# National Architectural Accrediting Board Architecture Program Report September 2013

# **Georgia Institute of Technology**

Dr. G.P. "Bud" Peterson, President

Dr. Rafael L. Bras, Provost Executive Vice President for Academic Affairs

# **College of Architecture**

Dr. Steven P. French, Dean

# **School of Architecture**

Dr. George B. Johnston, Chair george.johnston@coa.gatech.edu
Telephone: (404) 894-0558

Dr. John Peponis, Associate Chair

Volkan Alkanoglu
Director of Professional Studies

# **Master of Architecture**

2-Year Program: Pre-Professional Degree + 60 Semester Hours 3+Year Program: Non-Pre-Professional Degree + 108 Semester Hours

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# PART ONE (I): SECTION 1 – IDENTITY AND SELF ASSESSMENT

#### I.1.1 History and Mission

# **Georgia Institute of Technology**

Georgia Tech was established by an act of the Georgia legislature in 1885 and first admitted students in 1888. The School's creation signaled the beginning of the transformation of the agrarian South to an industrial economy. Writing on the occasion of Georgia Tech's centennial, Robert McMath et al. have described the historical context of the school's founding:

"The Georgia School of Technology that first opened its doors to students in October 1888 was an institutional response to far-reaching social, cultural, and economic changes. These changes affected the curriculum of the new school and the aspirations of its founders and its students. The emergence in Europe and the United States of new approaches to engineering and industrial education provided alternative patterns for the leaders of the movement in Georgia to establish a technological school. Their selection of the commercial shop approach as exemplified by the Worcester Free Institute in Massachusetts had significant consequences, vestiges of which may still be seen after a century. The founders of Georgia Tech were advocates of an ideology that has become known as the "New South Creed," a doctrine that influenced strongly the expectations of what the school and its graduates might contribute to the economic growth of the state and region. This creed still continues to affect perceptions of the school and its mission to the present day." 1

Today, Georgia Tech is one of 31 public institutions comprising the University System of Georgia and one of four major research universities in the state. Georgia Tech offers educational opportunities in over 150 degree-granting programs from 30 schools within six academic colleges: the College of Architecture, the College of Computing, the College of Engineering, the Ivan Allen College of Liberal Arts, the Scheller College of Business, and the College of Sciences. In Fall 2012, the Georgia Tech student body was comprised of 14,527 undergraduates and 7,030 graduates, and the academic and research faculty totaled over 3,000 full-time and part-time members.

Georgia Tech has established a tradition of excellence in technological research and education, is well known for its high academic standards and stands among the top ranks of U.S. research universities. *U.S. News & World Report* consistently lists Georgia Tech among the ten best public universities in the nation with many of its individual programs ranking within the top ten. Research is conducted for industry and government by the Georgia Tech Research Institute, by various academic schools and departments, and by more than 200 research centers and laboratories. In the State of Georgia, the Institute plays a leading role in the Georgia Research Alliance (GRA), a centerpiece of the state's economic development strategy.

Georgia Tech is a future-oriented institution with strong traditions, one dedicated to human progress, an intention best expressed in its strategic vision and plan, "Designing the Future":

#### Vision

Georgia Tech will define the technological research university of the 21st century. As a result, we will be leaders in influencing major technological, social, and policy decisions that address critical

<sup>&</sup>lt;sup>1</sup> Robert C. McMath, Jr. et al, Engineering the New South: Georgia Tech, 1885-1985 (Athens: University of Georgia Press, 1985), p. 3.

global challenges. "What does Georgia Tech think?" will be a common question in research, business, the media, and government.

#### Mission

Technological change is fundamental to the advancement of the human condition. The Georgia Tech community—students, staff, faculty, and alumni—will realize our motto of "Progress and Service" through effectiveness and innovation in teaching and learning, our research advances, and entrepreneurship in all sectors of society. We will be leaders in improving the human condition in Georgia, the United States, and around the globe.

Georgia Tech's complete strategic plan may be found here: <a href="http://www.gatech.edu/vision/">http://www.gatech.edu/vision/</a>

#### **Architecture at Georgia Tech**

Architecture was established as a discipline of study at Georgia Tech in 1908 at the request of a civil engineering student who recruited fellow students for an entering class of twenty. Over the intervening 105 years, the Department of Architecture has been complemented by the addition of disciplines (in order of establishment) of Industrial Design (1940), City & Regional Planning (1952), Building Construction (1958), and Music (1991).

