent<br>☐ Course Content/Objectives not Equivalent<br>☐ Credits Expired (older than 6 academic years)<br>☐ Other University Not Accredited<br>☐ Cannot Replace Graduate Course with Undergraduate Course<br>☐ Other |

**Comments**

# ARCHITECTURE

**Student:** **Date:**

☐ **Advanced Standing** ☐ **Course Waiver**

The RIT architecture program was designed for students with undergraduate degrees in fields other than architecture. Advanced standing places a newly accepted student directly into the fall semester of the second year of the program. This is usually the result of an undergraduate degree that is related to architecture. To achieve advanced standing the student must have successfully completed (averaging B or better) the equivalent of at least the two Architectural Representation courses and the two Architectural Design courses.

| RIT FIRST YEAR COURSES | | UNDERGRADUATE SCHOOL AND DEGREE: | CR | GR |
|---|---|---|---|---|
| ARCH-611 Architectural Representation I | 3 | | | |
| | | | | |
| ARCH-612 Architectural Representation II | 3 | | | |
| | | | | |
| ARCH-621 Architectural History I | 3 | | | |
| | | | | |
| ARCH-622 Architectural History II | 3 | | | |
| | | | | |
| ARCH-631 Architectural Design I | 6 | | | |
| | | | | |
| ARCH-632 Architectural Design II | 6 | | | |
| | | | | |
| ARCH-641 Fund. of Building Systems | 3 | | | |
| | | | | |
| ~~ARCH-761 Understanding Sustainability~~ | | ← THIS COURSE CAN NOT BE WAIVED | | |
| Total credits waived | | | | |
| Total credit reduction | | | | |

We have reviewed the above named student's transcript and approve of the advanced standing/course waiver(s) noted above.

| | | |
|---|---|---|
| Name | Name | Dennis A. Andrejko, FAIA |
| Date | Date | Date |
| Signature<br>Admissions Committee Representative | Signature<br>Review Committee Representative | Signature<br>Department Chairman |

ARCHITECTURE

Master of Architecture Program • Rochester Institute of Technology

# Thesis Policy

## Overview

Thesis in the RIT Department of Architecture is governed by RIT Institute Policy, D12.0, Graduate Requirements. This document is intended to help clarify the policy and amplify situations that are unique to the Architecture Program. In the event of any discrepancy between this document and Institute Policy, the current Graduate School and RIT policy will prevail.

The complete text of D12.0, Graduate Requirements is available online, at: http://www.rit.edu/~w-policy/sectionD/D12.html

Information about graduate programs and policies are available online, at: http://www.rit.edu/emcs/ptgrad/grad/

### Introduction

All students who earn an Master of Architecture degree at RIT must complete a Thesis. A minimum of 6 credit hours towards thesis is needed to earn the M Arch degree. If a student requires additional time to complete his/her Thesis additional credits must be taken to do so.

The Department of Architecture offers two separate but equivalent ways for students to undertake their Thesis investigations:

- Design Option
- Research Option

Students should choose the option that best accommodates their goals and working methods.

### Goals

1. The master's Thesis should be evidence of the graduate student's ability to carry out independent investigation and to present the results in clear and systematic form.
2. Preparing a Thesis assures students' expertise in a chosen area of architecture and reinforces a systematic, critical approach to architectural design.

### The Process

ARCH-753 Research Seminar/ Thesis Prep is the course that triggers the start of the thesis process. The course is typically offered in the fall semester of year three of the program and ARCH-790 Thesis occurs one year later. The interim time includes one intercession, one full semester, and one summer term. Students are expected to utilize this interim time to complete preliminary work on their Thesis. Following are the basic steps involved:

1. Develop a Thesis proposal in ARCH-753. This should be complete but is also considered a draft so subsequent changes are still possible.
2. Establish a Thesis Committee by the end of the course.
3. Seek approval of the Thesis proposal by the Thesis Committee. The approval form becomes part of the final Thesis submission. Refinements to the proposal should occur over the intercession and the form should be completed by the end of the first week of spring semester.
4. Preliminary research occurs during the spring semester and summer term.
5. Core work on the Thesis occurs in the 790 Thesis course. At the end of the semester Thesis documentation needs to be defended in an open forum and filed with the Wallace Center.

### Thesis Committee Composition

The Thesis Committee is made up of three RIT faculty members. The committee chair must be a member of the Architecture faculty and appointed to the graduate faculty at RIT. Students may select up to two other committee members, who must also be recognized graduate faculty, but can be from other schools, departments, or RIT colleges. Committee members can bring various points of view and levels of expertise to the student's committee. Committee members are, in effect, volunteering their time to work with the student. Students should be organized, clear, courteous, and considerate of the limited time of the committee members.

### Thesis Studio Course (ARCH-790 and 791)

Students who have completed three years of study (or its equivalent as determined by the faculty), and have successfully completed ARCH-753 Research Seminar/ Thesis Prep may register for ARCH-790 Thesis Studio for 6 credit hours. Immediately upon registration a grade of 'R' will be issued.

If a student does not complete his/her Thesis during ARCH-790, work must continue in subsequent Thesis courses. These courses start with ARCH-791 Thesis Continuation with variable credit (increments of 1–3 credit hours). They continue until the Thesis is completed. With the approval of the Thesis Committee, students may register for ARCH-791 Thesis Continuation for up to 7 consecutive semesters for a total of 16 Thesis credit hours.

If a student registers for ARCH-791 Thesis Continuation 1 credit at a time, he/she will only be charged for one credit for up to 7 semesters, thus allowing for seven semesters in addition to ARCH-790 Thesis Studio. If a student registers for a semester at 3 credit hours, he/she will be charged for the total amount of credits but will shorten the number of available semesters to complete the Thesis.

A student who undertakes the Thesis must understand that there is a commitment to the project that is not defined by a finite amount of time (e.g., the duration of a semester or year). Credit for a Thesis course cannot be earned until the Thesis has been completed and approved at all levels. That process does not end simply because a semester ends.

Variable credit allows graduate students flexibility to meet financial aid criteria or visa restrictions. Therefore, students should research credit hour limits as they may impact finances or visa. Situation vary from one student to another.

### Impact of an 'R' grade

Thesis credits do not affect GPA. A grade of 'R' is given upon registration for ARCH-790 Thesis Studio. At completion of the Thesis itself (ARCH-790 plus subsequent enrollment in ARCH-791) the 'R' grade will convert to the grade issued by the committee.

## Thesis Content

### Design Thesis/ Research Thesis

Whether the Thesis is design based or research based the end product is a research document that must be published according to RIT guidelines. A design based Thesis is somewhat of a misnomer because a considerable amount of research is required before a design can be executed. The resulting design drawings are part of the research results and simply become part of the research document.

Design theses can meet the NAAB requirement for comprehensive design (SPC B.6), however research theses may not. Students need to be sure they take a Department of Architecture course or courses to meet the B.6 requirement, and can provide evidence that this criteria has been met. Advisors can help with this.

### Organization of Thesis

The organization of a Thesis will vary considerably based on the student's project, research, the process, and the outcomes. This will depend on the advisor, the nature of the Thesis, the field of study and the author. However, every Thesis must contain a title page, abstract, table of contents, introduction, some form of historical (precedent or literature) review, and references. The arrangement and nature of the parts of the Thesis body can be varied to improve the clarity of exposition. The following listing gives the arrangement of the parts of a typical Thesis:

Approval page (All members of the Thesis Committee must appear by name and rank/title with original signatures in black ink)

- Title Page
- Copyright Page
- Acknowledgments (optional)
- Preface or Foreword
- Abstract
- Table of Contents
- List of Tables
- List of Figures
- Introduction
- Historical Review (or Precedent or Literature Review)
- Materials and Apparatus
- Method of Procedure
- Results (essentially the design in a design thesis)
- Discussion/Conclusions
- References
- Appendices
- Sources Cited

The student is responsible for conforming to all RIT Institute regulations regarding the publication of theses. These regulations are detailed and specific and exceptions are not made. Students are encouraged to research these regulations in advance of preparing their Thesis documentation. Typically letter size (8.5" x 11") portrait documents are standard, odd sizes are not permitted. Drawings in a design Thesis should be reduced to tabloid size (11" x 17") and folded to letter size.

### Accuracy and Grammar

The Thesis must be written in an acceptable literary format and style (suggestions and resources are available at the RIT Library). The Thesis must be written primarily in English and meet the requirements for correct sentence structure, spelling, punctuation and technical accuracy. Students are encouraged to hire or consult a proofreader, editor, and/or grammarian to ensure a high editorial standard. The chair of the Thesis Committee, department chair, and Dean of Graduate Studies may determine that the Thesis does not meet minimum standards.

### Design Thesis Guidelines

This document and RIT policy tend to focus on research theses. Design theses are a more practical way of completing architectural inquiry. Students research a particular issue and execute a design as a way to express their inquiry results. Following are typical expectations of a design Thesis, note how they parallel the Research Thesis organization noted above.

Preliminary Work (after ARCH-753 but before ARCH-790)

Precedent: A written and graphic investigation of what prior solutions have addressed the selected problem, i.e. case studies.

Context: A narrative of the contextual factors (culture, economy, geography, etc.) affecting the Thesis project.

Site Analysis: A written and graphic investigation of natural and man-made site conditions such as existing structures, topography, soil conditions, water, vegetation, sun and wind data, views, nature of surrounding properties, zoning codes, traffic, and any other conditions that would affect the project.

Program: A narrative supplemented with data quantifying the requirements of the Thesis project. This includes required character, space needs, and adjacencies.

Feasibility Study: A narrative with supporting data illustrating the financial feasibility of the project.

Thesis Work (during ARCH-790 and 791)

Schematic Design: A complete schematic design with primarily graphic material that represents a successful solution to the posed problem. This work is very similar to what is done in previous studio courses. Drawing types vary with project but should include diagrams, plans, sections, elevations and/or 3-D views sufficient to represent the project solution in full.

Design Development: A complete investigation of how the solution will be executed. This work is very similar to what is done in building systems courses. It should include:

- Zoning code analysis (open space, coverage, setbacks, etc.)
- Quantifying site components such as parking, lighting, walks, and landscaping
- Determining building envelope including compliance with energy code requirements at a minimum
- Building code analysis fixing use/occupancy, area, building type, and fire ratings
- Interior development indicating compartmentalization and egress that satisfies building code
- Structural system selection and preliminary sizing of members
- Mechanical, electrical, and plumbing schematics

### Final Presentation

The Thesis must be presented in a public forum and advertised on campus for at least 7 days beforehand. This presentation must occur at least 30 days prior to the completion of the semester in which it is expected the degree will be conferred. All members of the Thesis Committee must be present. The original and two copies must be handed into the Department of Architecture Office after signed approval by the student's Thesis Committee. Two of these copies are for archival purposes, one for transmittal to the RIT Library and one to the faculty advisor (sometimes copies may be filed electronically, check with your advisor). All copies of the Thesis must be signed by the Department Chair, Graduate Advisor and Committee Members before binding may take place.

### Binding and Publication

A "permission to reproduce" form should be signed by the author and must accompany the Library copy. This form will be permanently bound into the Library copy. It is the responsibility of the student to pay the necessary charges for reproduction and binding of the Thesis. The current charge is $13.00 per copy. This charge is to be paid to Student Financial Services and credited to the Wallace Center bindery account number 1-9-000-610-436-88.

### Embargo

A student who wishes to restrict or prohibit the reproduction of his or her Thesis (from the copy available in the Library) may use a special form from the RIT Library. This form is bound with the Thesis and prevents any unauthorized reproduction.

### Completion of Thesis

Once a student's work has been completed and the Thesis is approved and accepted by the committee, the department, and has been filed and accepted by the RIT Library, the Department of Architecture and GIS will certify the student for graduation internally, provided all other graduate requirements have been met.

### Resources

Thesis guidelines are available from RIT Libraries online at: http://infoguides.rit.edu/thesis-services

Students are encouraged to visit the RIT Library for guidance and information. Student theses are available for review at the RIT Library and other regional libraries (University at Buffalo, Cornell University, and Syracuse University.) Students are encouraged to review the work of other successful Thesis students in advance of preparing their Thesis documentation.

## Academic Dishonesty

### Policy

As per RIT Institute Policy, Academic Dishonesty falls into three basic areas: cheating, duplicate submission and plagiarism: Cheating is any form of fraudulent or deceptive academic act, including falsifying of data, possessing, providing, or using unapproved materials, sources, or tools for a work submitted for faculty evaluation. Duplicate submission is the submitting of the same or similar work for credit in more than one

course without prior approval of the instructors for those same courses. Plagiarism is the representation of others' ideas as one's own without giving proper credit to the original author or authors. Plagiarism occurs when a student copies direct phrases from a text (e.g., books, journals, internet) and does not provide quotation marks, or paraphrases or summarizes those ideas without giving credit to the author or authors. In all cases, if such information is not properly and accurately documented with appropriate credit given, then the student is guilty of plagiarism. Students are urged to use diligent care in the preparation of their Thesis to ensure none of these event could be charged.

### Consequences of Academic Dishonesty

Any act of Academic Dishonesty will incur the following possible consequences. After notifying and presenting the student with evidence of such misconduct, the instructor has the full prerogative to assign an "F" for the offense, or to assign an "F" for the entire course. The instructor will inform and, if possible, meet with the student concerning the decision reached on the "F" for the offense, or the "F" for the entire course or Thesis course sequence.

The student, as author, is solely responsible for the accuracy of the Thesis, and for any copyright, or other, infringements. Additionally, the student is solely responsible for civil or criminal suits which may arise from the Thesis. Under those circumstances, the University may review the granting of the degree in which the Thesis was submitted and revoke the degree if such action is deemed appropriate. The student is responsible for adhering to the Thesis requirements, as well as any additional requirements specific to his or her degree granting program.

Additionally, a student may face academic suspension and/or dismissal from the Institute. (See D17.0, Academic Conduct and Appeals Procedures," and D18.0, "RIT Student Conduct Process." available online, at: http://www.rit.edu/~w-policy/

❖

*Updated:*

*December 11, 2013*
*January 13, 2014*

R·I·T
Rochester Institute of Technology

ARCHITECTURE

Master of Architecture Program • Rochester Institute of Technology

# Global Experience

## Overview

Completion of a Global Experience is a requirement for all students in the Master of Architecture program at RIT. There are four options available to students which are outlined in this document.

## What are the goals of the Global Experience?

1. For the student to become immersed in a significantly different culture than their own so as to develop a sensitivity to that culture.
2. For the student to study a foreign culture in order to understand how the vernacular architecture is a result of the culture's influences on form (history, culture, geography, religion, society, etc.)

The over arching goal of the Global Experience requirement is to encourage RIT Architecture students to experience a culture that is different from their own. Thus, depending on the student's home or native country, global experience options may vary significantly. The idea here is to grow, not go back to what you know.

## Can a previous experience count?

In rare circumstances a previous experience, such as an undergraduate semester abroad program, can satisfy the RIT requirement. In general such a prior experience must be of sufficient length and be architecturally oriented. In all such cases the student must seek approval by submitting a course waiver form with full documentation of the experience.

## What are specific requirements?

Regardless of what option the student chooses for completing the Global Experience the following requirements must be met:

- The experience must be a minimum 21 contiguous calendar days not including travel days.
- The experience must occur between acceptance into the program and before degree certification while actively enrolled.
- The experience must be documented.
- The documentation must be submitted within one month of the date of return from the experience.
- The documentation presented must represent a Global Experience conducive with the program goals.
- All Global Experience requirements are subject to review, certification, and approval by the M Arch faculty and the RIT Study Abroad Office.

## What is the required documentation?

The student and his/her advisor need to discuss and determine a "deliverable" for the chosen global experience. Since there are several experience options available the deliverable is variable. However as a minimum the student should count on giving a presentation and/or a written document (a paper or portfolio) upon their return to RIT. As noted above this is due one month after the student's return.

## When can the experience occur?

Usually the experience happens in one of the summer terms while in the program, including the summer before beginning course work. However it is possible to complete the requirement during the winter intercession or during the fall or spring semesters. See the options that follow.

A student may choose to travel during a fall or spring semester but this could affect one's academic progress and put the student out of sequence in the M Arch program. Students should discuss this option with their advisor to reveal all of the ramifications.

## CREDIT-BEARING

These options can shorten your program by as much as a semester, i.e. you earn academic credit while satisfying the global experience requirement.

### Option 1

Attend the RIT Department of Architecture sanctioned program at the Danish Institute for Study Abroad.

**Benefits:**

- All logistics and arrangements are included
- Structured (helpful if you are inexperienced at traveling abroad
- Typically costs are included
- Pay less per credit than usual RIT tuition
- RIT will assist with visas and paperwork
- RIT provides emergency assistance
- Just pay and show up
- Designed by RIT faculty
- Financial aid and loans may be used to pay for the program
- RIT guarantees credit transfer articulation
- You travel with people you know
- RIT faculty assesses your work and provides feedback throughout

**Drawbacks:**

- Structured program so less flexibility is possible
- You travel with people you know

**Approval:**

- Approval by academic advisor not necessary. Approval is guaranteed.

### Option 2

Attend a program sanctioned by another architecture school such as the Syracuse University Italy Program.

**Benefits:**

- Greater flexibility in places to visit and credit vs. non-credit options
- Typically costs are included
- Credits are earned while traveling, although these may or may not transfer RIT
- You get to study and travel with other architecture students

**Drawbacks:**

- Requires research on applying
- Credit must be transfered to RIT
- No RIT assistance with visas & paperwork
- No RIT emergency assistance
- Financial aid typically not applicable to program
- Can be expensive

**Approval:**

- Approval by academic advisor is necessary. Start early, because the process will take 6-8 weeks to evaluate and gain approval.

## NON CREDIT-BEARING

These options can satisfy the global experience requirement but rarely is academic credit an outcome of the program..

### Option 3

Attend a program offered by a non-academic organization such as Habitat for Humanity.

**Benefits:**

- Allows for non-course options
- Travel and experience oriented, no stress about academic performance
- Experience can be significant
- No bureaucracy related to credit transfer or finances

**Drawbacks:**

- Requires research on applying
- No RIT assistance with visas & paperwork
- No RIT emergency assistance
- Financial aid typically not applicable to program
- No credit earned
- Can be physically more demanding

**Approval:**

- Approval by academic advisor is necessary. Start early, because the process will take 6-8 weeks to evaluate and gain approval.

### Option 4

The student designs and creates his/her own program at a location of their choosing.