The multi-disciplinary College of Architecture was established in 1975, and a significant milestone that soon followed was the establishment in 1982 of the Doctor of Philosophy in Architecture degree and the multi-disciplinary Doctoral Program, a reflection of the increasing complexity of the designed and built environment as well as the growing emphasis upon leading-edge research at Georgia Tech. In addition to the five Schools, the College encompasses seven research centers: the Center for Quality Growth & Regional Development, the Center for Geographic Information Systems, the Center for Assistive Technology and Environmental Access, the Alternative Media Access Center, the Digital Building Laboratory, the Construction Resource Center, and the Center for Music Technology.

Since 1999, all undergraduate students in the College of Architecture (currently Architecture and Industrial Design) have been introduced to the broad field of design and the built environment prior to declaring their majors through multi-disciplinary instruction in the Common First Year. Most recently, in 2010, the academic programs in the College were reorganized as School-level units comparable to all other academic units in the Institute with each responsible for its own discipline-specific doctoral-level degrees and cross-disciplinary research programs.

The School of Architecture at Georgia Tech encompasses five distinct degree programs, a reflection of the School's multiple missions in undergraduate education, professional education, and advanced studies & research. The undergraduate Bachelor of Science in Architecture degree contributes to the general education mission of Georgia Tech through studio-based design education that provides grounding in liberal and technological knowledge and emphasizes creativity and the ability to seek and solve problems related to the built and inhabited environment. At the heart of the School is the professional degree in architecture, the accredited Master of Architecture, which satisfies one requirement for individuals aiming to achieve licensure as practicing architects. Embedded as it is in an institute of technology and situated within a vibrant metropolis, Georgia Tech's M.Arch. Program fosters a culture of design informed by research, sparked by imagination, and infused by a spirit of enterprise, innovation, and know-how.

Building linkages with practice and industry, the School has developed several post-professional degree programs: the newly established Master of Science in Urban Design degree, a partnership with the School of City and Regional Planning, which addresses national and global challenges related to urban growth; and the Master of Science (with a major in Architecture) degree with distinct concentrations in the areas of Digital Design & Fabrication, High Performance Building, and Health & Design. These concentrations mirror fields of study in our Ph.D. program: Design Computation, Building Technology, and Evidence Based Design each with an associated research lab and substantial funding base. We also support work in History & Culture, Organizational & Cognitive Performance, and Urban Design. Historically, the development of a culture of funded research in the field of architecture has lagged behind sister disciplines in engineering and the sciences. Yet what we are trying to do in the School of Architecture is exploit the creative tensions between research and design that can drive innovation in the field, to imagine a better future through architecture, design, and research.

# **Georgia Tech's Master of Architecture Program**

Professional study in architecture at Georgia Tech commenced in 1908 as a four-year Bachelor of Science in Architecture degree, then in 1934 as a five-year Bachelor of Architecture degree, and then transformed in 1973 to the Master of Architecture degree following a "four plus two" model. That model was augmented in 1983 to accommodate students with undergraduate preparation in areas other than architecture within the 3+ year curriculum. Today, the 3+ Year Master of Architecture curriculum of 108 semester hours comprises the sole framework within which the academic backgrounds and preparation of entering students is evaluated and assessed in order to establish their appropriate placement with regard to the degree requirements of the accredited professional degree program.

The student body of the professional program is comprised of students with three basic profiles, of whom one-third typically have a Georgia Tech undergraduate degree and two-thirds have an undergraduate degree from some other university:

- Students holding the four-year B.S.Arch. from Georgia Tech and having engaged three complete years of architectural design studio beyond the Common First Year. These students have successfully completed a rigorous Georgia Tech core education in mathematics, science, humanities, and social science, and then a complement of requirements in the architecture major including history and theory, structures, construction technology, building systems, and a slate of electives drawn from other offerings in the School, College, and Institute. These students typically complete 2+ years in the M.Arch. program at Georgia Tech. This cohort typically comprises about 33% of each graduating class.
- Students holding the four-year B.S.Arch., B.A.Arch., or other equivalent degree from a U.S. university having a NAAB-accredited professional degree program at the Masters or Doctorate level. These students' transcripts and application materials are scrutinized to ensure that their undergraduate preparation comprises a liberal education with an emphasis upon architectural design. Advanced placement decisions for these students are based upon the number of semesters of undergraduate design studio completed and the level of accomplishment evident in their design portfolios. These students typically complete 2+ years in the M.Arch. program at Georgia Tech. This cohort typically comprises about 20-25% of each graduating class.
- Students holding a baccalaureate degree from a U.S. or non-U.S. university in a discipline other than architecture; or a student from a U.S. pre-professional architecture program (possibly including Georgia Tech) with less than three years of design studio past the freshman year; or a student from a non-U.S. university with an emphasis in architecture but for whom the goal is the attainment of

the Master of Architecture degree as a first professional degree. Students in this category typically complete 3+ years in the M.Arch. program at Georgia Tech. This cohort typically comprises about 45-50% of each graduating class.

The distribution of matriculated M.Arch. students for 2011 and 2012 is described in Table 1, below:

TABLE 1: M.Arch. Matriculated Students, 2011 and 2012

	2011	2012			
M.Arch. 2 year program					
GT BS.Arch. graduates	15	13			
Architecture graduates from other undergraduate programs	21	11			
All students in 2-Year program	36	24			
M.Arch. 3+ year program					
GT BS Arch. graduates	2	4			
Graduates with other undergraduate degrees	20	26			
All students in 3-Year program	22	30			
All matriculated students	56	54			

Drawing students from among these three cohorts ensures diversity in intellectual backgrounds and educational experiences that is considered a key asset for enriching the culture of professional education at Georgia Tech. Additionally, students co-enrolled in the dual degree Master of City and Regional Planning program and in the post-professional Master of Science (Architecture) and Master of Science in Urban Design programs, provide an added richness to the mix in both coursework and design studios.

Within the M.Arch. curriculum itself, well-sequenced courses and studios in core preparatory subjects, more advanced courses and studios with a strong professional emphasis in theory and practice of architecture and architectural technology are integrated with studios foregrounding comprehensive design skills. The final year of the curriculum offers a slate of professional electives and research-oriented design studios fueled by the expertise of full-time faculty, a corps of practicing Atlanta architects, and visiting professors in areas such as urban design, building performance, digital design and fabrication, and health and design. Exposure to these academic options, along with a pedagogy that regularly engages real clients, consultants, and everyday circumstance provides students a nurturing environment within which to mature as problem solvers who are prepared to enter the profession and to find their voices as leaders and as agents of change.

#### I.1.2 Learning Culture and Social Equity

The School of Architecture is committed to nurturing an open, accessible, and supportive setting for architectural education, one accepting of differences in abilities, backgrounds, and perspectives, and one that helps shape, and is shaped by, a vision of truth, beauty, and justice as realizable social ideals both within and through the architectural profession. The School of Architecture participates as a community in the shaping of policies, and the making of policy choices, intended to advance these aspirations through concrete actions.

#### **Learning Culture Policies**

Georgia Tech Rules And Regulations

As stated in the Georgia Tech Catalog, "These regulations are intended to set forth the requirements of the faculty to the end that a large student body may live and work together harmoniously with a minimum of friction and misunderstanding. Each student is expected to be a law-abiding citizen and to obey the laws of the city of Atlanta, Fulton County, the state of Georgia, and the United States." <a href="http://www.catalog.gatech.edu/rules/1.php">http://www.catalog.gatech.edu/rules/1.php</a>

Code of Conduct:

http://www.catalog.gatech.edu/rules/19a.php

**Grievance Procedures:** 

http://www.catalog.gatech.edu/rules/20a.php

**Student-Faculty Expectations:** 

http://www.catalog.gatech.edu/rules/22.php

School of Architecture Studio Culture Policy

Faculty and Students maintain an open dialog about Studio Culture through regular reviews of the School's Studio Culture Policy found here:

http://www.arch.gatech.edu/academics/studentlife

#### Faculty, Staff, and Student Access to Policies

Policies applicable to Faculty, Staff, and Students are publically available and accessible through Georgia Tech's website. It is a shared expectation that all members of the Georgia Tech community be aware of and accountable for understanding and following the policies of the Institute.