**Benefits:**

- Most flexible of all options
- Provides a true opportunity to experience the culture chosen
- Posibility that money can be earned but visa limitations must be investigated
- Only one approval is nececsary, otherwise no red tape or applying is usually necessary

**Drawbacks:**

- Student is responsible for everything
- No RIT assistance with visas & paperwork
- No RIT emergency assistance
- Financial aid typically not applicable
- No credit earned
- Planning and lead time are substantial
- Language and cultural barriers might present a challenge

**Approval:**

- Approval by academic advisor is necessary. Start early, because the process will take 4-6 months to evaluate and gain approval.
- Approval is not guranteed.

## What about international students?

By attending RIT in the United States, international students are already well on their way to satisfying the Global Experience requirement. However, simply immersing oneself in the culture of RIT and Rochester is not sufficient.

An additional activity is required to round out the US experience. This activity can take any number of forms including, but not limited to:

- A second co-op with a focus of study and a concluding report
- The study of the culture of another location within the United States
- Taking a standard trip abroad like US students to another country other than their own

In all cases the Global Experience must be approved by the Department. International students may use the Global Experience Form to request approval for their chosen activity.

## Can I work abroad?

By working abroad it is possible for a student to satisfy the required co-op and Global Experience at the same time. See below for information on this exciting opportunity.

## Resources

Each year the Department of Architecture conducts an informational meeting to assist students in planning for their co-op and Global Experience. All students should attend this meeting since representatives from support departments will also be present. It is the most efficient way of obtaining the information needed to make decisions on these two program requirements. In the meantime, the following RIT websites are the source of very helpful information as well as a session with the student's department advisor.

http://www.rit.edu/emcs/admissions/academics/experiential/study-abroad

http://www.rit.edu/emcs/oce/employers/work-abroad-program

R·I·T

Rochester Institute of Technology

ARCHITECTURE

Master of Architecture Program

# Global Experience Approval Form

Name: _____

Please work from the digital version of this document and type in all requested information. Check the appropriate box below and provide a description of the experience such as name, dates, credits involved, and organization offering it. Attach supporting documentation if available. See RIT Architecture International Experience Options document for complete details. You will not run out of space, the text field will automatically create a scroll bar as needed. Save your file using the following convention: *your last name-your experience.pdf*, e.g. *carney-panama.pdf*. Send an unsigned copy of the file to your faculty advisor for review who will make comments and forward to the Department Head. Each person reviewing will add their initials to the file name after they review it (e.g. *carney-panama-jjc-daa.pdf*). Once you receive the feedback, make necessary changes, save it again and add only your initials (e.g. *carney-panama-bmc.pdf*), this time sign it digitally and send it to your advisor who will sign it and forward it to the Department Head for signature.

- ❑ Option 1: RIT sanctioned
- ❑ Option 2: Other university program
- ❑ Option 3: Non-credit with another organization
- ❑ Option 4: Non-credit self-designed program

Description:

Approvals:

Student: _____ electronic signature/date: _____

Advisor: _____ electronic signature/date: _____

Department Head: Dennis A. Andrejko, FAIA electronic signature/date: _____

ARCHITECTURE

Master of Architecture Program • Rochester Institute of Technology

# Co-op Experience

## Overview

One of the program requirements in the Master of Architecture program is to complete a co-op work experience. Following are guidelines to assist the student in preparing for and completing co-op.

## What's the purpose of co-op?

1. To gain work experience in the architecture, engineering, and/or construction industry.
2. To provide the student with a better understanding of career options, work conditions, and work expectations.
3. To enable students to better select a career preparation focus for remaining program study.

## What does the co-op consist of?

The co-op work experience is a number of things and each of the following must be satisfied in order to satisfy this requirement.

1. Co-op is a course (ARCH-699) that you must take while working on your co-op job. You will not earn a letter grade for the course, rather you will receive either an "S" for satisfactorily completing the course, or a "U" if you don't.
2. It is a real world job that must last ten weeks or 350 hours minimum.
3. It is part of RIT's extensive co-op program requiring you and your employer to register and report on the RIT co-op website.

## What kind of jobs qualify?

Just about any job in the architecture, engineering, or construction industry is acceptable. The job must be related to architecture and must require you to travel to a place of employment, i.e. you can't be a contract worker based out of your home. Before you begin your job you must make your intentions known to the Department of Architecture to get your job approved. Failure to do so may result in your work experience not satisfying the co-op requirement.

## Suppose I've already worked in the field?

If you feel you have satisfied the requirement already, submit a Course Waiver form for consideration. We encourage you to complete more than one co-op for additional work experience.

## What if I can't find a job?

It's not always possible to find a job where and when you would like. You should consider jobs at different locations or jobs at organizations that you might not otherwise think about. If you still are unable to find employment you may drop the course and try at a different time.

## What if I don't work the min. 350 hours?

If this happens you will be given an incomplete ("I") for the term. This grade will stay in affect until such time as you complete the co-op. If possible you may work part time while attending classes to attain the 350 hour minimum.

## When does co-op happen?

Normally it is easiest to complete your co-op over a summer term. This can happen during any one of the three summer terms that occur in the program. A part-time job can qualify for co-op as long as you compile at least 350 hours. This could take most of the academic year. You would register for the co-op course during the term you would expect to complete the co-op but register at the RIT co-op website when you begin the job.

## Where can you work?

Your work can be in a small office, large office, corporate design or construction unit, or in a government agency as long as it is related to architecture. You can work in your home town, Rochester, in the United States, or in another country. In fact RIT has a work abroad program that could satisy both your co-op and global experience during a single term.

## Final Considerations

There is no substitute for hands-on experience especially in concert with your formal education. A co-op experience can be a pivotal part of your overall education. You could be earning credit towards your internship on your way to licensure. In fact you may find that your coursework is easier after your co-op job.

## Further Information

For further information visit the RIT co-op website. It has a wealth of information about preparing for a job, finding one, and many other helpful resources. The site also has a link to JobZone which is a direct source for finding a job.

http://www.rit.edu/emcs/oce/

You might also wish to set up a meeting with one or more of the following advisors.

Jules Chiavaroli
Department of Architecture Co-op Coordinator
jjcnet@rit.edu

Maureen Arquette, Program Coordinator
Office of Co-op and Career Services
mpaoce@rit.edu

Maria Richart, Associate Director
International Outreach
mjroce@rit.edu

R·I·T
Rochester Institute of Technology

# ARCHITECTURE

## DIGITAL DEVICE REQUIREMENTS

| | APPLE OS | WINDOWS | SUGGESTED BUT NOT REQUIRED | OTHER NOTES |
|---|---|---|---|---|
| LAPTOP OR DESKTOP | Any computer with a processor speed and graphics card that support the use of current Adobe Creative Suite, Autodesk AutoCAD and REVIT, and 3D Studio Max | Any computer with a processor speed and graphics card that supports the use of current Adobe Creative Suite Autodesk AutoCAD and REVIT, and 3D Studio Max | | |
| BACKUP/ EXTERNAL | Apple Time Capsule or WD Passport External Hard Drive | WD Passport External Hard Drive | 16 GB USB drive | |
| CAMERA | | | A digital camera may be helpful. Typically a 5mp or better camera (such as the type found on an iPhone) will be sufficient<br><br>As your graphic needs grow, you may wish to purchase a more sophisticated camera, such as a DSLR. | |
| TABLET | | | Some students find a tablet computer helpful for taking notes or sketching. A basic iPad or Microsoft Surface and stylus would suffice in this regard, but is not required. | A Kindle fire or other e-reader may be helpful for downloading PDF copies of readings for class or e-books, but is not required. Sketching on these devices tends to be more difficult than on the Microsoft Surface or iPad |
| SOFTWARE - DRAWING/ MODELING | Autodesk AutoCAD 2011 and newer and REVIT are required. Google Sketchup is required. | Autodesk AutoCAD and REVIT are required Google Sketchup is required | ArchCAD 15 and newer is used by many students and faculty as an alternative to AutoCAD. MicroCAD is another popular CAD program that may also prove useful<br><br>MAYA, 3D Studio Max, and Rhino may be helpful but are not required<br><br>Google Sketchup Pro version may be helpful but is not required | Autodesk offers free student downloads http://students.autodesk.com<br><br>Sketchup is available free at http://www.sketchup.com/<br><br>ArchCAD is available free at http://www.graphisoft.com/products/archicad/ |
| SOFTWARE - SECURITY | McAfee Virus Scan is required | McAfee Virus Scan is required | | McAfee Virus Scan is available free to all RIT students at https://www.rit.edu/its/services/security/software.html |
| SOFTWARE - OFFICE | Reminders, Notes, Pages, Numbers, and Keynote or Microsoft Office are required | Microsoft Office and Skype is required | | |
| SOFTWARE - READING | Adobe Acrobat Reader 9.0 or newer is required | Adobe Acrobat Reader 9.0 or newer is required | Adobe Digital Editions may be helpful but is not required.<br><br>Adobe Acrobat 9.0 or newer may be helpful but is not required | iBooks Author may be helpful but is not required |
| SOFTWARE - CONNECTING | Apple Mail, Contacts, Facetime and Google Connect are required<br><br>FETCH(FTP software) is required<br><br>Firefox or Safari is required.<br><br>Cisco VPN is required | Microsoft Office Skype and Google Connect is required<br><br>WinSCP(FTP software) is required<br><br>Firefox or Internet Explorer is required<br><br>Cisco VPN is required | Google Docs makes collaboration easy. All RIT students are offered a free Google account and are encouraged to use these tools for collaboration and connection | Cisco VPN is available free to all RIT students at https://www.rit.edu/its/services/vpn |
| SOFTWARE - DESIGN | Adobe CS 4.0 or newer Design Standard is required | Adobe CS 4.0 or newer Design Standard is required | Design Premium may be useful but is not required | Student subscriptions are available at http://www.adobe.com/products/creativesuite/csubscription.html |

RIT Architecture makes a small number of general use computers available to students enrolled in the program. Each student enrolled in the RIT Architecture program is required to own and maintain their own computer.

Computing technology changes a lot, and RIT Architecture makes every effort to keep these recommendations up to date. Check the RIT ITS web site often for the latest information. With the cost of new equipment constantly declining, upgrades are generally not cost-effective after a machine becomes four or five years old.

RIT Architecture generally supports Apple OS and Windows computers equally.

All personal computers and digital devices connected to the RIT network (wired or wireless) must comply with RIT security guidelines. You can find out more about computer security at RIT at: http://www.rit.edu/its/security.html

All personal computers and digital devices connected to the RIT network (wired or wireless) must be operated within the rules set out by ITS. You can find out more about getting connected at: http://www.rit.edu/its/help/new_at_rit

**Costs**

The cost of a new computer is significant. Students are encouraged to consider the purchase of used, refurbished, or other gently used equipment.

The cost of a required computer can be covered by student loans, and may provide special tax benefits. Before purchasing a computer, software, or related equipment, research your financial options and potential tax benefits. You can find current information at: http://www.irs.gov/uac/Tax-Benefits for Education: Information Center

**Requirements**

1. All RIT Architecture students are required to own and maintain a desktop or laptop computer for use in class and in studio.
2. All RIT Architecture students are required to abide by all RIT policies and security directives for their own computer equipment and other digital devices connected to the RIT network.

**Discounts**

Most major manufacturers (Apple, Dell, etc.) offer significant discounts or incentives for educational customers. You may use this policy sheet along with your letter of acceptance or a copy of your current enrollment schedule as proof of your enrollment. More information is available at: http://www.rit.edu/its/services/buying_guidelines

**Hardware Guidelines**

The information on this policy page can be used to aid in purchasing decisions, however you should assess your own academic goals, budget, and need for portability to ultimately determine which computer might be best for you.

Netbooks and mobile devices (e.g., iPad, Chromebook) maybe cost effective supplements to your laptop or desktop, but are not suitable replacements, as they typically cannot run graphics and processor-heavy software like 3D Studio Max, Autodesk AutoCAD, or programs in the Adobe Creative Suite.

**Additional Hardware**

A printer may be helpful to your study, it is not necessary. RIT Architecture maintains state of the art color printers and plotters that are available to students for free or a small fee, depending on use.

External hard drives/storage are helpful for backups. Our students have had great and reliable success with WD Passport drives. These are very portable, durable, and inexpensive.

Scanners may be helpful to your study, but are generally not necessary. RIT Architecture maintains state of the large scale scanners and smaller flatbed scanners that are available to students for free or a small fee, depending on use

**Software**

Software is frequently available to students for free, a reduced fee, or at a significant discount. The exact type of software you use will be determined by your instructors on a course by-course basis, and may change over time. The attached list is provided as a general guideline. You won't need any software immediately, but are encouraged to download free software and/or take advantage of bundled software discounts when available and advantageous.

**Additional Questions?**

Contact ITS at RIT: http://www.rit.edu/its/help

ARCHITECTURE

Department of Architecture

Master of Architecture Program

# Student Manual

2014 - 2015

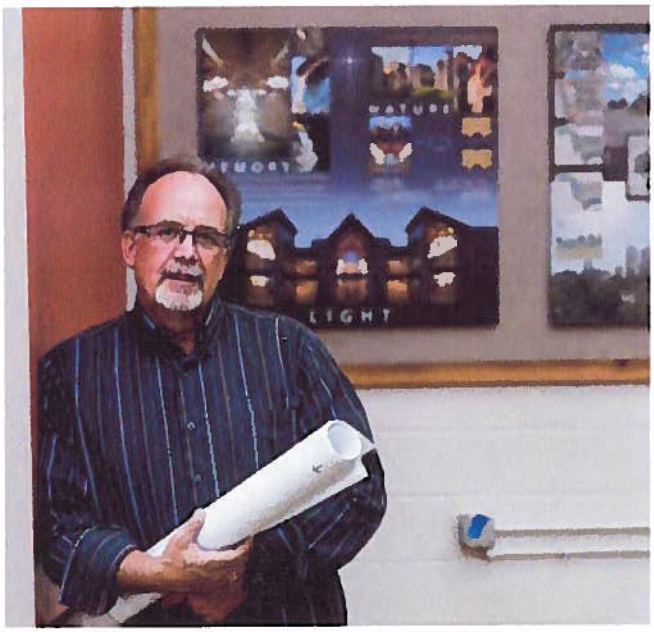
R·I·T

Golisano Institute for Sustainability

College of Imaging Arts & Sciences

**Rochester Institute of Technology**

Appendix C




*Dennis A. Andrejko, FAIA*
*Head, Department of Architecture*

## Overview

The Department of Architecture Master of Architecture Program at RIT invites students to participate and share experiences around the evolving nature of architecture, the built and unbuilt environments, human settlements and social, cultural, and individual conditions. With this invitation comes the requirement on the student's part to engage in her/his course of study in a responsible, collegial and professional manner. The following Student Manual provides a basic overview of the Master of Architecture program to complement the program's actual mission and curriculum. Additional referencing is included in the body of the Manual.

Welcome to the Master of Architecture Program! We wish you the best as you journey through your next few years here.

## Program Goals and Objectives

### Program Goals

1. The program will produce broad-thinking architects well-grounded in the principles and practices of sustainability.
2. Graduates will be able to create comprehensive projects that solve problems at the intersection of architecture and sustainability.

### Educational Objectives

The educational objectives of the program (as well as its vision, goal, and learning outcomes) derive from and are fully situated within the assessment superstructure of RIT.

The Master of Architecture program will:

1. Develop in its students a first-principle commitment to a fully sustainable built environment;
2. Provide students with the technical and practical knowledge necessary to develop innovative and sustainable solutions to urban problems;
3. Develop in students sophisticated skills in design, creative thinking, and problem-solving;
4. Prepare students as leaders in a briskly evolving profession requiring teamwork, business integration, and holistic thinking;
5. Provide students with the knowledge and skills necessary to obtain professional licensure.

# Accreditation

## Statement of Accreditation

*In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.*

*Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.*

*The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a program should be accredited within 6 years of achieving candidacy, if its plan is properly implemented. In order to meet the education requirement set forth by the National Council of Architectural Registration Boards (NCARB), an applicant for an NCARB Certificate must hold a professional degree in architecture from a program accredited by the NAAB; the degree must have been awarded not more than two years prior to initial accreditation. However, meeting the education requirement for the NCARB Certificate may not be equivalent to meeting the education requirement for registration in a specific jurisdiction. Please contact NCARB for more information.*

The Rochester Institute of Technology Architecture Program is, what is often referred to as, a Type I program whereby students enter with a non-architecture related undergraduate degree and normally earn their Masters degree with 3+ years of study. The program does occasionally admit students with undergraduate degrees in architecture on a limited basis.

The RIT Architecture Program was granted candidacy in 2011 for the following professional degree program in architecture:

**Master of Architecture**

(pre-professional degree + 105 ScH graduate credits)

Projected year of initial accreditation: 2015/16


*The architecture program, while housed in the Golisano Institute for Sustainability, maintains an affiliation with the School of Design in the College of Imaging Arts & Sciences.*

## Curriculum

Students are required to complete 105 semester credit hours to successfully complete the program. For those granted "advanced standing" the requirement can be reduced (but not less than 84 semester credit hours). Designed as a full-time program, courses will be offered on campus, primarily during the day. The heart of the coursework is studio-based, the remainder of the courses are traditionally classroom based. In addition to three required sustainability courses, students will take one sustainability elective. They will also take four graduate electives, drawn from courses offered by other colleges at the Institute. All students will prepare a thesis in their last year.

In addition to coursework, Master of Architecture students must fulfill one co-op experience and one global experience.