Georgia Tech Student Resources, Procedures, and Policies http://gatech.edu/students/

Georgia Tech Catalog 2013-2014 http://www.catalog.gatech.edu/index.php

Georgia Tech Faculty Resources, Procedures, and Policies http://gatech.edu/facultystaff/faculty.html

http://www.academic.gatech.edu/main/

Georgia Tech Staff Resources, Procedures, and Policies

# http://gatech.edu/facultystaff/staff.html

#### **Implementation and Assessment of Learning Culture Policies**

Vice Provost for Learning Excellence
 The Office of the Vice Provost for Learning Excellence and Dean of Libraries define the standard of excellence for teaching and learning by promoting pedagogical best practices and supporting faculty, instructors and teaching assistants as educators.

http://provost.gatech.edu/reporting-units/vice-provost-learning-excellence

Georgia Tech's Center for the Enhancement of Teaching and Learning (CETL) CETL administers each semester the Course Instructor Opinion Survey (CIOS) which assesses students' views on the efficacy of individual courses and their instructors as well as correlative factors pertaining to the learning culture fostered in each course. Results of these surveys are used as one factor in faculty members' annual performance reviews.

http://www.cetl.gatech.edu/home http://www.cetl.gatech.edu/cios

Undergraduate and Graduate Exit Surveys

The Georgia Tech Exit Surveys is administered to evaluate student satisfaction with program performance and their overall experiences at Georgia Tech. This survey is administered to students during their final year, usually somewhere between degree petition and graduation. The report covers those students who indicated they would be graduating within the academic year (from Summer through Spring).

https://webapps.gatech.edu/cfcampus/adors/

# Faculty, Staff, and Student Participation in Development of Learning Culture Policies

■ Faculty of the College of Architecture serve on the Georgia Tech Executive Board, the General Faculty Assembly, the Academic Senate, and various standing committees of the General and Academic Faculties. Among these are the Undergraduate Curriculum Committee and the Graduate Curriculum Committee.

http://www.facultygovernance.gatech.edu

- Graduate and undergraduate students in the College of Architecture participate in the election of representatives to the respective tiers of the Student Government Associations. Student representatives serve in non-voting roles in the Executive Board, General Faculty Assembly, Academic Senate, and standing committees of the Academic Faculty. <a href="http://sga.gatech.edu">http://sga.gatech.edu</a>
- Georgia Tech School of Architecture students contribute to an ongoing dialog about Studio Culture through student organizations such as AIAS, NOMAS, and WIA.

Georgia Tech AIAS http://gtaias.wordpress.com

Georgia Tech NOMAS https://sites.google.com/site/georgiatechnomas/ Georgia Tech Women in Architecture <a href="http://wiagatech.weebly.com">http://wiagatech.weebly.com</a>

 Members of the classified staff at Georgia Tech are represented on the Executive Board by an appointed, non-voting representative.

http://www.facultygovernance.gatech.edu

# **Georgia Tech Policies for Grievances Related to Harassment/Discrimination:**

 Georgia Tech Policy Library: Affirmative Action, Equal Employment Opportunity, Conflict Resolution, Anti-Harrassment Policy and Procedure
 <a href="http://www.policylibrary.gatech.edu/37.-affirmative-action-equal-employment-opportunity-conflict-resolution-anti-harassment-policy-and-p">http://www.policylibrary.gatech.edu/37.-affirmative-action-equal-employment-opportunity-conflict-resolution-anti-harassment-policy-and-p</a>

# **Georgia Tech Policies for Academic Integrity:**

- Georgia Tech Honor Code http://www.honor.gatech.edu/index.php
- Dean of Students: Student Code of Conduct http://osi.gatech.edu/plugins/content/index.php?id=31
- Georgia Tech Catalog: Code of Conduct http://www.catalog.gatech.edu/rules/19d.php
- Georgia Tech Catalog: Academic Honor Code http://www.catalog.gatech.edu/rules/18b.php

# Program Plans to Increase/Maintain Faculty/Staff/Student Diversity

- Georgia Tech Policy on Nondiscrimination and Affirmative Action
   http://www.policylibrary.gatech.edu/37.-affirmative-action-equal-employment-opportunity-conflict-resolution-anti-harassment-policy-and-p
- Office of Vice President for Institute Diversity
   <a href="http://www.diversity.gatech.edu">http://www.diversity.gatech.edu</a>
   <a href="http://www.diversity.gatech.edu/about-us/vpid-mission-vision-and-goals">http://www.diversity.gatech.edu/about-us/vpid-mission-vision-and-goals</a>
- Dean of Students: Student Diversity Programs http://www.diversityprograms.gatech.edu/
- Office of Minority Education Development (OMED) http://omed.gatech.edu/redux/