**Curriculum Mask**

| | FALL SEMESTER | | INT. | SPRING SEMESTER | | SU. |
|---|---|---|---|---|---|---|
| Year 1 | ARCH-611 Architectural Representation I | 3 | Optional Electives | ARCH-612 Architectural Representation II | 3 | Optional Coop |
| | ARCH-621 Architectural History I | 3 | | ARCH-622 Architectural History II | 3 | |
| | ARCH-631 Architectural Design I | 6 | | ARCH-632 Architectural Design II | 6 | |
| | ARCH-761 Understanding Sustainability | 3 | | ARCH-641 Fundamentals of Building Systems | 3 | |
| | | 15 | | | 15 | |
| Year 2 | ARCH-731 Architectural Studio I: Site | 6 | Optional Electives | ARCH-732 Architectural Studio II: Urban | 6 | ARCH-699 Coop |
| | ARCH-741 Integrated Building Systems I | 3 | | ARCH-742 Integrated Building Systems II | 3 | |
| | ARCH-751 Architectural Theory | 3 | | ARCH-752 Urban and Regional Planning | 3 | |
| | Graduate Elective | 3 | | ARCH-762 Industrial Ecology Fundamentals | 3 | |
| | | 15 | | | 15 | |
| Year 3 | ARCH-733 Architectural Studio III: Adaptive | 6 | Optional Electives | ARCH-734 Architectural Studio IV: Comprehensive | 6 | Global Experience |
| | ARCH-743 Integrated Building Systems III | 3 | | ARCH-744 Integrated Building Systems IV | 3 | |
| | ARCH-753 Research Seminar/Thesis Preparation | 3 | | Graduate Elective | 3 | |
| | ARCH-763 Sustainable Building Metrics | 3 | | ARCH-771 Professional Practice | 3 | |
| | | 15 | | | 15 | |
| Year 4 | ARCH-790 Thesis Studio | 6 | Optional Electives | | | |
| | Graduate Elective | 3 | | | | |
| | Graduate Elective | 3 | | | | |
| | Sustainability Elective | 3 | | | | |
| | Credits | 15 | | | | |

Total Credits = 105

| | | |
|---|---|---|
| Graphics | 6 | 6% |
| Design | 42 | 40% |
| Technology & Practice | 18 | 17% |
| Sustainability | 12 | 11% |
| History/Theory/Planning | 15 | 15% |
| Graduate Electives | 12 | 11% |

## Course Descriptions

**GIS-ARCH-611 Architectural Representation I**
Introduction to the range of architectural representation skills necessary to effectively document basic architectural form and space. Skill development will be both manual and digital. Class 2, Studio 4, Credit 3 (F)

**GIS-ARCH-612 Architectural Representation II**
Further study of architectural representation skills necessary to effectively document more complex architectural form and space. Skill development will be both manual and digital. (Pre-requisite ARCH-611 Architectural Representation I) Class 2, Studio 4, Credit 3 (S)

**GIS-ARCH-621 Architectural History I**
Students study global architecture from pre-history to the 15th century, including form, technology, urban context, and how architecture reflects social, religious, and political concerns. Class 3, Credit 3 (F)

**GIS-ARCH-622 Architectural History II**
Students study global architecture from the 15th to the 21st century, including form, technology, urban context, and how architecture reflects social, religious, and political concerns. Class 3, Credit 3 (S)

**GIS-ARCH-631 Architectural Design I**
Exploration of basic architectural space and form through studio design problems. Problems require understanding of elements such as spatial relationships, circulation, light, and orientation. (Co-requisite, ARCH-611 Architectural Representation I). Classroom 3, Studio 9, Credit 6 (F)

**GIS-ARCH-632 Architectural Design II**
Students will analyze and solve building based architectural design problems with a focus on residential design and other wood based structures. (Pre-requisite, ARCH-631 Architectural Design I, Co-requisite, ARCH-621 Architectural Representation II). Classroom 3, Studio 9, Credit 6 (S)

**GIS-ARCH-641 Fundamentals of Building Systems**
Students will receive an overview of the various passive and active architectural and engineering systems that comprise a building project while focusing on wood frame construction. (Co-requisite ARCH-632 Architectural Design II) Class 3, Credit 3 (S)

**GIS-ARCH-699 Co-op Architecture**
This course provides a ten-week (350 hour min.) work experience in the field. (Second year program status) Credit 0 (Su)

**GIS-ARCH-731 Architectural Studio I: Site**
Investigation of the interconnection between architecture and the site as well as natural and man-made constraints. Basic landscape architecture topics will also be introduced. (Pre-requisite, ARCH-632 Architectural Design II, Co-requisite, ARCH-741 Integrated Building Systems I). Classroom 3, Studio 9, Credit 6 (F)

**GIS-ARCH-732 Architectural Studio II: Urban**
Investigation of architectural design as a response to the modern urban context. This includes an understanding of urban design and planning, as well as community involvement. (Pre-requisite, ARCH-731 Architectural Studio I: Site, Co-requisite, ARCH-742 Integrated Building Systems II). Classroom 3, Studio 9, Credit 6 (S)

**GIS-ARCH-733 Architectural Studio III: Adaptive**
This course examines the adaptive reuse of existing buildings, with implicit exposure to the basics of historic preservation. (Pre-requisite, ARCH-732 Architectural Studio II: Urban, Co-requisite, ARCH-743 Integrated Building Systems III). Classroom 3, Studio 9, Credit 6 (F)

**GIS-ARCH-734 Architectural Studio IV: Comprehensive**
In conjunction with the co-requisite course, students will explore, undertake, and resolve an architectural design project in a comprehensive manner, guided by the principles of sustainable design. (Pre-requisite, ARCH-732 Architectural Studio II: Urban, Co-requisite, ARCH-743 Integrated Building Systems III). Classroom 3, Studio 9, Credit 6 (S)

**GIS-ARCH-741 Integrated Building Systems I**
A study of architectural materials and systems that comprise a building project's site work including civil engineering and landscaping, water management, soils/substructure, and exterior lighting. (Pre-requisite, ARCH-641 Fundamentals of Building Systems, Co-requisite ARCH-731 Architectural Studio I: Site) Class 3, Credit 3 (F)

**GIS-ARCH-742 Integrated Building Systems II**
A study of building envelopes and structural systems of non-residential buildings and their overall performance. Structural inquiry will fully cover the field of statics. (Pre-requisite, ARCH-741 Integrated Building Systems I, Co-requisite ARCH-732 Architectural Studio II: Urban) Class 3, Credit 3 (S)

**GIS-ARCH-743 Integrated Building Systems III**
Interior building components will be studied from subdivision of space to selection of finishes as related to building code regulations. Structural inquiry will continue with strength of materials. (Pre-requisite ARCH-742 Integrated Building Systems II, Co-requisite ARCH-733 Architectural Studio III: Adaptive) Class 3, Credit 3 (F)

**GIS-ARCH-744 Integrated Building Systems IV**
In conjunction with the co-requisite course, students will document a building design with design development drawings, including MEP with a focus on environmental systems and lighting. (Pre-requisite ARCH-743 Integrated Building Systems III, Co-requisite ARCH-733 Architectural Studio IV: Comprehensive) Class 3, Credit 3 (S)

**GIS-ARCH-751 Architectural Theory**
A survey of architectural theory and criticism with emphasis on contemporary architecture. Students will investigate, learn, and apply critical thinking, as well as communicate it to others. Class 3, Credit 3 (F)

**GIS-ARCH-752 Urban and Regional Planning**
This course immerses students in the field of urban and regional planning by studying and actively engaging in the planning process through projects with community agencies. (Pre-requisite, ARCH-632 Architectural Design II) Class 3, Credit 3 (S)

**GIS-ARCH-753 Research Seminar/Thesis Prep**
Students frame individual thesis proposals through various research approaches, critical readings, presentations and examinations of architecture; physicality, socially, culturally, historically and technologically. (Prerequisite, 60 credit hours in the program) Class 3, Credit 3 (F)

**GIS-ARCH-761 Understanding Sustainability**
Students will study the interaction between industrial, environmental/ecological and social systems in the built environment by introduction of systems thinking and the multiple disciplines comprising sustainability. (acceptance into M. Arch. program or permission of instructor) Class 4, Credit 4. (F)

**GIS-ARCH-762 Industrial Ecology Fundamentals**
Students will learn how to assess the impact and interrelations of built environments on the natural environment by utilizing life cycle assessment tools and principles of sustainability. (ARCH-761 Understanding Sustainability) Class 3, Credit 3 (S)

**GIS-ARCH-763 Sustainable Building Metrics**
The measurement science, performance metrics, assessment tools, and fundamental data critical for the development and implementation of building systems associated with the life-cycle operation of buildings while maintaining a healthy and productive indoor environment. Class 3, Credit 3 (F)

**GIS-ARCH-771 Professional Practice**
Students will study the role and responsibilities of architects engaged in professional practice with focus on project delivery, management, ethics, professional development, and legal responsibilities. (Second year courses) Class 3, Credit 3 (S)

**GIS-ARCH-790 Thesis**
Students will propose, design, and defend an architectural design or research problem, while working closely with a selected faculty committee. (Prerequisite, ARCH-753 Research Seminar/ Thesis Preparation) Class 3, Studio 9, Credit 6 (F)

**Graduate Electives**

Virtually any graduate level course (600 level and above) is acceptable as an elective. Students should check with their advisor if there is any doubt as to a course's acceptability. The Graduate Bulletin has a complete list of courses, however those listed below are particularly applicable to architecture.

The required sustainability elective may be chosen from the list below, however it can not simultaneously satisfy a graduate elective. If an undergraduate course of interest is found, students are encouraged to work with their advisor to have the course co-listed as a graduate course.

Students may also choose to complete an independent study (ARCH-799 Independent Study) in lieu of an elective. Up to two (2) independent studies may be taken in place of graduate electives. Students must complete an Independent Study Request Form and have it approved by the first week of the semester or term in which they plan to begin their study. Please note that it usually requires several revisions before the study is approved so planty of lead time should be given to the independent study process.

**Environmental, Health and Safety Management**
ESHS-601 Fire Protection
ESHS-750 EHS and FM Project Management
**Facilities Management**
FCMG-660 Principles & Practice in Facilities Mgt.
FCMG-720 EHS in Facilities Management
FCMG-740 Real Estate in Facilities Management
FCMG-760 Operation & Maintenance in FM
**Hospitality-Tourism Management**
HSPT-761 Strategic Planning & Develop't. for HT Ind.
HSPT-763 Resort Amenity and Attraction Development
**Art and Art History**
All the studio electives; CCER, CGEN, CGLS, CMTJ, CWFD, CWTD, and FNAS
ARTH-601 Forms of Inquiry
ARTH-605 Thinking About Making
ARTH-621 The Image
ARTH-671 Art & Architecture Ancient Rome
ARTH-676 Early Medieval Art
ARTH-677 Displaying Gender
ARTH-682 Medieval Craft
**Business**
ACCT-603 Accounting for Decision Makers
DECS-744 Project Management
ESCB-705 Economics & Decision Modeling
MGMT-740 Organizational Behavior and Leadership
MKTG-761 Marketing Concepts and Commercializ'n.
**Public Policy**
PUBL-610 Technological Innovation & Public Policy
PUBL-700 Readings in Public Policy
PUBL-701 Graduate Policy Analysis
PUBL-702 Graduate Decision Analysis
**Environmental Science**
ENVS-650 Advanced Applications of Geog. Info. Sys.
**Sustainability Electives**
MGMT-710 Managing for Environmental Sustainability
ENVS-601 Environmental Science Graduate Studies
MECE-629 Renewable Energy Systems
MECE-733 Sustainable Energy Management
PUBL-630 Energy Policy
PUBL-810 Technology, Policy & Sustainability
STSO-621 Graduate Biodiversity and Society
STSO-750 Sustainable Communities
ESHS-765 Product Stewardship
ISUS-xxx all courses

## Co-op

Students are required to complete one co-op experience. This requirement is usually satisfied over a summer term but can be completed over an extended period of time through part-time employment. The minimum requirement is 350 hours.

All students seeking professional registration as an architect must earn 700 "units" working in an intern capacity under the direct supervision of a registered architect. Students in accredited architecture programs may begin accumulating internship units (8 hours of training = one unit) through domestic or international cooperative education programs offered through their institutions, or through summer employment obtained independently by the student.

RIT's expertise in developing and managing cooperative education programs will greatly facilitate students' ability to obtain these critical training hours. Currently, a number of RIT architecture and engineering firms hire our undergraduate students, and we have every reason to expect that M.Arch., students will be equally attractive to them.

## Global Experience

All students are required to spend at least one summer term or intercession engaged in architecture-related work and/or study abroad. RIT offers a number of international opportunities to its undergraduate and graduate students.

Through affiliation with other universities and organizations (Syracuse, Arcadia, CIEE, Danish Institute for Study Abroad), students may study in western Europe, India, China, and South Korea. Through an arrangement with Syracuse University, RIT Master of Architecture students will be eligible to participate in architecture programs offered at Syracuse centers in London and Florence. Further opportunities include faculty-led programs in Germany (Dessau and Marburg), Paris, and Dubrovnik, Croatia.

A more detailed explanation of global experience options is available in the Department of Architecture office, and the program's Global Experience Policy.

## Thesis

Thesis is a requirement for graduation in the M.Arch. program and normally begins in fall semester of Year 3 with ARCH-753 Research Seminar/Thesis Preparation, and culminates in of fall semester of year 4 with ARCH-790 Thesis Studio. Specific requirements for Thesis may be found in the program's Thesis Policy statement.

## Advanced Standing & Course Waivers

The department uses a formal process during applicant review for admission to address specific placement of students with advanced standing or course waivers based on previous academic and/or professional experience. Each student is advised of her/his status upon entry. Should additional opportunities arise while enrolled in the program, students should coordinate any requests through their advisor and follow the procedures in the Advanced Standing/Course Waiver Policy available in the Department office.

*Students on a tour of Frank Lloyd Wright's Boynton House.*

## Advising and Mentoring

Each student is assigned an advisor upon entry into the program, and is encouraged to remain in regular contact regarding all academic and related issues during the course of study in the program. Students may also obtain a mentor, an architect from the area, who may be consulted on a mutually agreeable basis. Mentors are made available through our annual mentor/mentee program.

## Academic Standing

All students are required to maintain a minimum overall 3.0 grade point average (GPA) and satisfactory performance in all architecture courses. Failure to do so will result in academic probation and could result in dismissal from the program, per university policy.

## Studio Policy

Enrollment in the Master of Architecture Program and studio occupancy is a privilege granted to students majoring in architecture. Regarding this privilege, each student is bound to uphold this standard, through personnel performance as well as in concert with others, as in the upholding of the RIT Code of Student Conduct. Students who repeat a violation after a warning will be asked to empty their desk and leave the studio. The studio is a central benefit to an architect's education and each student is an important participant in the overall effort to create an environment of intellectual productivity. The term "studio" refers to a series of specific, uniquely structured courses as well as a physical place founded on an educational ideal: the belief in an environment that fosters critical thinking—the forming and testing of ideas.

The complete body of the Studio Policy will be distributed at the beginning of every academic year and is also available in the Department of Architecture office.

## Facilities and Equipment

### Facilities

Students generally have full access to Department facilities with the use of their institute ID cards. Hours change throughout the year and will be posted and/or announced. The Architecture Department has dedicated space as follows.

- Studio, Classroom, Resource Room, Print/Plot Room; SLA-1465 suite
- Studio, Resource Room; SLA-1220
- Studio; SLA-2200
- Sustainable Building Materials Lab (SBML); SUS-3200

In addition to dedicated space, students have limited access to shops and computer CAD Graphics labs in the College of Imaging Arts & Sciences as well as other spaces and resources in GIS such as the Decision Theatre (DT). As RIT students, access to all general computer labs is available during the posted hours.

### Equipment

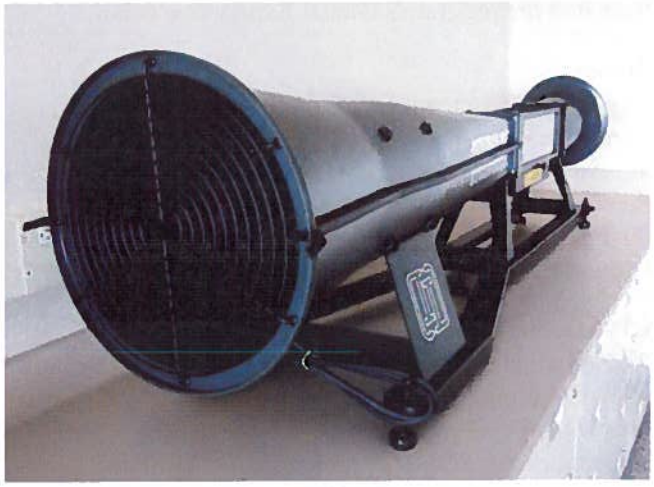
The Department has available a variety of equipment that students may use for their coursework and research. Some of the devices such as printers, plotters, and scanners are readily available. Other devices may be accessed by contacting the student assistant responsible for overseeing student use of equipment and for providing basic training. Some of the larger devices are shown on the following pages.

### Computer Resources

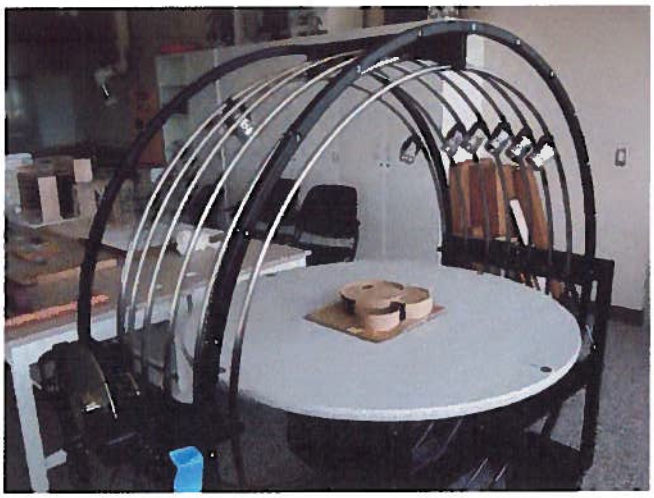
The Department provides some computers in studios and classrooms but every student is expected to have his/her own computer. Many key applications are available to students free of charge and others may be purchased at the RIT bookstore at a very reasonable student price.

The Department maintains a server with large storage capability. Class files are stored there and every student has access to a partition where they may store their files.