Architectural education at Georgia Tech has been transformed over that last generation in its student enrollment from the proverbial "white men's profession" to a highly pluralized context for discourse and debate about the shape and the shaping of our built environment. With an enrollment that is majority female (54%) and in which Caucasian males are a distinct minority (29%), the School of Architecture has articulated a goal of building a faculty that is as diverse as its student body. Progress toward that goal, however, has been frustratingly slow. Clearly, the School needs to do more to advance its goals in this area. The calls from the student body for a more inclusive professoriate are compelling and appropriate.

Currently, four of the School's 28 tenured and tenure-track faculty (14%) are female and 20 (71%) are Caucasian males. Despite the appointment of four new full-time tenure-track female faculty members over the last six years, however, faculty diversity with respect to gender has suffered a net loss due to attrition: the retirement of one, the relocation of three (to Cambridge University, the University of Pennsylvania, and Chinese University of Hong Kong), and the non-retention of one through the tenure process. There are currently no full-time tenure-track faculty members in the School of African descent.

Efforts at building faculty demographic diversity are focused in three domains:

Tenure Track Faculty. The recent appointments of Jennifer Bonner as Assistant Professor and Erica Ryherd as Associate Professor (jointly with the School of Mechanical Engineering) represent deliberate efforts to build faculty strength in terms of both intellectual and demographic diversity. In the past, the School has benefited from efforts from the Office of the Provost to advance faculty diversity through joint spousal hires and other opportunity hires. Going forward, in order to consolidate and accelerate progress, as much attention must be given to faculty retention, development, and advancement as is given to the efforts at faculty recruitment through tenure-track faculty searches.

Part-time Instructors. While employment of part-time instructors must be balanced against the need for full-time instructional and research faculty, this avenue provides opportunities for exposing students to role models and points of view otherwise not represented by the full-time faculty. Of the 16 non-tenure-track faculty currently engaged in instruction in the 4+2 Program, five are female and two are of African descent.

Visiting Lectures and Jury Critics. Conscious effort is made to shape an inclusive series of visiting lecturers and to bring a diverse group of external reviewers to Atlanta for end-of-semester reviews.

#### I.1.3 Response to the Five Perspectives

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

The division of knowledge and expertise between the fields of architecture and engineering that served so well in the industrial age is being transformed into new model of integrated knowledge in the digital age. The digital-age practice of architecture will rise on creative contact between design and research across fields and disciplinary boundaries. Within the institutional setting of Georgia Tech, the College and School of Architecture promote the academic identity of Architecture as a conjunctive field of cultural knowledge amid the divisions of modern technology; it promotes the cultivation of that field through acts of teaching, research, service, and community outreach; and it fosters a fertile intellectual environment conducive to the growth of the architectural discipline.

Georgia Tech's mission as a technological university and as a major research institution supports the School of Architecture in exploring how new technologies and organizational arrangements can serve human values by shaping and supporting built environments, ones enabling and enriching human experience, expressive of the present and responsive to future needs. The professional program in Architecture, more particularly, benefits from a setting in which design imagination and rigor intersect with the imagination and rigor of science and a culture of experimentation, exploration, and discovery. At the same time, the School of Architecture provides a context in which Georgia Tech students can bring together abstract and applied, visual, computational, and technological ways of thinking. Within the College of Architecture itself, a multi-disciplinary climate is fostered through:

- freshman common core focused upon design and the built environment and uniting both students and instructors in Architecture and Industrial Design;
- summer study and semester or year-long exchange programs in Europe and Asia
- the adjacency of graduate/professional degree programs and coursework in architecture, building construction, city and regional planning, industrial design, and music technology.
- a dual degree program for students interested in pursuing both the Master of Architecture and Master of City & Regional Planning degrees; and a stand-alone Master of Science in Urban Design degree program jointly sponsored by the two Schools and administered by the School of Architecture.
- designated doctor of philosophy degrees in architecture, building construction, city & regional planning, and music technology.
- seven research centers Digital Building Laboratory, Center for Quality Growth & Regional Development, Center for Geographic Information Systems, Center for Assistive Technology & Environmental Access, Alternative Media Access Center, Construction Resource Center, and Center for Music Technology. Substantial research in the School of Architecture is also conducted through the High Performance Building Lab and the SimTigrate Lab focused on healthcare design.