*Environmental Chamber in the Sustainable Building Materials Lab.*



*Wind tunnel located in the Sustianable Building Materials Lab.*



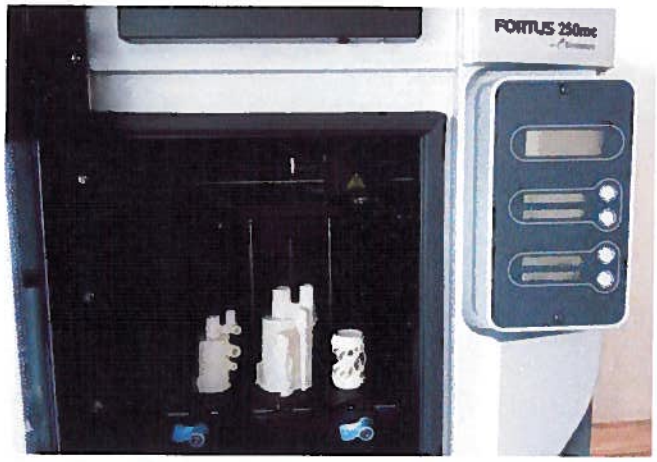
*Heliodon located in the Sustianable Building Materials Lab.*

*Large scale scanner available in the main studio suite.*


*Miscellaneous measuring devices; temperature, humidity, sun, wind, illumination, air movement, distances, etc.*

*Plotters; one available in the main studio, another in the Sustianable Building Materials Lab.*

*Copier, printer, scanner located in some studios.*



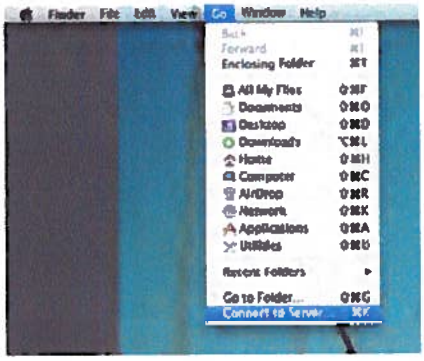

*3D Printer located in the Eco-Design Lab.*


*Laser cutter located in the Sustianable Building Materials Lab.*

**Connect to Server: Macintosh**

From the finder

Go > Connect to Server . . .

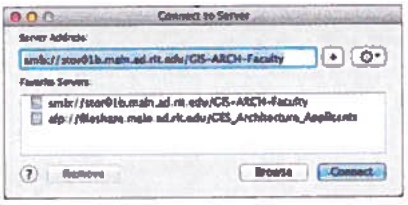



Type in the appropriate server address in the dialog box.

smb://stor01b.main.ad.rit.edu/GIS-ARCH-Faculty

smb://stor01b.main.ad.rit.edu/GIS-ARCH-Students

smb://stor01b.main.ad.rit.edu/GIS-ARCH-Public




To save this location click the "+" next to the address window. It will appear in the favorites list the next time you connect.

**Connect to Server: Windows**

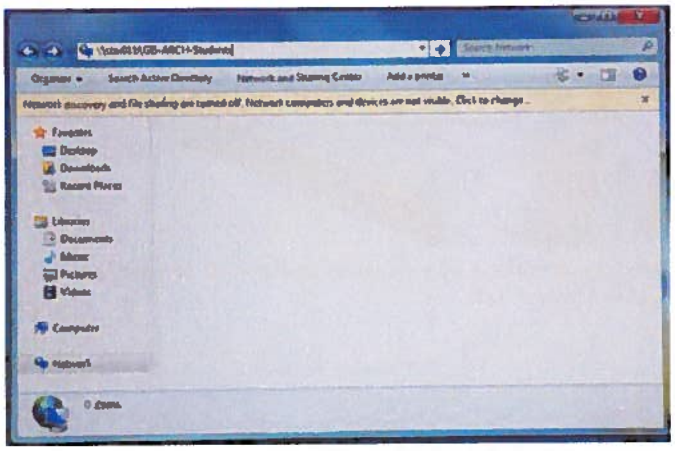
Double click the Computer icon. Or from the Start button go to Computer.

Type in the appropriate server address in the address window of the dialog box and <Enter>.

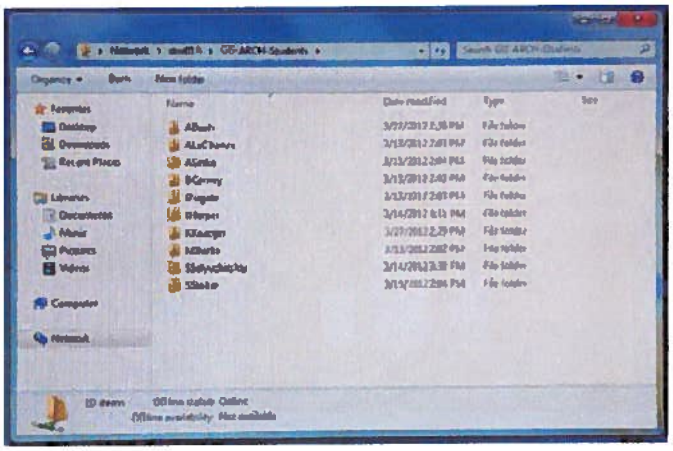
\\stor01b\GIS-ARCH-Faculty

\\stor01b\GIS-ARCH-Students

\\stor01b\GIS-ARCH-Public

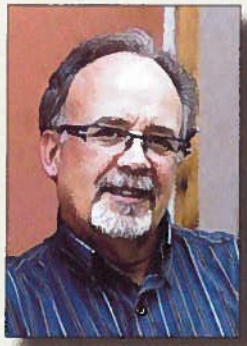


A list of folders will appear. You may access yours directly or drag it to the desktop so that it will be available to you during your next session.



## Faculty and Staff

Faculty and staff are dedicated to our program and here to assist in guiding students towards their success in the program. A student's primary advisor will be one of these individuals, however adjunct faculty members are often assigned as secondary advisors. Full-time faculty members who teach our sustainability courses are also listed since they are well connected to our program. Some faculty members are responsible for certain areas of the program, e.g. admissions or co-op, and these are listed under their names. Should you have questions about any of these topics please feel free to contact them directly.



Dennis A. Andrejko, FAIA
Department Head

Donna Podeszek
Administrative Assistant

Dr. Alex Bitterman
Architecture Faculty

Jules Chiavaroli, AIA
Architecture Faculty
*Curriculum*
*Co-op*

Ming Hu, AIA
Architecture Faculty
*Admissions*
*Global Experience*

Dr. Callie Babbitt
Sustainability Faculty

David Chamberlain
Adjunct Faculty

Alissa de Witt-Paul
Adjunct Faculty

Dr. Gabrielle Gaustad
Sustainability Faculty

Trevor Harrison, AIA
Adjunct Faculty

Michelle Murnane, AIA
Adjunct Faculty
*Architect Licensing Advisor*

Michael Place
Adjunct Faculty

Mary Scipioni
Adjunct Faculty

Dr. Tom Trabold
Sustianability Faculty

Jim Yarrington, AIA
Adjunct Faculty

ARCHITECTURE

Department of Architecture
Master of Architecture Program
Rochester Institute of Technology

architecture.rit.edu

*Academic Year 2014-15*

SUSTAINABLE
ARCHITECTURE

# Master of Architecture

Program Information

R·I·T

Golisano Institute for Sustainability
College of Imaging Arts & Sciences

**Rochester Institute of Technology**

**2014 - 2015**

**Appendix C**

*"As everyone reading this already knows, new technologies and practices coupled with the irreversible consequences of global climate change begin to delimit the core challenges facing our schools. BIM, IP, and sustainability constitute a natural package but the ways professional curricula greet or integrate these realities into studio-based programs of required instruction remains an open question. Old principles still dominate studio pedagogy; few if any schools teach building science in a studio context; fewer still enjoy access to facilities and faculty sufficient to explore new materials and methods of construction. Only a quarter of the current National Architectural Accrediting Board (NAAB) student performance criteria require the demonstration of ability or understanding in areas related to construction and building systems, and yet construction and building systems are the focus of the most significant industry innovation and the site of the most significant opportunities to address measurable sustainable design and practice."* …

*"What is necessary is revolutionary thinking in which we completely detach ourselves from what has come before and attempt to determine what should come next."* [1]

1. AIA, and ACSA, *Proceedings from Cranbrook 07: Integrated Practice and the Twenty-first Century Curriculum*; 2008

*Cover photo: new Sustainability Institute Hall, home of the Department of Architecture.*

## Program Overview

Architecture is in a time of great transition. Globalization, political policy making, advanced materials development, and the challenges facing urban environments place great demands on professional architects to be well versed in concepts outside their immediate field, and able to work effectively with professionals from a variety of disciplines.

The Master of Architecture Program is designed for students with a broad range of interests and backgrounds who are interested in studying architecture at the graduate level, but whose undergraduate degrees were obtained in fields outside of architecture. The program's curriculum has been shaped by the global emphasis of sustainability, factors that impact urbanism, and the hands-on application of the principles of design and technology on materials and construction.

This degree program is being offered in partnership with RIT's College of Imaging Arts and Sciences.

The Master of Architecture Program is approved by the New York State Education Department and has been granted candidacy status by the National Architectural Accrediting Board (NAAB).


*The architecture program, while housed in the Golisano Institute for Sustainability, maintains an affiliation with the School of Design in the College of Imaging Arts & Sciences.*

## Program Information

Our innovative Master of Architecture Program is geared toward preparation for the practice of architecture in an increasingly inter-disciplinary and inter-professional world. This program is founded upon the principle that the adjective "sustainable" is an integral part of the practice of architecture.

The program emphasizes application and collaboration, and students will learn and practice the skills and methods of architecture through the lens of sustainability, graduating with the ability to contribute meaningfully to the construction of a fully sustainable built environment.

Students will also be exposed to the results of cutting-edge research in such areas as material aging, clean technologies, alternative energy solutions, pollution prevention, and green product assessment currently underway in the Golisano Institute for Sustainability.

*Learning is not limited to the classroom and studio. Field trips and work in the community are commonplace. Here students visit Frank Lloyd Wright's Boynton House.*

### Sustainability

The global emphasis on sustainability, and RIT's commitment to progress in this field now and in the future, forms the first important pillar of the Master of Architecture program. New architecture professionals entering the field from RIT's program will have the opportunity to bring with them a unique perspective on sustainability – one for which the adjective "sustainable" is an integral part of the practice of architecture.

### Urbanism

The challenges facing our cities are profound, and architecture plays a key role in addressing them. A degraded urban environment has implications for social, economic, cultural, and environmental health, so RIT's M Arch program pays particular attention to urban settings and urban principles. The program focuses on the practices and principles of preservation and adaptive reuse, with the city of Rochester serving as an active learning environment.

### Integration

Integration of learning and practice are key elements to an effective Master of Architecture program. The program's design curriculum is well integrated with technical coursework and discussion that extends beyond design concepts. Topics such as construction technologies, material science, and building systems have huge implications in design; as does public policy, sociology, urban economic development and other non-design concepts. An educational goal of the program is to acquire collective intelligence in a team environment to the benefit of the communities in which structures are built.

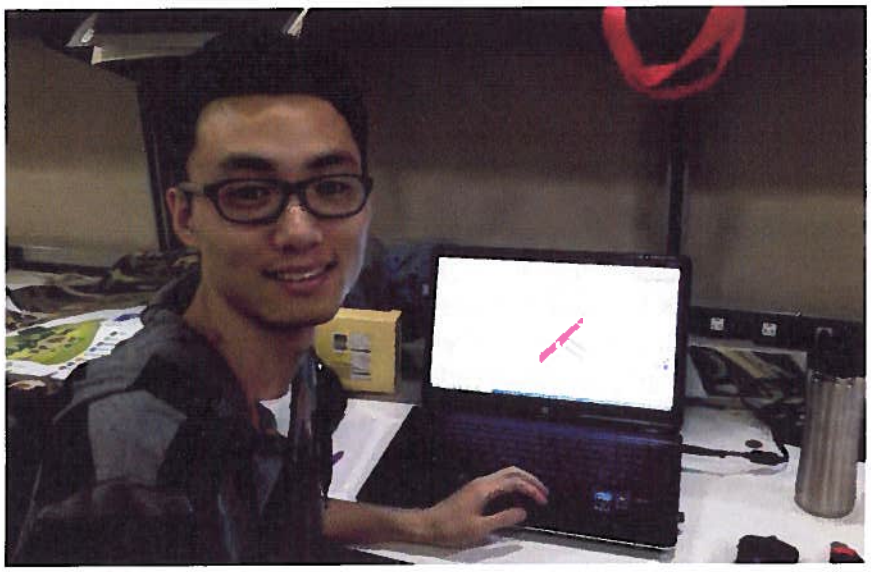
### Technology

Today's architects have incredible technological tools at their disposal. Mastering these tools and understanding technology's implications on their design work are important components of an architect's education. An architecture degree program residing within one of the country's most respected technology universities provides a distinct advantage. The ability to study specialized areas of technology, and the opportunity to collaborate with engineers, computer scientists, imaging scientists and experts in advanced materials means an educational environment for architects unlike most any other.

## Admission Requirements

To be considered for admission to the Master of Architecture Program, candidates must fulfill the following requirements:

- Hold a baccalaureate degree from an accredited institution
- Have an undergraduate cumulative GPA of B (3.0) or higher
- Successfully complete one semester each of a college level math and science course
- Submit transcripts (in English) of all previously completed undergraduate and graduate course work
- Present a portfolio of creative work, which may include sketches, constructions, graphics, and/or photographs (While student portfolios will likely not include examples of architectural drawing/design, evidence of creative talent will be important in determining admission)
- Submit a written and 90 second maximum video recording containing a personal statement of educational objectives
- Submit three letters of recommendation from former instructors and/or professional employers
- Submit the results of the Graduate Record Examination (GRE) with a minimum score of 500 (V) and 500 (Q)
- Complete a graduate application



*Third year student Mingbo Peng won honorable mention for his border crossing design in a national competition sponsored by the Association of Collegiate Schools of Architecture and the American Institute of Steel Construction.*

- International applicants, whose native language is not English, must submit scores from the Test of English as a Foreign Language (TOEFL). Minimum scores of 600 (paper-based), 250 (computer-based), and 100 (Internet-based) are required.

Full details and links to application materials are available on the Architecture program website: architecture.rit.edu

## Accreditation

### Statement of Accreditation

*In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.*

*Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.*

*The NAAB grants candidacy status to new programs that have developed viable plans for achieving initial accreditation. Candidacy status indicates that a program should be accredited within 6 years of achieving candidacy, if its plan is properly implemented. In order to meet the education requirement set forth by the National Council of Architectural Registration Boards (NCARB), an applicant for an NCARB Certificate must hold a professional degree in architecture from a program accredited by the NAAB; the degree must have been awarded not more than two years prior to initial accreditation. However, meeting the education requirement for the NCARB Certificate may not be equivalent to meeting the education requirement for registration in a specific jurisdiction. Please contact NCARB for more information.*

The Rochester Institute of Technology Architecture Program is, what is often referred to as, a Type I program whereby students enter with a non-architecture related undergraduate degree and normally earn their Master degree with 3+ years of study.

The RIT Architecture Program was granted candidacy status in 2011 for the following professional degree program in architecture:

**Master of Architecture**
(pre-professional degree + 105 ScH graduate credits)
Projected year of initial accreditation: 2015-16

## Curriculum

Students are required to complete 105 semester credit hours to successfully complete the program. Designed as a full-time program, courses will be offered on campus, primarily during the day. The core of the coursework is studio-based design. Technical courses and electives are predominatly classroom based. In addition to three required sustainability courses, students will take one sustainability elective. All students will prepare a thesis in their last year. Students will take four graduate electives, drawn from courses offered by the colleges of Liberal Arts, Engineering, Applied Science and Technology, Imaging Arts and Sciences, and Business.

In addition to course work, Master of Architecture students must fulfill one co-op experience and one global experience.

### Co-op Requirement

Students are required to complete one co-op experience. This requirement is usually satisfied over a summer term but can be completed over an extended period of time through part-time employment. The minimum requirement is 350 hours.

RIT's expertise in developing and managing cooperative education programs will greatly facilitate students' ability to obtain these critical training hours. A number of local architecture and engineering firms hire our students, however the co-op requirement may occur in any location including work abroad.

### Global Experience

All students are required to spend at least one summer engaged in architecture-related work and/or study abroad (called global experience). RIT offers a number of international opportunities to its undergraduate and graduate students. Through affiliation with other universities and organizations (Syracuse, Arcadia, CIEE, DIS), students may study in western Europe, India, China, and South Korea. Through an arrangement with Syracuse University, RIT Master of Architecture students will be eligible to participate in architecture programs offered at Syracuse centers in London and Florence. Further opportunities include faculty-led programs in Germany (Dessau and Marburg), Paris, and Dubrovnik, Croatia.

**Typical Course Schedule**

| | | |
|---|---|---|
| **FIRST YEAR** | | |
| ARCH-611, 612 | Architectural Representation I, II | 6 ScH |
| ARCH-621, 622 | Architectural History I, II | 6 ScH |
| ARCH-631, 632 | Architectural Design I, II | 12 ScH |
| ARCH-641 | Fundamentals of Building Systems | 3 ScH |
| ARCH-761 | Understanding Sustainability | 3 ScH |
| **SECOND YEAR** | | |
| ARCH-731, 732 | Architectural Studio I, II | 12 ScH |
| ARCH-741, 742 | Integrated Building Systems I, II | 6 ScH |
| ARCH-751 | Architectural Theory | 3 ScH |
| ARCH-752 | Urban and Regional Planning | 3 ScH |
| ARCH-762 | Industrial Ecology Fundamentals | 3 ScH |
| | Graduate Elective | 3 ScH |
| **THIRD YEAR** | | |
| ARCH-733, 734 | Architectural Studio III, IV | 12 ScH |
| ARCH-743, 744 | Integrated Building Systems III, IV | 6 ScH |
| ARCH-753 | Research Seminar/Thesis Preparation | 3 ScH |
| ARCH-763 | Sustainable Building Metrics | 3 ScH |
| ARCH-771 | Professional Practice | 3 ScH |
| | Graduate Elective | 3 ScH |
| **FOURTH YEAR Fall Only** | | |
| ARCH-790 | Thesis | 6 ScH |
| | Graduate Electives | 6 ScH |
| | Sustainability Elective | 3 ScH |

**Co-op Experience:**
One required, typically after the second year of the program

**Global Experience:**
One required, typically after the third year of the program or during an Intercession

## Course Descriptions: Architecture Program

**GIS-ARCH-611** **Architectural Representation I**
Introduction to the range of architectural representation skills necessary to effectively document basic architectural form and space. Skill development will be both manual and digital. Class 2, Studio 4, Credit 6 (F)

**GIS-ARCH-612** **Architectural Representation II**
Further study of architectural representation skills necessary to effectively document more complex architectural form and space. Skill development will be both manual and digital. (Pre-requisite ARCH-611 Architectural Representation I) Class 2, Studio 4, Credit 6 (S)

**GIS-ARCH-621** **Architectural History I**
Students study global architecture from pre-history to the 15th century, including form, technology, urban context, and how architecture reflects social, religious, and political concerns. Class 3, Credit 3 (F)

**GIS-ARCH-622** **Architectural History II**
Students study global architecture from the 15th to the 21st century, including form, technology, urban context, and how architecture reflects social, religious, and political concerns. Class 3, Credit 3 (S)

**GIS-ARCH-631** **Architectural Design I**
Exploration of basic architectural space and form through studio design problems. Problems require understanding of elements such as spatial relationships, circulation, light, and orientation. (Co-requisite, ARCH-611 Architectural Representation I). Classroom 3, Studio 9, Credit 6 (F)

**GIS-ARCH-632** **Architectural Design II**
Students will analyze and solve building based architectural design problems with a focus on residential design and other wood based structures. (Pre-requisite, ARCH-631 Architectural Design I, Co-requisite, ARCH-621 Architectural Representation II). Classroom 3, Studio 9, Credit 6 (S)

**GIS-ARCH-641** **Fundamentals of Building Systems**
Students will receive an overview of the various passive and active architectural and engineering systems that comprise a building project while focusing on wood frame construction. (Co-requisite ARCH- 632 Architectural Design II) Class 3, Credit 3 (S)

**GIS-ARCH-699** **Co-op Architecture**
This course provides a ten-week (350 hour min.) work experience in the field. (Second year program status) Credit 0 (Su)

**GIS-ARCH-731** **Architectural Studio I: Site**
Investigation of the interconnection between architecture and the site as well as natural and man-made constraints. Basic landscape architecture topics will also be introduced. (Pre-requisite, ARCH-632 Architectural Design II, Co-requisite, ARCH-741 Integrated Building Systems I). Classroom 3, Studio 9, Credit 6 (F)

**GIS-ARCH-732** **Architectural Studio II: Urban**
Investigation of architectural design as a response to the modern urban context. This includes an understanding of urban design and planning, as well as community involvement. (Pre-requisite, ARCH-731 Architectural Studio I: Site, Co-requisite, ARCH-742 Integrated Building Systems II). Classroom 3, Studio 9, Credit 6 (S)

**GIS-ARCH-733** **Architectural Studio III: Adaptive**
This course examines the adaptive reuse of existing buildings, with implicit exposure to the basics of historic preservation. (Pre-requisite, ARCH-732 Architectural Studio II: Urban, Co-requisite, ARCH-743 Integrated Building Systems III). Classroom 3, Studio 9, Credit 6 (F)

**GIS-ARCH-734** **Architectural Studio IV: Comprehensive**
In conjunction with the co-requisite course, students will explore, undertake, and resolve an architectural design project in a comprehensive manner, guided by the principles of sustainable design. (Pre-requisite, ARCH-732 Architectural Studio II: Urban, Co-requisite, ARCH-743 Integrated Building Systems III). Classroom 3, Studio 9, Credit 6 (S)

**GIS-ARCH-741** **Integrated Building Systems I**
A study of architectural materials and systems that comprise a building project's site work including civil engineering and landscaping, water management, soils/substructure, and exterior lighting. (Pre-requisite, ARCH-641 Fundamentals of Building Systems, Co-requisite ARCH-731 Architectural Studio I: Site) Class 3, Credit 3 (F)

**GIS-ARCH-742** **Integrated Building Systems II**
A study of building envelopes and structural systems of non-residential buildings and their overall performance. Structural inquiry will fully cover the field of statics. (Pre-requisite, ARCH-741 Integrated Building Systems I, Co-requisite ARCH-732 Architectural Studio II: Urban) Class 3, Credit 3 (S)

**GIS-ARCH-743** **Integrated Building Systems III**
Interior building components will be studied from subdivision of space to selection of finishes as related to building code regulations. Structural inquiry will continue with strength of materials. (Pre-requisite ARCH-742 Integrated Building Systems II, Co-requisite ARCH-733 Architectural Studio III: Adaptive) Class 3, Credit 3 (F)

**GIS-ARCH-744** **Integrated Building Systems IV**
In conjunction with the co-requisite course, students will document a building design with design development drawings, including MEP with a focus on environmental systems and lighting. (Pre-requisite ARCH-743 Integrated Building Systems III, Co-requisite ARCH-733 Architectural Studio IV: Comprehensive) Class 3, Credit 3 (S)

**GIS-ARCH-751** **Architectural Theory**
A survey of architectural theory and criticism with emphasis on contemporary architecture. Students will investigate, learn, and apply critical thinking, as well as communicate it to others. Class 3, Credit 3 (F)

**GIS-ARCH-752** **Urban and Regional Planning**
This course immerses students in the field of urban and regional planning by studying and actively engaging in the planning process through projects with community agencies. (Pre-requisite, ARCH-632 Architectural Design II) Class 3, Credit 3 (S)

**GIS-ARCH-753** **Research Seminar/Thesis Prep**
Students frame individual thesis proposals through various research approaches, critical readings, presentations and examinations of architecture; physicality, socially, culturally, historically and technologically. (Prerequisite, 60 credit hours in the program) Class 3, Credit 3 (F)

**GIS-ARCH-761** **Understanding Sustainability**
Students will study the interaction between industrial, environmental/ecological and social systems in the built environment by introduction of systems thinking and the multiple disciplines comprising sustainability. (acceptance into M. Arch. program or permission of instructor) Class 4, Credit 4. (F)

**GIS-ARCH-762** **Industrial Ecology Fundamentals**
Students will learn how to assess the impact and interrelations of built environments on the natural environment by utilizing life cycle assessment tools and principles of sustainability. (ARCH-761 Understanding Sustainability) Class 3, Credit 3 (S)

**GIS-ARCH-763** **Sustainable Building Metrics**
The measurement science, performance metrics, assessment tools, and fundamental data critical for the development and implementation of building systems associated with the life-cycle operation of buildings while maintaining a healthy and productive indoor environment. Class 3, Credit 3 (F)

**GIS-ARCH-771** **Professional Practice**
Students will study the role and responsibilities of architects engaged in professional practice with focus on project delivery, management, ethics, professional development, and legal responsibilities. (Second year courses) Class 3, Credit 3 (S)

**GIS-ARCH-790** **Thesis**
Students will propose, design, and defend an architectural design or research problem, while working closely with a selected faculty committee. (Prerequisite, ARCH-753 Research Seminar/ Thesis Preparation) Class 3, Studio 9, Credit 6 (F)

## Potential Graduate Electives

With the required four open electives and one sustainability elective students can virtually minor in or obtain an advanced certificate in another discipline. Following are popular electives.

### Environmental, Health and Safety Management

ESHS-601 Fire Protection
ESHS-750 EHS and FM Project Management

### Facilities Management

FCMG-660 Principles & Practice in Facilities Mgt.
FCMG-720 EHS in Facilities Management
FCMG-740 Real Estate in Facilities Management
FCMG-760 Operation & Maintenance in FM

### Hospitality-Tourism Management

HSPT-761 Strategic Planning & Develop't. for HT Ind.
HSPT-763 Resort Amenity and Attraction Development

**Business**
ACCT-603 Accounting for Decision Makers
DECS-744 Project Management
ESCB-705 Economics & Decision Modeling
MGMT-740 Organizational Behavior and Leadership
MKTG-761 Marketing Concepts and Commercialization

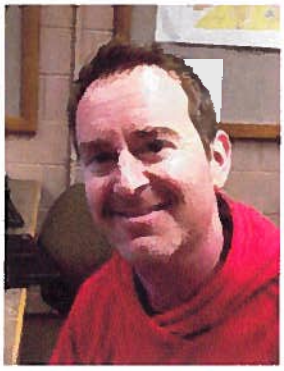
**Art and Art History**
All the studio electives; CCER, CGEN, CGLS, CMTJ, CWFD, CWTD, and FNAS
ARTH-601 Forms of Inquiry
ARTH-605 Thinking About Making
ARTH-621 The Image
ARTH-671 Art & Architecture Ancient Rome
ARTH-676 Early Medieval Art
ARTH-677 Displaying Gender
ARTH-682 Medieval Craft

**Public Policy**
PUBL-610 Technological Innovation & Public Policy
PUBL-700 Readings in Public Policy
PUBL-701 Graduate Policy Analysis
PUBL-702 Graduate Decision Analysis

**Environmental Science**
ENVS-650 Advanced Applications of Geog. Info. Sys.

**Sustainability Electives**
MGMT-710 Managing for Environmental Sustainability
ENVS-601 Environmental Science Graduate Studies
MECE-629 Renewable Energy Systems
MECE-733 Sustainable Energy Management
PUBL-630 Energy Policy
PUBL-810 Technology, Policy & Sustainability
STSO-621 Graduate Biodiversity and Society
STSO-750 Sustainable Communities
ESHS-765 Product Stewardship





*Students come to the program with a wide range of undergraduate degrees and backgrounds.*

## Additional Program Information

For more detailed program information and application requirements for admission please visit the program web site at:

www.rit.edu/architecture

We also invite you to contact one of our faculty/staff members listed below for a one-on-one appointment:

Architecture Program Offices – Golisano Institute for Sustainability Building, Suite 3170

Donna Podeszek, Sr. Staff Assistant, dkpcpm@rit.edu, 475-4990
Dennis A. Andrejko, Department Head, daaarch@rit.edu, 475-4990
Jules Chiavaroli, Professor, jjcnct@rit.edu, 475-6238
Ming Hu, Assistant Professor, mxhgis@rit.edu, 475-7535

*The program allows students to fully explore the technical side of architecture. Here students evaluate a soil sample for its appropriateness in supporting a building foundation.*

*The heart of the program lies in the design studio.*

*Extra curricular activities include a robust mentorship program where students are paired with local architects often forming strong bonds.*

Appendix C

R·I·T

Rochester Institute of Technology

Appendix C

National Architectural Accrediting Board, Inc.



March 10, 2014

Dr. William W. Destler, President
Rochester Institute of Technology
One Lomb Memorial Drive
Rochester, NY 14623-5603

1101 Connecticut Avenue, NW
Suite 410
Washington, DC 20036

tel 202.783.2007
fax 202.783.2822

www.naab.org
info@naab.org

Dear Dr. Destler:

At the February 2014 meeting of the National Architectural Accrediting Board (NAAB), the board reviewed the *Visiting Team Report* (VTR) for the Rochester Institute of Technology, Golisano Institute for Sustainability.

As a result, the professional architecture program: **Master of Architecture** was formally granted continuation of its candidacy for a period of two years. The continued candidacy term is effective January 1, 2013. The next visit for continuation of candidacy or initial accreditation is scheduled for 2015. Initial accreditation must be achieved by 2017, or the program will be required to submit a new candidacy application.

Continuing candidacy is subject to the submission of Annual Statistical Reports and any subsequent visits that may be required until initial accreditation is achieved.

The Annual Statistical Report is described in Section 10, of the *NAAB Procedures* for Accreditation, 2012 Edition, **Amended**. This report captures statistical information on the institution and the candidate program.

Finally, under the terms of the *2012 Procedures for Accreditation*, programs are required to make the *Architecture Program Report*, the *VTR*, and related documents available to the public. Please see Section 4, paragraph j. (page 43), for additional information.

The visiting team has asked me to express its appreciation for your gracious hospitality.

Very truly yours,

Shannon B. Kraus, FAIA, NCARB, MBA, ACHA
President-Elect

cc: Dennis Andrejko, Chair
Heather Young, Visiting Team Chair
Visiting Team Members

Enc.

**Rochester Institute of Technology**
**School of Architecture**

# Continuation of Candidacy Visiting Team Report

**M. Arch** (undergraduate degree + 105 semester credit hours)

The National Architectural Accrediting Board
13 November 2013

*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 & Visit Summary

The Team applauds the vision of the architecture program that combines such a strong and potentially impactful emphasis on sustainability broadly conceived within the program's mission. We find this to be a groundbreaking perspective. The rigor and fusion of sustainability concepts with those of diverse disciplinary endeavors of fundamental design, construction, and building materials and systems has already been recognized by those seeking just such a nexus.

The architecture program enjoys strong support from the central administration: Dr. William Destler, president, Dr. Jeremy Haefner, provost and Golisano Institute for Sustainability director Dr. Nabil Nasr under whose initiatives and leadership the program finds space to develop and is nurtured. Moreover, they are committed to supporting future investments in, and the success of, the program as a significant program at the intersection of RIT's established strengths in technology, design and the arts.

The team applauds the continued successful implementation of the Master of Architecture program being jointly championed by the Golisano Institute for Sustainability (GIS) and the College of Imaging Arts and Sciences (CIAS). With GIS now being recognized as equivalent to a college, the program is now well positioned within the university structure as it continues its development.

The team wishes to expressly acknowledge the efforts of the AIA Rochester as they relate to the creation and continued development of the Master of Architecture program. The relationship between the AIA Rochester and the program is already strong and will continue to strengthen over time.

### 2. Conditions Not Yet Met

I.1.1 History and Mission:
I.1.2 Learning Culture and Social Equity:
I.1.4 Long-Range Planning:
I.1.5 Self-Assessment Procedures:
I.2.1 Human Resources & Human Resource Development:
I.2.5 Information Resources:
I.3.1 Statistical Reports
PART ONE (I): SECTION 4 – POLICY REVIEW
II.1.1 Student Performance Criteria: Realms A, B and C
II.2.3 Curriculum Review and Development
PART TWO (II): SECTION 3 – EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION
II.4.2 Access to NAAB Conditions and Procedures
II.4.5 ARE Pass Rates

### 3. Causes of Concern

A. **Mission and Implementation:** The stated founding premise of the three and one-half-year architecture program is that it is "designed for students with an earned bachelor's degree in a non-architecture field." This approach has been selected "in order to assure that our students, who will be continually working in teams, will bring a rich breadth of academic background and intellectual problem-solving to the studio." As a practical matter, the program has emerged as of great interest to students who do have architecture and related design backgrounds, both here in the US and internationally. The past academic record of these applicants is thoroughly reviewed and may lead to

advanced standing. Moreover, the program is considering articulation agreements for advanced standing with other universities and other academic programs within RIT. The folding in of advanced standing students may dramatically affect the anticipated culture grounded in the founding principles, levels of student learning needs and capacity in the same cohort, and should be carefully assessed going forward.

B. **Comprehensive Design:** In reviewing the Student Performance Matrix and the syllabi provided for courses yet to be taught, the team noted a potential for some students to successfully develop a research thesis and not complete design work required to meet the standards of Comprehensive Design (SPC B.6). At this time SPC B.6 is only noted as being met within ARCH-790: Thesis Studio.

C. **Student Stress:** In conversations with students in the Master of Architecture program, the important issue of "stress" surfaced. When prompted, many (nearly all) students stated that the stress of pursuing their graduate degree while at the same time needing to work part-time positions for financial reasons. Unfortunately, students are sacrificing their academics to seek monies to assist with tuition, living and supply costs. While a typical architecture student certainly will experience stress during their studies, the team felt that the stress level was impactful on both the students and program.

## 4. Progress Since the Previous Visit (2011)

### Conditions Not Met or Not Yet Met

**2009 Condition I.1.1., History and Mission:** *The program must describe its history, mission and culture and how that history, mission, and culture is expressed in contemporary context. Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that history, mission, and culture is expressed in contemporary context.*

*The accredited degree program must describe and then provide evidence of the relationship between the program, the administrative unit that supports it (e.g., school or college) and the institution. This includes an explanation of the program's benefits to the institutional setting, how the institution benefits from the program, any unique synergies, events, or activities occurring as a result, etc.*

*Finally, the program must describe and then demonstrate how the course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects.*

**Previous Team Report (2011):** The Architecture Program Report amply fulfills the requirement for narrative. The program, however, does not yet fulfill the requirement for evidence. The Department of Architecture is an entirely new academic unit at the Rochester Institute of Technology (RIT). It is housed within the Golisano Institute for Sustainability (GIS) –also a new unit at the university. Admitting its entering class in the fall of 2011, the program has yet to produce evidence 'demonstrating the way in which its course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects'.

**2013 Team Assessment:** At the time of the visit the master of architecture program is in the fifth semester of a seven semester program. Evidentiary proof that the stated goals and mission of the program being fulfilled are still to be produced.

**2009 Condition I.1.2, Learning Culture and Social Equity:** *Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages*

*the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments both traditional and non-traditional.*

*Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.*

*Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community: faculty, staff, and students are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.*

*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 a culturally rich educational environment in which each person is equitably able to learn, teach, and work. This includes provisions for students with mobility or learning disabilities. The program 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. Finally, the program must demonstrate that it has a plan in place to maintain or increase the diversity of its faculty, staff, and students when compared with diversity of the institution during the term of the next two accreditation cycles.*

**Previous Team Report (2011): Learning Culture:** In interactions with students, faculty and staff, the team found evidence that the program 'encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments'. Program faculty generously mentors and clearly respects this first cohort of students. However, health-related issues raised by simultaneous demands on student time deserve program attention. To that end, a robust studio culture policy is not yet in place. Once enacted and fully embraced by all program stakeholders, it will raise awareness of these objectives. **See Causes for Concern.**

> **2013 Team Assessment: Learning Culture:** Refer to specific 2013 Team Assessment comments on page 2: Causes of Concern from 2011 VTR: I.1.2, Studio Culture.

**Previous Team Report (2011): Social Equity:** As documented in the APR and verified on site, RIT has written policies and procedures regarding harassment and discrimination, academic integrity, and for the support of diversity among faculty and staff. The APR provides links to university-wide policies on diversity in hiring, and on diversity recruitment efforts in student admissions. The program faculty, currently comprised of 3 full time members (including the director), has articulated its intention to comply with university diversity policies and procedures as it expands its roster of faculty and staff. However, the team found no evidence of a written program-specific plan to increase diversity in program faculty, students or staff.

> **2013 Team Assessment: Social Equity:** As required, RIT has policies and procedures on harassment and discrimination, academic integrity and for the support of diversity among faculty and staff. The APR provides references to websites of university-wide policies on diversity in hiring and on diversity recruitment in admissions yet the focus of said website is focused more on the university as a whole as opposed to the program. The program does not provide a plan for the maintenance or increase of the diversity of faculty, staff, and students when compared with the diversity of the institution.

**2009 Condition I.1.4, Long-Range Planning:** *An accredited degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and, where appropriate, the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision-making.*

**Previous Team Report (2011):** The Architecture Program Report indicates that the program has identified adequate information resources to support long range planning. At the time of this visit, it had not yet demonstrated that it collects and uses this data.

Additionally, the program has yet to link its described self-assessment procedures and its information resources to an effective strategy for multi-year planning in support of its mission. The establishment of clear, measurable, long-term objectives for the program --objectives that will guide decision making as the program progresses toward the attainment of its mission-- will be essential to its success. **See Causes for Concern**

> **2013 Team Assessment:** Refer to specific 2013 Team Assessment comments on page 5: Causes of Concern from 2011 VTR: I.1.1, History and Mission.

**2009 Condition I.1.5, Self-Assessment Procedures:** *The program must demonstrate that it regularly assesses the following:*

- *How the program is progressing towards its mission.*
- *Progress against its defined multi-year objectives (see above) since the objectives were identified and since the last visit.*
- *Strengths, challenges and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.*
- *Self-assessment procedures shall include, but are not limited to:*
  - *Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.*
  - *Individual course evaluations.*
  - *Review and assessment of the focus and pedagogy of the program.*
  - *Institutional self-assessment, as determined by the institution.*
  - *The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.*

**Previous Team Report (2011):** The program's self-assessment processes are described in the APR. The narrative includes a matrix that links assessment to the Student Performance Criteria Realms as defined by the NAAB. This meets the standards set by the NAAB for the evaluation of student performance in the context of the extant program curriculum.

As described in the APR and articulated by program, however, the self-assessment procedures do not include processes for evaluating how the program is progressing toward its mission against its long term planning objectives, nor do they include processes for assessing program strengths, challenges and opportunities. The team found no evidence of a process yet in place by which information gathered through assessment procedures will be used to advise changes in the program allowing it to advance the maturation of the program.

Some of the entities that will be charged with performing program assessment had not been established at the time of the visit. Among them, and as described in the APR: The Program Advisory Board, Student Review Committee, and Thesis Review Committee.

Substantive self-assessment has not yet begun; evidence of its implementation was not available at the time of this visit.

> **2013 Team Assessment:** The program has developed a thorough program goal assessment rubric and conducted one annual student performance review. However, some of the groups identified for program assessment have yet to be formed or convened.

**2009 Condition I.2.1, Human Resources & Human Resource Development (Faculty & Staff):**

- *Faculty & Staff:*
  - *An accredited degree program must have appropriate human resources to support student learning and achievement. This includes full and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions[2].*
  - *Accredited programs must document the policies they have in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA) and other diversity initiatives.*
  - *An accredited degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.*
  - *An accredited degree program must demonstrate that an IDP Education Coordinator has been appointed within each accredited degree program, trained in the issues of IDP, and has regular communication with students and is fulfilling the requirements as outlined in the IDP Education Coordinator position description and regularly attends IDP Coordinator training and development programs.*
  - *An accredited degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.*
  - *Accredited programs must document the criteria used for determining rank, reappointment, tenure and promotion as well as eligibility requirements for professional development resources.*

**Previous Team Report (2011):** As documented in the APR and confirmed at the time of the visit, there are currently three (3) tenured full-time faculty members assigned to the program. Two are senior RIT faculty who earned tenure in other units, and who have transferred their academic appointment to the new program. The third, hired specifically for the architecture program, is its inaugural director. Additionally, the program shares two (2) tenure track faculty members with the Golisano Institute for Sustainability (GIS). Both are active research scientists whose primary academic affiliation is with GIS. Lastly, the program has identified three (3) adjunct faculty members to deliver curriculum.

The APR includes a plan for the addition of two (2) dedicated full-time faculty members to the program over the next 2-3 years. The program curriculum –and the anticipated sequence of its delivery as documented in the APR-- will require the prompt addition of faculty with specific, specialized knowledge, skills, and experience to deliver the full range of required coursework.

A single part-time staff member currently responds to all departmental needs --including those of faculty, students, and administration. The need for full-time staff, already apparent, will become increasingly acute as the professional program grows.

> **2013 Team Assessment:** The program has three full-time tenured faculty at present, the same number as at the time of the last visit. The faculty staffing plan calls for two additional full-time tenure line faculty members. A search has been authorized for one new position – with the appointment scheduled to begin at RIT in fall 2014. The number

of students has more than doubled since the previous visit and new faculty to deliver required curriculum, advance the research agenda of the program, and to provide service are needed. All but a few courses are delivered by part-time faculty associated with other units at RIT (an interdisciplinary plus) and adjunct faculty (a professional community plus in keeping with RIT objectives). However, adjunct faculty are often retained very close to the time of course delivery; there is little orientation to the program. Although there are financial resources available for faculty development, policies for faculty development funding do not appear to be in place. An overall review of hiring and orientation policies and faculty and staff professional development policies and resources is needed.

**2009 Condition I.2.2, Governance:** The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.

**Previous Team Report (2011):** While institutional governance structures, policies, and documents have long been in place at RIT, they are not yet in place either for the architecture program, or for its parent academic unit, the Golisano Institute for Sustainability (GIS). The architecture program and GIS are new additions to RIT. At the time of this visit, neither had substantive representation on university-wide committees, and neither had representation on the RIT Faculty Senate. The Director of the Golisano Institute (who also serves RIT as Assistant Provost) does represent GIS at the RIT Council of Deans.

At the time of this visit, the program had neither drafted nor yet adopted any unit-specific faculty governance documents. It did not yet have program-specific faculty assignment | evaluation rubrics, or tenure and promotion guidelines.

**2013 Team Assessment:** Several changes in governance have occurred since the time of the last visit. The Faculty and Staff of the Master of Architecture Program are now represented in the RIT Academic Senate through GIS representation in faculty governance and on university wide committees. Architecture students are represented in student government through the Graduate Student Association.

**2009 Condition I.2.5, Information Resources:** *The accredited program must demonstrate that all students, faculty, and staff have convenient access to literature, information, visual, and digital resources that support professional education in the field of architecture.*

*Further, the accredited program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research and evaluative skills, and critical thinking skills necessary for professional practice and lifelong learning.*

**Previous Team Report (2011):** The architectural collection (4111 monographs) is housed in RIT's Wallace Library (146,234 sf.) centrally located on the campus. Two staff members have been identified to assist architecture students and faculty. The library has completed an analysis of its current NA holdings and has developed a strategy to build the collection for the program. In the current fiscal year, a sum of only $5000 has been allocated to support serials and subscriptions to online resources. Current information resources are insufficient to sustain a vibrant, growing professional program in architecture.

The library relies heavily on the ConnectNY library consortium, an established inter-library system, to provide students and faculty with additional resources. Through ConnectNY, they have access to area libraries, including Syracuse University, Rensselaer Polytechnic Institute, the U.S. Military Academy at West Point, and Colgate University. While this reliance meets immediate

requirements, it may prove impractical as a long-term solution to expanding program and faculty research needs.

AIA Rochester has donated a valuable collection of original, early 20th century architectural drawings to RIT, depicting important Rochester buildings. The collection is fragile, and currently housed in a remote campus facility; its permanent location has yet to be determined. At present, RIT students have limited access to this collection. **See Causes for Concern.**

> **2013 Team Assessment:** Refer to specific 2013 Team Assessment comments on page 3: Causes of Concern from 2011 VTR: I.2.5, Information Resources.

**2009 Condition I.3.1, Statistical Reports[3].** *Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.*

- *Program student characteristics.*
  - *Demographics (race/ethnicity & gender) of all students enrolled in the accredited degree program(s).*
    - *Demographics compared to those recorded at the time of the previous visit.*
    - *Demographics compared to those of the student population for the institution overall.*
  - *Qualifications of students admitted in the fiscal year prior to the visit.*
    - *Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.*
  - *Time to graduation.*
    - *Percentage of matriculating students who complete the accredited degree program within the "normal time to completion" for each academic year since the previous visit.*
    - *Percentage that complete the accredited degree program within 150% of the normal time to completion for each academic year since the previous visit.*

- *Program faculty characteristics*
  - *Demographics (race/ethnicity & gender) for all full-time instructional faculty.*
    - *Demographics compared to those recorded at the time of the previous visit.*
    - *Demographics compared to those of the full-time instructional faculty at the institution overall.*
  - *Number of faculty promoted each year since last visit.*
    - *Compare to number of faculty promoted each year across the institution during the same period.*
  - *Number of faculty receiving tenure each year since last visit.*
    - *Compare to number of faculty receiving tenure at the institution during the same period.*
  - *Number of faculty maintaining licenses from U.S. jurisdictions each year since the last visit, and where they are licensed.*

**Previous Team Report (2011):** Statistical reports were provided noting program faculty characteristics. Little statistical data has been developed for the program student characteristics.

> **2013 Team Assessment:** Statistical reports were provided using the I.3.1 Statistical Report Template, but additional data points were not. In particular, demographic data for the entire institution was not included.

**2009 Condition I.3.3, Faculty Credentials:** *The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history and context of the institution.*

*In addition, the program must provide evidence through a faculty exhibit[1] that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last accreditation visit.*

**Previous Team Report (2011):** As documented in the APR and confirmed at the time of the visit, there are currently three (3) tenured full-time faculty members assigned to the program. Two are senior RIT faculty who earned tenure in other academic units, and who have transferred their appointments to the new program. The third, hired specifically for the architecture program, is its inaugural director. Additionally, the program shares two (2) tenure track faculty members with the Golisano Institute for Sustainability (GIS). Both are active research scientists whose primary academic affiliation is with GIS. Lastly, the program has identified three (3) adjunct faculty members to deliver curriculum. The Director, one tenured faculty member, and two of the current adjunct faculty members are licensed architects.

The APR includes a plan for the addition of two (2) full-time faculty members to the program over the next 2-3 years. However, the program curriculum –and the anticipated sequence of its delivery as documented in the APR and confirmed at the time of the visit– will require the prompt addition of full-time faculty who possess specific, specialized knowledge, skills, and experience to deliver the complete range of required coursework. **See Causes for Concern.**

> **2013 Team Assessment:** Refer to specific 2013 Team Assessment comments on page 3: Causes of Concern: I.3.3, Faculty Credentials.

**2009 Condition II.2.3, Curriculum Review and Development:** *The program must describe the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that licensed architects are included in the curriculum review and development process.*

**Previous Team Report (2011):** A Curriculum Development Committee composed of 3 licensed community architects, 2 licensed program faculty architects, and additional interdisciplinary members developed the current curriculum structure and proposed course syllabi.

A program Curriculum Committee has been identified. The committee has not yet met, and its procedures are not yet established, but it will be charged with evaluating the curriculum on a regular basis. The APR includes a matrix by which the program, through this committee, will assess the curriculum based on the performance of its current students. However, the team found no evidence of a process to address curricular modifications in response to changes | advances in the discipline, the profession, or the program mission. Processes for the timely identification, development, approval and implementation of curricular change will be central to the development of the program. **See Causes for Concern**

[1] The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

**2013 Team Assessment:** Refer to specific 2013 Team Assessment comments on page 4: Causes of Concern from 2011 VTR: II.3.2, Curriculum Review and Development.

**2009 Condition II.3, Evaluation of Preparatory/Pre-Professional Education:** *Because of the expectation that all graduates meet the SPC (see Section 1 above), the program must demonstrate that it is thorough in the evaluation of the preparatory or pre-professional education of individuals admitted to the NAAB-accredited degree program.*

*In the event a program relies on the preparatory/pre-professional educational experience to ensure that students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the accredited degree program. This assessment should be documented in a student's admission and advising files.*

**Previous Team Report (2011):** As noted in the APR and confirmed at the time of the visit, both the institution and the program have established guidelines to evaluate the preparatory/pre-professional education of individuals seeking program admission.

The RIT admissions office first reviews the application to ascertain that it has met institutional requirements, then passes the applicant file to the program for its assessment. Portfolios and essays are required for initial consideration. A faculty committee reviews applicant files and makes recommendations for admission. Areas of candidate weaknesses are identified and recorded in his/her file. As deemed appropriate, conditional acceptance may be issued with the requirement that the candidate take additional courses and/or maintains a "B" average.

Faculty is currently responsible for student advising and for ensuring successful student progress through the program. At the time of this visit, students had yet to complete the first quarter of academic instruction. No evidence was available of successful completion of any conditional acceptance requirements. None of the current students had been offered advanced placement in the program. Although the program noted that such placement would be available to future applicants, the team found no evidence that processes and procedures were yet in place to determine whether advanced placement is merited.

**2013 Team Assessment:** The APR states that there has been no need for evaluation of prior work outside the normal admission process, yet students in Fall 2013 were in fact admitted via "advanced standing." Further, the APR states that a review is underway and a policy is included; as such a Course Waiver / Advanced Standing Policy has been provided in the APR Appendix B. The policy outlines the process by which some applicants may be offered advanced standing.

However, as stipulated by the Conditions, there was no description for verifying the requisite 45 general education credits and how those credits compare with credits which may be awarded as part of advanced standing. Granted, the University requires a baccalaureate degree from an accredited institution for admission to the program, but did not outline the review of general education credits.

**2009 Condition II.4.4, Public Access to APRs and VTRs:** *In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents available to the public:*

*All Annual Reports, including the narrative*
*All NAAB responses to the Annual Report*
*The final decision letter from the NAAB*

*The most recent APR*
*The final edition of the most recent Visiting Team Report, including attachments and addenda*

*These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their websites.*

**Previous Team Report (2011):** The program has not yet generated many of the items required for the fulfillment of this condition, and full public access is not yet required. However, the first APR has been written. While it had been made available to program administrators and faculty, the team found no evidence that the APR had also been made available to students.

**2013 Team Assessment:** The team confirmed that the above named documents were available to the public on file within the Architecture Program Office.

**2009 Condition ARE Pass Rates:** *Annually, the National Council of Architectural Registration Boards publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered to be useful to parents and prospective students as part of their planning for higher/post-secondary education. Therefore, programs are required to make this information available to current and prospective students and their parents either by publishing the annual results or by linking their website to the results.*

**Previous Team Report (2011):** At the time of the site visit, this condition is not yet applicable

**2013 Team Assessment:** No students are eligible to sit for the ARE as the first cohort of students are currently completing the 5th semester of the 7 semester program. At the time of this site visit, this condition is not yet applicable.

**2009 Part II. Section I, Student Performance –Educational Realms & Student Performance Criteria (2011):**

**Previous Team Report (2011):** All SPC's are Not Yet Met.

**2013 Team Assessment:** Student work demonstrating understanding and ability within realms A, B, and C is still being developed. At the time of this team visit not all courses have been completed or offered.

**<u>2011 Causes of Concern</u>:**

**A. Studio Culture (I.1.2)**

**Previous Team Report (2011):** As the program grows, aspects of the existing learning culture may hamper some of the desired outcomes identified by the program. At the time of this visit, a studio culture policy is not yet in place. The draft document provided to the team identifies student privileges in studio, but makes no mention of the key role played by faculty in ensuring a healthy, supportive work environment. Additionally, no plan has yet been identified to implement the policy, to revise and update the document as the program moves forward, and to encourage a collaborative work environment for both faculty and students that includes mechanisms for successful time management.

**2013 Team Assessment:** The team found evidence that the program "encourages a positive and respectful learning environment that encourages the fundamental values of

optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments."

Both faculty and staff graciously provide support/mentorship to students. While the Master of Architecture Program has authored a "Studio Culture" policy involving student feedback, it is not evident to be a living document within the community of the program; i.e., students were not involved in the initial crafting of the policy nor does it outline how grievances or deviations from the policy are handled. As the policy is up for revision next year, there is an opportunity to strengthen the language of the policy. This Team considers this cause of concern not fully resolved.

**B. Long-Range Planning (I.1.4)**

**Previous Team Report (2011):** While the Architecture Program Report indicates that the program has identified information resources to support long range planning, it has yet to link its self-assessment procedures and its information resources to an effective strategy for long term planning: The establishment of clear, measurable, multi-year objectives for the program as it progresses toward the attainment of its mission is essential to its success.

**2013 Team Assessment:** The APAC (Architecture Program Advisory Council) has been formed but not convened. It is central to development of advice regarding program currency with regard to the profession and data sources to be used for metrics in support of long-range planning. Also, the university is now embarking upon a strategic plan – which will require GIS and its units to update their own strategic plans. The Architecture program faculty group has yet to be formed for program long-range planning, though the chair is on the planning committee for GIS and would like the program to be pro-active. This Team considers this cause of concern not fully resolved.

**C. Equipment and Software (I.2.3)**

**Previous Team Report (2011):** Currently the program shares equipment that is housed within the College of Imaging Arts and Sciences, and located in buildings some distance from the studios. Among these are shops, computer labs, and 3-D fabrication tools, each supported by a range of software packages with institutional licenses. As the program grows, and as the need for these facilities also grows, the reliance on remote equipment may prove impractical.

**2013 Team Assessment:** Since the 2011 visit, construction of the Gallisano Institute for Sustainability (GIS) has been completed. That facility is immediately next door to Louise Slaughter Hall where the main studio spaces for architecture are located. In addition to computer labs and print centers in Slaughter, The GIS center has added significant new digital media computer labs, a heliodon, 2-D laser printers, a 3-D modeler, and new classrooms. Wind tunnel testing equipment and an environmental chamber are also available for faculty and student use. The university continues its ample provision of software packages with institutional licenses. The space and equipment should meet the future needs of the program mere steps away from the Louise Slaughter studios. This leaves the materials and methods shop facility as a sole remaining unit exclusively available at CIAS. The equipment and outfitting of the shop is excellent, safety training is required for use, and safety equipment and first aid equipment are provided. However, access hours are somewhat limited due to course scheduling and shop operations. As the architecture program grows, long range planning may take into account alternatives or a supplemental shop facility. This Team considers this cause of concern addressed.

**D. Information Resources (I.2.5)**

**Previous Team Report (2011):** The current collection of both monographs and periodicals is insufficient to sustain a vibrant, growing professional program in architecture. Resources currently allocated for the purchase of new materials do not yet meet the need. While the RIT library relies heavily on the excellent ConnectNY consortium, this reliance may not prove practical as a long-term solution to expanding program and faculty research needs.

> **2013 Team Assessment:** The library has purchased and maintains the Avery Index to Periodic Literature digital access and has increased it share of recommended periodicals from 37% to 60% of the Association of Architectural Librarians recommended core list. The e-Library and online access to interlibrary loan is up and running with approximately a 24-hr turn around for article PDFs. Although expenditures including staff time allocation ran below projections in FY'12 and FY'13, strategic enhancements to the core collection were achieved. However, core collection development via acquisition needs to be continued to adequately serve the increasing number of students, growth in thesis project demands for research resources, and enriching materials for depth of concentrations in NA fields. This Team considers this cause of concern not fully resolved.

**E. Faculty Credentials (I.3.3)**

**Previous Team Report (2011):** The program curriculum, as described in its syllabi, will require the prompt addition of faculty to the program roster who possess specific and specialized knowledge and experience.

> **2013 Team Assessment:** From meetings held with the faculty and students, and evidence provided in the faculty exhibit, tenured faculty in both the Master of Architecture program and GIS are adequately prepared to promote student achievement. Adjunct faculty have been selected to complement the depth of experience shown in the core faculty and round out the curriculum.
>
> Faculty achievement, even during the development of the program and curriculum, particularly on the part of GIS Assistant Professors Dr. Gabrielle Gaustad and Dr. Callie Babbitt, are impressive; in August 2012, Dr. Babbitt received "Best Paper Award" at the 17th Design for Manufacturing and the Life Cycle Conference jointly with colleagues. Additionally, Jules Chiavaroli, AIA and Michelle Murnane, AIA have served as the president of the local AIA Rochester chapter during the years 2012 and 2013 respectively.
>
> The program is proceeding with a search for its next full-time faculty bringing the total FTE faculty number to four for Fall 2014. Per the plan, an additional search will occur accordingly beyond this year. This Team considers this cause of concern addressed.

**F. Flexibility within the Curriculum Framework (II.2.2):**

**Previous Team Report (2011):** As currently configured, the program curriculum is highly structured. It provides only limited opportunities for students to pursue concentrations or minors inside or outside the program.

> **2013 Team Assessment:** Since the 2011 visit, RIT has converted its university calendar from quarterly terms, to two semesters and a summer term. The architecture program was among the first at RIT in reconfiguring its curriculum from the quarter system (147

credit hours) to semesters and 105 credit hours. It also repositioned the thesis semester to the fall semester of a 4th year, and increased the number of electives to five. Concurrent with these changes, the architecture program identified courses that could lead to concentration options in History, Design, Business, Planning and Sustainability. This Team considers this cause of concern addressed.

**G. Curriculum Review and Development (II.2.3)**

**Previous Team Report (2011):** The program needs to establish methods by which to review and assess its curriculum on a regular basis. While a matrix has been developed to assess student performance, the program has yet to develop clear and concise guidelines and processes to modify the curriculum as it responds to disciplinary change and to the changing long-range goals of the program.

**2013 Team Assessment:** There is a standing curriculum committee chaired by a full-time tenured architecture professor that includes faculty members from GIS, the architecture program (tenured and adjunct), CIAS, and a student representative. It has been highly effective in developing the revised curriculum and enhancing elective options. However, per the APR, processes and procedures for curriculum assessment and modification have yet to be developed. This Team considers this cause of concern not fully resolved.

## II. Compliance with the Conditions for Accreditation

### Part One (I): INSTUTIONAL SUPPORT AND COMMITMENT TO CONTINUOUS IMPROVEMENT

### Part One (I): Section 1. Identity and Self-Assessment

***I.1.1 History and Mission:*** *The program must describe its history, mission and culture and how that history, mission, and culture is expressed in contemporary context. Programs that exist within a larger educational institution must also describe the history and mission of the institution and how that history, mission, and culture is expressed in contemporary context.*

*The accredited degree program must describe and then provide evidence of the relationship between the program, the administrative unit that supports it (e.g., school or college) and the institution. This includes an explanation of the program's benefits to the institutional setting, how the institution benefits from the program, any unique synergies, events, or activities occurring as a result, etc.*

*Finally, the program must describe and then demonstrate how the course of study and learning experiences encourage the holistic, practical and liberal arts-based education of architects.*

**[X] The program has not fulfilled this requirement for narrative or evidence**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments earlier in this report: Progress the Last Site Visit (2011) 2009 Condition I.1.1, History and Mission.

***I.1.2 Learning Culture and Social Equity:***

- *Learning Culture: The program must demonstrate that it provides a positive and respectful learning environment that encourages the fundamental values of optimism, respect, sharing, engagement, and innovation between and among the members of its faculty, student body, administration, and staff in all learning environments both traditional and non-traditional.*

  *Further, the program must demonstrate that it encourages students and faculty to appreciate these values as guiding principles of professional conduct throughout their careers, and it addresses health-related issues, such as time management.*

  *Finally, the program must document, through narrative and artifacts, its efforts to ensure that all members of the learning community: faculty, staff, and students are aware of these objectives and are advised as to the expectations for ensuring they are met in all elements of the learning culture.*

- *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 a culturally rich educational environment in which each person is equitably able to learn, teach, and work. This includes provisions for students with mobility or learning disabilities. The program 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. Finally, the program must demonstrate that it has a plan in place to maintain or increase the diversity of its faculty, staff, and students when compared with diversity of the institution during the term of the next two accreditation cycles.*

**[X] The program has not demonstrated that it provides a positive and respectful learning environment.**

**[X] The program has not demonstrated that it provides a culturally rich environment in which in each person is equitably able to learn, teach, and work.**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments earlier in this report: Causes of Concern from 2011 VTR: I.1.2, Studio Culture. Please also refer to specific 2013 Team Assessment comments on page 6: Progress Since the Last Site Visit (2011) 2009 Condition I.1.2, Learning Culture and Social Equity.

***I.1.3 Response to the Five Perspectives:*** *Programs must demonstrate through narrative and artifacts, how they respond to the following perspectives on architecture education. Each program is expected to address these perspectives consistently within the context of its history, mission, and culture and to further identify as part of its long-range planning activities how these perspectives will continue to be addressed in the future.*

A. **Architectural Education and the Academic Community**. That the faculty, staff, and students in the accredited degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching.[2] In addition, the program must describe its commitment to the holistic, practical and liberal arts-based education of architects and to providing opportunities for all members of the learning community to engage in the development of new knowledge.

**[X] The program is responsive to this perspective.**

**2013 Team Assessment:** Evidence indicating that this Condition is met was located in course materials & student performance evidence, curriculum committee structure, and from direct conversations with students and faculty that cooperative integrative activity as graduate assistants on research projects, preparing interdisciplinary grant proposals among faculty, university-based engagement with the broader Rochester community and cross-disciplinary teaching and elective course selection is taking place. The RIT situation in the city of Rochester itself with access to community organizations provide a context for academic research and student curricular engagement. With maturation of the program, this interdisciplinary and cross-academic unit activity should be enhanced.

B. **Architectural Education and Students**. That students enrolled in the accredited degree program are prepared: to live and work in a global world where diversity, distinctiveness, self-worth, and dignity are nurtured and respected; to emerge as leaders in the academic setting and the profession; to understand the breadth of professional opportunities; to make thoughtful, deliberate, informed choices and; to develop the habit of lifelong learning.

**[X] The program is responsive to this perspective.**

**2013 Team Assessment:** At this point in the maturation of the program, there have been three cohorts of students, each very different with regards to background and geographic location than the previous. For example, students entering in Fall 2013 are predominately international and many have been provided advanced standing due to their academic background. While it is not determined if this change in the student profile is a lasting trend or not, the program must be aware to its student profile and adjust accordingly.

At this time, there is student representation on the program Curriculum Committee and an active AIAS Chapter. In addition, while a group of students informally meet with the director to discuss the ongoing status of the program, there is no formal student governance. As well, there is a

[2] See Boyer, Ernest L. *Scholarship Reconsidered: Priorities of the Professoriate*. Carnegie Foundation for the Advancement of Teaching. 1990.

Studio Culture Policy and while students provided feedback on the policy they were not involved in its initial authorship.

From the meeting with the students, it was clear that the students value their role as "pioneers" of the program and value the education they are receiving.

C. **Architectural Education and the Regulatory Environment**. That students enrolled in the accredited degree program are provided with: a sound preparation for the transition to internship and licensure within the context of international, national, and state regulatory environments; an understanding of the role of the registration board for the jurisdiction in which it is located, and; prior to the earliest point of eligibility, the information needed to enroll in the Intern Development Program (IDP).

**[X] The program is responsive to this perspective.**

**2013 Team Assessment:** By a hand vote during the meeting with students, the clear majority of students desire to pursue licensure. An IDP Education Coordinator is in place and organizes sessions with students on IDP with staff from NCARB and the State Registration Board; not all, but some students have begun a NCARB Council Record and recorded experience from either concurrently working in the profession while in school or through their coop experience.

To fulfill graduation requirements, all students must complete a coop experience. During these experiences, students are required to work for a minimum of hours within an architectural setting; it was not clear or apparent if students were required to participate in IDP concurrently with the coop experience.

In Summer 2013, students from the Master of Architecture participated in the required Global Experience by participating in the Danish Institute for Study Abroad (DIS).

D. **Architectural Education and the Profession**. That students enrolled in the accredited degree program are prepared: to practice in a global economy; to recognize the impact of design on the environment; to understand the diverse and collaborative roles assumed by architects in practice; to understand the diverse and collaborative roles and responsibilities of related disciplines; to respect client expectations; to advocate for design-based solutions that respond to the multiple needs of a diversity of clients and diverse populations, as well as the needs of communities and; to contribute to the growth and development of the profession.

**[X] The program is responsive to this perspective.**

**2013 Team Assessment:** Although evidence of this is still being produced, the program infrastructure with its emphasis on the collaborative design process and integration of multi-disciplinary perspectives should prepare students to practice in a global economy. Case studies and studio work emphasizing traditional and non-traditional cultures and the required international experience further support these ideals.

E. **Architectural Education and the Public Good**. That students enrolled in the accredited degree program are prepared: to be active, engaged citizens; to be responsive to the needs of a changing world; to acquire the knowledge needed to address pressing environmental, social, and economic challenges through design, conservation and responsible professional practice; to understand the ethical implications of their decisions; to reconcile differences between the architect's obligation to his/her client and the public; and to nurture a climate of civic engagement, including a commitment to professional and public service and leadership.

**[X] The program is responsive to this perspective.**

**2013 Team Assessment:** Students enrolled in the program come to RIT because of their commitment to sustainability and the belief that they can utilize their education to improve their environment. Once fully executed, the program proposes to give students the tools to integrate the foundations of sustainability with the rights and responsibilities of architectural practice.

***I.1.4 Long-Range Planning:*** *An accredited degree program must demonstrate that it has identified multi-year objectives for continuous improvement within the context of its mission and culture, the mission and culture of the institution, and, where appropriate, the five perspectives. In addition, the program must demonstrate that data is collected routinely and from multiple sources to inform its future planning and strategic decision making.*

**[X] The program's processes do not meet the standards as set by the NAAB.**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments on page 2: Causes of Concern from the 2011 VTR, 2009 Condition I.1.4, Long-Range Planning.

***I.1.5 Self-Assessment Procedures:*** *The program must demonstrate that it regularly assesses the following:*

- *How the program is progressing towards its mission.*
- *Progress against its defined multi-year objectives (see above) since the objectives were identified and since the last visit.*
- *Strengths, challenges and opportunities faced by the program while developing learning opportunities in support of its mission and culture, the mission and culture of the institution, and the five perspectives.*
- *Self-assessment procedures shall include, but are not limited to:*
  - *Solicitation of faculty, students', and graduates' views on the teaching, learning and achievement opportunities provided by the curriculum.*
  - *Individual course evaluations.*
  - *Review and assessment of the focus and pedagogy of the program.*
  - *Institutional self-assessment, as determined by the institution.*
  - *The program must also demonstrate that results of self-assessments are regularly used to advise and encourage changes and adjustments to promote student success as well as the continued maturation and development of the program.*

**[X] The program's processes do not meet the standards as set by the NAAB.**

**2013 Team Assessment:** Refer to specific 2013 Team Assessment comments earlier in this report: Progress Since the Last Site Visit (2011) 2009 Condition I.1.5, Self-Assessment Procedures.

PART ONE (I): SECTION 2 – RESOURCES

**I.2.1 Human Resources & Human Resource Development:**

- *Faculty & Staff:*
  - *An accredited degree program must have appropriate human resources to support student learning and achievement. This includes full and part-time instructional faculty, administrative leadership, and technical, administrative, and other support staff. Programs are required to document personnel policies which may include but are not limited to faculty and staff position descriptions*[3].
  - *Accredited programs must document the policies they have in place to further Equal Employment Opportunity/Affirmative Action (EEO/AA) and other diversity initiatives.*
  - *An accredited degree program must demonstrate that it balances the workloads of all faculty and staff to support a tutorial exchange between the student and teacher that promotes student achievement.*
  - *An accredited degree program must demonstrate that an IDP Education Coordinator has been appointed within each accredited degree program, trained in the issues of IDP, and has regular communication with students and is fulfilling the requirements as outlined in the IDP Education Coordinator position description and regularly attends IDP Coordinator training and development programs.*
  - *An accredited degree program must demonstrate it is able to provide opportunities for all faculty and staff to pursue professional development that contributes to program improvement.*
  - *Accredited programs must document the criteria used for determining rank, reappointment, tenure and promotion as well as eligibility requirements for professional development resources.*

**[X] Human Resources (Faculty & Staff) are inadequate for the program**

**2013 Team Assessment:** Refer to specific 2013 Team Assessment comments on page 8: Progress Since the Last Site Visit (2011) 2009 Condition I.2.1, Human Resources & Human Resource Development.

- *Students:*
  - *An accredited program must document its student admissions policies and procedures. This documentation may include, but is not limited to application forms and instructions, admissions requirements, admissions decisions procedures, financial aid and scholarships procedures, and student diversity initiatives. These procedures should include first-time freshman, as well as transfers within and outside of the university.*
  - *An accredited degree program must demonstrate its commitment to student achievement both inside and outside the classroom through individual and collective learning opportunities.*

**[X] Human Resources (Students) are inadequate for the program**

**2013 Team Assessment:** Admissions requirements are clearly spelled out on the university and program websites. However, they differ from the outlined detail in the APR. E.g., the APR indicates a focus in letters of recommendation on communicative, collaborative and leadership abilities while the website for architecture identifies focus on creativity. There is no explicit comment on general education requirements for the NAAB degree, i.e., 45 semester credit hours. Evidence indicated other fundamental opportunities such as student organization participation, field trips, participation in research projects, and access to student support services are being met. A financial aid pool of approximately 30% of gross tuition charges is provided to the program for distribution to students in the program.

[3] A list of the policies and other documents to be made available in the team room during an accreditation visit is in Appendix 3.

***I.2.2 Administrative Structure & Governance:***

- **Administrative Structure:** An accredited degree program must demonstrate it has a measure of administrative autonomy that is sufficient to affirm the program's ability to conform to the conditions for accreditation. Accredited programs are required to maintain an organizational chart describing the administrative structure of the program and position descriptions describing the responsibilities of the administrative staff.

**[X] Administrative Structure is adequate for the program**

**2013 Team Assessment:** Although somewhat unusual in its relation to the RIT Administrative structure in its alliances with both the GIS and CIAS, the Master of Architecture Program is formally within the Golisano Institute for Sustainability. As such they work within the GIS Administrative structure to develop and review curriculum, tenure and promotion.

- **Governance:** The program must demonstrate that all faculty, staff, and students have equitable opportunities to participate in program and institutional governance.

**[X] Governance opportunities are adequate for the program**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments on page 8: Progress Since the Last Site Visit (2011) 2009 Condition I.2.2, Administrative Governance.

***I.2.3 Physical Resources:*** *The program must demonstrate that it provides physical resources that promote student learning and achievement in a professional degree program in architecture. This includes, but is not limited to the following:*

- *Space to support and encourage studio-based learning*
- *Space to support and encourage didactic and interactive learning.*
- *Space to support and encourage the full range of faculty roles and responsibilities including preparation for teaching, research, mentoring, and student advising.*

**[X] Physical Resources are adequate for the program**

**2013 Team Assessment:** Adequate design studio, classroom, faculty and administrative physical resources are provided for the Master of Architecture Program in the new Golisano Institute for Sustainability, a LEED Platinum living learning laboratory, and Louise Slaughter Hall. Sustainability labs, classrooms, faculty and administrative spaces are in GIS while studio spaces and computer/printing lab are across the courtyard in Louise Slaughter Hall. These spaces are adequate to support the program as it grows to the projected to a full complement of 80 students. Additional support spaces including a well appointed wood shop, art studio and lab space are located within the CIAS building across campus.

***I.2.4 Financial Resources:*** *An accredited degree program must demonstrate that it has access to appropriate institutional and financial resources to support student learning and achievement.*

**[X] Financial Resources are adequate for the program**

**2013 Team Assessment:** While the exact formulae for base budget recurring funding and expense, tuition distribution, expenditure determination, and central investment funding for program launch are not fully defined, in practice financial commitments are being honored in terms of the five-year business plan filed as a part of the architecture program proposal. The president, provost and CFO are directly involved in academic budget allocation based upon prioritized annual planning requests from the academic units of RIT. GIS Director Nabil Nasr and GIS CFO Randy Jones represent architecture at the university level of budget planning and in turn, allocate financial resources to the program.

***I.2.5 Information Resources:*** *The accredited program must demonstrate that all students, faculty, and staff have convenient access to literature, information, visual, and digital resources that support professional education in the field of architecture.*

*Further, the accredited program must demonstrate that all students, faculty, and staff have access to architecture librarians and visual resources professionals who provide information services that teach and develop research and evaluative skills, and critical thinking skills necessary for professional practice and lifelong learning.*

**[X] Information Resources are inadequate for the program**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments on page 3: Causes of Concern from 2011 VTR: I.2.5, Information Resources.

**PART I: SECTION 3 –REPORTS**

***I.3.1 Statistical Reports[4]****. Programs are required to provide statistical data in support of activities and policies that support social equity in the professional degree and program as well as other data points that demonstrate student success and faculty development.*

- *Program student characteristics.*
  - *Demographics (race/ethnicity & gender) of all students enrolled in the accredited degree program(s).*
    - *Demographics compared to those recorded at the time of the previous visit.*
    - *Demographics compared to those of the student population for the institution overall.*
  - *Qualifications of students admitted in the fiscal year prior to the visit.*
    - *Qualifications of students admitted in the fiscal year prior to the upcoming visit compared to those admitted in the fiscal year prior to the last visit.*
  - *Time to graduation.*
    - *Percentage of matriculating students who complete the accredited degree program within the "normal time to completion" for each academic year since the previous visit.*
    - *Percentage that complete the accredited degree program within 150% of the normal time to completion for each academic year since the previous visit.*

- *Program faculty characteristics*
  - *Demographics (race/ethnicity & gender) for all full-time instructional faculty.*
    - *Demographics compared to those recorded at the time of the previous visit.*
    - *Demographics compared to those of the full-time instructional faculty at the institution overall.*
  - *Number of faculty promoted each year since last visit.*
    - *Compare to number of faculty promoted each year across the institution during the same period.*
  - *Number of faculty receiving tenure each year since last visit.*
    - *Compare to number of faculty receiving tenure at the institution during the same period.*
  - *Number of faculty maintaining licenses from U.S. jurisdictions each year since the last visit, and where they are licensed.*

**[X] Statistical reports do not provide the appropriate information**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments earlier in this report: Progress Since the Last Site Visit (2011) 2009 Condition I.3.1, Statistical Reports.

***I.3.2. Annual Reports****: The program is required to submit annual reports in the format required by Section 10 of the 2009 NAAB Procedures. Beginning in 2008, these reports are submitted electronically to the NAAB. Beginning in the fall of 2010, the NAAB will provide to the visiting team all annual reports submitted since 2008. The NAAB will also provide the* NAAB Responses *to the annual reports.*

*The program must certify that all statistical data it submits to NAAB has been verified by the institution and is consistent with institutional reports to national and regional agencies, including the Integrated Postsecondary Education Data System of the National Center for Education Statistics.*

*The program is required to provide all annual reports, including statistics and narratives that were submitted prior to 2008. The program is also required to provide all* NAAB Responses *to annual reports*

[4] In all cases, these statistics should be reported in the same format as they are reported in the Annual Report Submission system.

*transmitted prior to 2008. In the event a program underwent a Focused Evaluation, the* Focused Evaluation Program Report *and* Focused Evaluation Team Report, *including appendices and addenda should also be included.*

**[X] Annual Reports and NAAB Responses were provided and provide the appropriate information**

**2013 Team Assessment**: The NAAB Annual Report – Part II – Narrative including the response to the 2011 VTR Causes of Concern was included in the 2013 APR appendices.

***I.3.3 Faculty Credentials**: The program must demonstrate that the instructional faculty are adequately prepared to provide an architecture education within the mission, history and context of the institution.*

*In addition, the program must provide evidence through a faculty exhibit[5] that the faculty, taken as a whole, reflects the range of knowledge and experience necessary to promote student achievement as described in Part Two. This exhibit should include highlights of faculty professional development and achievement since the last accreditation visit.*

**[X] Faculty credentials were provided and demonstrate the range of knowledge and experience necessary to promote student achievement.**

**2013 Team Assessment**: Refer to specific 2013 Team Assessment comments on page 3: Causes of Concern: I.3.3, Faculty Credentials.

[5] The faculty exhibit should be set up near or in the team room. To the extent the exhibit is incorporated into the team room, it should not be presented in a manner that interferes with the team's ability to view and evaluate student work.

***PART ONE (I): SECTION 4 – POLICY REVIEW***
*The information required in the three sections described above is to be addressed in the APR. In addition, the program shall provide a number of documents for review by the visiting team. Rather than be appended to the APR, they are to be provided in the team room during the visit. The list is available in Appendix 3.*

**[X] The policy documents in the team room did not meet the requirements of Appendix 3**

**2013 Team Assessment:** The full complement of required documents was not provided in the team room.

## PART TWO (II): EDUCATIONAL OUTCOMES AND CURRICULUM

### PART TWO (II): SECTION 1 – STUDENT PERFORMANCE – EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

**II.1.1 Student Performance Criteria:** The SPC are organized into realms to more easily understand the relationships between individual criteria.

**Realm A: Critical Thinking and Representation:**
Architects must have the ability to build abstract relationships and understand the impact of ideas based on research and analysis of multiple theoretical, social, political, economic, cultural and environmental contexts. This ability includes facility with the wider range of media used to think about architecture including writing, investigative skills, speaking, drawing and model making. Students' learning aspirations include:

- Being broadly educated.
- Valuing lifelong inquisitiveness.
- Communicating graphically in a range of media.
- Recognizing the assessment of evidence.
- Comprehending people, place, and context.
- Recognizing the disparate needs of client, community, and society.

**A.1. Communication Skills: *Ability to* read, write, speak and listen effectively.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-751 and through team interactions with students.

**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.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC was found in ARCH-751, this criterion is not yet met.

**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.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-611 and ARCH-612.

**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.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC was found in ARCH-612, this criterion is not yet met.

**A.5. Investigative Skills: *Ability to* gather, assess, record, apply, and comparatively evaluate relevant information within architectural coursework and design processes.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC was found in ARCH-753, this criterion is not yet met.

**A. 6. Fundamental Design Skills: *Ability to* effectively use basic architectural and environmental principles in design.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-631 and ARCH-632.

**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.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC was found in ARCH-752, this criterion is not yet met.

**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.**

**[X] Not Yet Met**

**2013 Team Assessment:** Incomplete evidence of this SPC was found in ARCH-631 and ARCH-632.

**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.**

**[X] Not Yet Met**

**2013 Team Assessment:** Some evidence of this SPC was found in ARCH-621 and ARCH-622; this criterion is not yet met.

**A. 10.** **Cultural Diversity: *Understanding* of the diverse needs, values, behavioral norms, physical abilities, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity on the societal roles and responsibilities of architects.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC was found in ARCH-621 and ARCH-622, this criterion is not yet met.

**A.11.** **Applied Research: *Understanding* the role of applied research in determining function, form, and systems and their impact on human conditions and behavior.**

**[X] Not Yet Met**

**2013 Team Assessment:** Evidence of this SPC was not found in ARCH-753.

**Realm A. General Team Commentary:** Although progress in being made in Realm A, the program is relatively new and students have only progressed through five of seven semesters of study required for graduation. Thus, substantial aspects of the criteria have yet to be established in the evidence of student work.

**Realm B: Integrated Building Practices, Technical Skills and Knowledge:** Architects are called upon to comprehend the technical aspects of design, systems and materials, and be able to apply that comprehension to their services. Additionally they must appreciate their role in the implementation of design decisions, and their impact of such decisions on the environment. Students learning aspirations include:

- Creating building designs with well-integrated systems.
- Comprehending constructability.
- Incorporating life safety systems.
- Integrating accessibility.
- Applying principles of sustainable design.

**B. 1.** **Pre-Design: *Ability* to prepare a comprehensive program for an architectural project, such as preparing an assessment of client and user needs, an inventory of space and equipment requirements, an analysis of site conditions (including existing buildings), a review of the relevant laws and standards and assessment of their implications for the project, and a definition of site selection and design assessment criteria.**

**[X] Not Yet Met**

**2013 Team Assessment:** Evidence of this SPC was not found in ARCH-753 – the primary designated course. Some evidence of this SPC was found in ARCH-731 and ARCH-733.

**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.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC can be found, insufficient evidence was available to deem this criterion met.

**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.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-632.

**B. 4. Site Design: *Ability* to respond to site characteristics such as soil, topography, vegetation, and watershed in the development of a project design.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-731.

**B. 5. Life Safety: *Ability* to apply the basic principles of life-safety systems with an emphasis on egress.**

**[X] Not Yet Met**

**2013 Team Assessment:** Although some evidence of this SPC was found in ARCH-733 and ARCH-744, this criterion is not yet met.

**B. 6. Comprehensive Design: *Ability* to produce a comprehensive architectural project that demonstrates each student's capacity to make design decisions across scales while integrating the following SPC:**

**A.2. Design Thinking Skills**
**A.4. Technical Documentation**
**A.5. Investigative Skills**
**A.8. Ordering Systems**
**A.9. Historical Traditions and Global Culture**
**B.2. Accessibility**
**B.3. Sustainability**
**B.4. Site Design**
**B.5. Life Safety**
**B.7. Environmental Systems**
**B.9.Structural Systems**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-790 Thesis Studio, has not yet been taught.

**B. 7** **Financial Considerations: *Understanding* of the fundamentals of building costs, such as acquisition costs, project financing and funding, financial feasibility, operational costs, and construction estimating with an emphasis on life-cycle cost accounting.**

**[X] Not Yet Met**

**2013 Team Assessment:** Evidence of this SPC was not found in ARCH-741, ARCH-742, ARCH-743 or ARCH-744; ARCH-745 has not yet been taught.

**B. 8.** **Environmental Systems: *Understanding* the principles of environmental systems' design such as embodied energy, active and passive heating and cooling, indoor air quality, solar orientation, daylighting and artificial illumination, and acoustics; including the use of appropriate performance assessment tools.**

**[X] Not Yet Met**

**2013 Team Assessment:** The Master of Architecture Program has deemed that this criterion will be primarily met in ARCH-745. As this course will be taught for the first time in Spring 2014, there was not yet any student evidence to review.

**B. 9.** **Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-744.

**B. 10.** **Building Envelope Systems: *Understanding* of the basic principles involved in the appropriate application of building envelope systems and associated assemblies relative to fundamental performance, aesthetics, moisture transfer, durability, and energy and material resources.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-742.

**B. 11.** **Building Service Systems Integration: *Understanding* of the basic principles and appropriate application and performance of building service systems such as plumbing, electrical, vertical transportation, security, and fire protection systems**

**[X] Not Yet Met**

**2013 Team Assessment:** The Master of Architecture Program has deemed that this criterion will be primarily met in ARCH-745. As this course will be taught for the first time in Spring 2014, there was not yet any student evidence to review.

**B. 12. Building Materials and Assemblies Integration: *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.**

**[X] Met**

**2013 Team Assessment:** Evidence of this SPC was found in ARCH-632, ARCH 732, and ARCH-743.

**Realm B. General Team Commentary:** Although progress in being made in Realm B, the program is relatively new and students have only progressed through five of seven semesters of study required for graduation. As noted – several key courses identified as primary sources for particular SPCs have yet to be taught. Thus, substantial aspects of the criteria have yet to be established in the evidence of student work.

**Realm C: Leadership and Practice:**
Architects need to manage, advocate, and act legally, ethically and critically for the good of the client, society and the public. This includes collaboration, business, and leadership skills. Student learning aspirations include:

- Knowing societal and professional responsibilities
- Comprehending the business of building.
- Collaborating and negotiating with clients and consultants in the design process.
- Discerning the diverse roles of architects and those in related disciplines.
- Integrating community service into the practice of architecture.

**C. 1. Collaboration: *Ability* to work in collaboration with others and in multi-disciplinary teams to successfully complete design projects.**

**[X] Not Yet Met**

**2013 Team Assessment:** At the time of this visit there was insufficient evidence of student ability. There was ample evidence of collaborative work in a number of courses in both analytic and synthesizing activities. However, collaboration in multi-disciplinary teams (other than the diverse backgrounds of the students) was not in evidence, nor apparent in admissions review of student preparatory work.

**C. 2. Human Behavior: *Understanding* of the relationship between human behavior, the natural environment and the design of the built environment.**

**[X] Not Yet Met**

**2013 Team Assessment:** Evidence of this SPC was not found in ARCH-631.

**C. 3** **Client Role in Architecture: *Understanding* of the responsibility of the architect to elicit, understand, and reconcile the needs of the client, owner, user groups, and the public and community domains.**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**C. 4.** **Project Management: *Understanding* of the methods for competing for commissions, selecting consultants and assembling teams, and recommending project delivery methods**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**C. 5.** **Practice Management: *Understanding* of the basic principles of architectural practice management such as financial management and business planning, time management, risk management, mediation and arbitration, and recognizing trends that affect practice.**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**C. 6.** **Leadership: *Understanding* of the techniques and skills architects use to work collaboratively in the building design and construction process and on environmental, social, and aesthetic issues in their communities.**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**C. 7.** **Legal Responsibilities: *Understanding* of the architect's responsibility to the public and the client as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, and historic preservation and accessibility laws.**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**C. 8. Ethics and Professional Judgment: *Understanding* of the ethical issues involved in the formation of professional judgment regarding social, political and cultural issues, and responsibility in architectural design and practice.**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**C. 9. Community and Social Responsibility: *Understanding* of the architect's responsibility to work in the public interest, to respect historic resources, and to improve the quality of life for local and global neighbors.**

**[X] Not Yet Met**

**2013 Team Assessment:** As the program is currently in the first semester of its third year, the primary course identified as meeting this SPC, ARCH-771 Professional Practice, has not yet been taught.

**Realm C. General Team Commentary:** Very little progress is being made in Realm C, as the program is relatively new and students have only progressed through five of seven semesters of study required for graduation. As noted – the key professional practice course Arch-771 identified as the primary source for many of the SPCs has yet to be taught. Thus, substantial aspects of the criteria have yet to be established in the evidence of student work.

**PART TWO (II): SECTION 2 – CURRICULAR FRAMEWORK**

***II.2.1 Regional Accreditation:*** *The institution offering 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).*

**[X] Met**

**2013 Team Assessment:** A 10 year accreditation term for 2012-22 was verified on the Middle States Commission of Higher Education website "www.msche.org": at Institution Directory link for RIT.edu.

***II.2.2 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.*

**[X] Met**

**2013 Team Assessment:** The program successfully redesigned its curriculum from a quarter system to semester system within the past two years. It received approval at both the university and New York State Education Department, and meets NAAB requirements for general education by admissions policy.

***II.2.3 Curriculum Review and Development***
*The program must describe the process by which the curriculum for the NAAB-accredited degree program is evaluated and how modifications (e.g., changes or additions) are identified, developed, approved, and implemented. Further, the NAAB expects that programs are evaluating curricula with a view toward the advancement of the discipline and toward ensuring that students are exposed to current issues in practice. Therefore, the program must demonstrate that licensed architects are included in the curriculum review and development process.*

**[X] Not Yet Met**

**2013 Team Assessment:** Refer to specific 2013 Team Assessment comments earlier in this report: Causes of Concern from the 2011 VTR, 2009 Condition II.2.3, Curriculum Review and Development.

**PART TWO (II) : SECTION 3 – EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION**
*Because of the expectation that all graduates meet the SPC (see Section 1 above), the program must demonstrate that it is thorough in the evaluation of the preparatory or pre-professional education of individuals admitted to the NAAB-accredited degree program.*

*In the event a program relies on the preparatory/pre-professional educational experience to ensure that students have met certain SPC, the program must demonstrate it has established standards for ensuring these SPC are met and for determining whether any gaps exist. Likewise, the program must demonstrate it has determined how any gaps will be addressed during each student's progress through the accredited degree program. This assessment should be documented in a student's admission and advising files.*

**[X] Not Yet Met**

**2013 Team Assessment:** Refer to specific 2013 Team Assessment comments earlier in this report: Progress Since the Last Site Visit (2011) 2009 Condition II.3, Evaluation of Preparatory/Pre-Professional Education.

**PART TWO (II): SECTION 4 – PUBLIC INFORMATION**

***II.4.1 Statement on NAAB-Accredited Degrees***
*In order to promote an understanding of the accredited professional degree by prospective students, parents, and the public, all schools offering an accredited degree program or any candidacy program must include in catalogs and promotional media the exact language found in the* 2009 NAAB Conditions for Accreditation, *Appendix 5.*

**[X] Met**

**2013 Team Assessment:** The team found evidence of Statement on NAAB-Accredited Degrees posted on the RIT website as follows: http://www.rit.edu/gis/architecture/program/accreditation

***II.4.2 Access to NAAB Conditions and Procedures***
*In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, the school must make the following documents available to all students, parents and faculty:*

*The 2009 NAAB Conditions for Accreditation*
*The NAAB Procedures for Accreditation (edition currently in effect)*

**[X] Not Yet Met**

**2013 Team Assessment:** While the Master of Architecture Program website (see below) listed the requisite websites as above, both links were not working properly.
http://www.rit.edu/gis/architecture/program/accreditation

***II.4.3 Access to Career Development Information***
*In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of accredited degree programs, the program must make the following resources available to all students, parents, staff, and faculty:*

*www.ARCHCareers.org*
*The NCARB Handbook for Interns and Architects*
*Toward an Evolution of Studio Culture*
*The Emerging Professional's Companion*
*www.NCARB.org*
*www.aia.org*
*www.aias.org*
*www.acsa-arch.org*

**[X] Met**

**2013 Team Assessment:** The team found evidence that the programs links to the Career Development Information as noted in the NAAB Criteria were on the RIT Architecture website, but it was difficult to locate.

***II.4.4 Public Access to APRs and VTRs***

*In order to promote transparency in the process of accreditation in architecture education, the program is required to make the following documents available to the public:*

*All Annual Reports, including the narrative*
*All NAAB responses to the Annual Report*
*The final decision letter from the NAAB*
*The most recent APR*
*The final edition of the most recent Visiting Team Report, including attachments and addenda*

*These documents must be housed together and accessible to all. Programs are encouraged to make these documents available electronically from their websites.*

**[X] Met**

**2013 Team Assessment:** Refer to specific 2013 Team Assessment comments on page 12: Progress Since the Last Site Visit (2011) 2009 Condition II.4.4, Public Access to APRs and VTRs.

***II.4.5 ARE Pass Rates***

*Annually, the National Council of Architectural Registration Boards publishes pass rates for each section of the Architect Registration Examination by institution. This information is considered to be useful to parents and prospective students as part of their planning for higher/post-secondary education. Therefore, programs are required to make this information available to current and prospective students and their parents either by publishing the annual results or by linking their website to the results.*

**[X] Not Yet Met**

**2013 Team Assessment:** Not applicable at this time.

## III. Appendices:

### 1. Program Information

[Taken from the *Architecture Program Report*, responses to Part One: Section 1 Identity and Self-Assessment]

#### A. History and Mission of the Institution (I.1.1)

Reference Rochester Institute of Technology, *APR*, pp. 3-6

#### B. History and Mission of the Program (I.1.1)

Reference Rochester Institute of Technology, APR, pp. 1-2

#### C. Long-Range Planning (I.1.4)

Reference Rochester Institute of Technology, APR, pp. 13-14

#### D. Self-Assessment (I.1.5)

Reference Rochester Institute of Technology, APR, pp. 14-18

## 2. Conditions Met with Distinction

## 3. The Visiting Team

Team Chair, Representing the Profession
Heather Young
Fergus Garber Young Architects
81 Encina Avenue
Palo Alto, CA 94301
(650) 473-0400
(650) 793-1289 mobile
heather@fgy-arch.com

Representing the Academy
Gregory S. Palermo, FAIA
Professor of Architecture and
ACSA Distinguished Professor
College of Design, Rm. 392
Iowa State University
Ames, IA 50011-3093
(515) 294-7163
(515) 294-1440 fax
gpalermo@iastate.edu

Representing the NAAB
Lee W. Waldrep, Ph.D.
Assistant Director for Undergraduate Student Services
School of Architecture
608 Lorado Taft Dr. – MC-621
University of Illinois at Urbana-Champaign
Champaign, IL 61820-6921
(217) 333-7720
lwaldrep@illinois.edu

## IV. Report Signatures

**Respectfully Submitted,**

**Heather Young**
**Team Chair**

**Representing the Profession**

**Gregory S. Palermo, FAIA**
**Team member**

**Representing the Academy**

**Lee W. Waldrep, Ph.D.**
**Team member**

**Representing the NAAB**