Productive exchanges with disciplines outside the College are experienced at multiple levels as well, whether through the Institute's undergraduate general education requirements, architecture students' exposure to research and elective coursework outside the discipline, through participation of students from other disciplines in architecture courses and summer study programs, through joint faculty and research appointments with other Colleges, or through student, faculty, and administrator participation in governance of the Institute, College, and School.

Faculty in the School of Architecture are highly productive in research. Over the last three years, faculty have published at least 8 books, 25 book chapters, 52 refereed journal articles, 80 refereed conference proceedings, participated in 35 exhibitions of creative work, and have received new awards of \$6.25 million in sponsored research contracts.

The reorganization of the College of Architecture into Schools has established a new parity at Georgia Tech between and among the School of Architecture and sister schools in the College of Engineering. This simple move has opened new avenues of collaboration in both academics and research, opportunities that the School must seize. Discussions with the Schools of Civil Engineering and Mechanical Engineering are already under way to determine how best to build on the present foundation of a small number of courses taken by students across the units.

Georgia Tech's high standards maintain the productivity of these exchanges. The Institute has a strong tradition in professional education in architecture, engineering, sciences, computing, and business, and all degree programs at Georgia Tech are subject to scrutiny regarding their quality, productivity, resourcefulness, and continued relevance to society. The periodic accreditation process for professional degree programs in the Institute and ongoing strategic planning insure that all programs are subject to similar standards and expectations.

#### **B.** Architectural Education and Students.

Synthesizing both the aims of liberal education to nurture the intellectual development of the individual and the aims of an institute of technology to prepare graduates with the technical skills to aid society, the School of Architecture endeavors to prepare students to thrive, both personally and professionally, within a context of cultural and technological change.

The School of Architecture fosters an intellectual climate for professional education in which fundamental knowledge, theoretical inquiry, and critical reflection about architecture are pursued through relevant course work, assignments, and design projects grounded in the complexities of the everyday and a rapidly changing profession. The School of Architecture cultivates an optimistic attitude about architectural practice in which students' awareness of prevailing professional conventions can serve as a basis for assessing emergent tendencies as well as alternative career paths available within the design, planning, and construction fields. While it is assumed that the majority of graduate students are oriented toward traditional careers in architectural design and practice, a range of programmatic factors helps to broaden the students' view of what is possible within this evolving profession. Students are exposed to a wide array of architectural practitioners, engaged in both normative and alternative modes of practice, among full-time and part-time members of the faculty. In addition, the School invites numerous practicing architects to serve on studio reviews, competition juries, and to participate in the lecture series.

The School of Architecture recruits and accepts into its several graduate programs well-qualified and motivated students with undergraduate backgrounds in both architecture and a wide range of other disciplines. The diverse student body of intelligent, academically prepared, and visually aware students admitted into the 3+ year Master of Architecture Program helps to establish a rich school culture within which students can benefit from each other's experiences and broaden their intellectual horizons. This intellectual diversity is further complemented by the international background of many of the students admitted into the professional program as well as the post-professional Master of Science programs and the research-oriented Doctor of Philosophy Program. The School provides international study abroad

programs for both graduate and undergraduate students, recruits a geographically diverse range of students to the graduate program, and provides for international visiting lecturers and visiting critics to supplement the academic programs and to broaden student awareness of contemporary culture and politics.

The requirement of the Graduate Record Examination establishes one comparative indicator of graduate students' capacity with regard to their academic preparation. Master of Architecture students entering the School of Architecture during AY 2012-2013 had average combined GRE scores of 1159 (506 verbal (58<sup>th</sup> %-ile) and 690 quantitative (57<sup>th</sup> %-ile) as compared to the Institute combined average of 1267 (see also <u>Table 18</u>)

Both graduate and undergraduate students tailor their programs of study satisfying the core requirements of the institution and professional or pre-professional curriculum while focusing electives in areas of individual interest. The graduate curriculum contains a large number of free elective courses as well, which allow students to assemble independent programs of study beyond the core requirements. A range of course offerings in the areas of architectural and urban design, history and theory, building technology, practice, environmental psychology, and digital media and modeling provide students with opportunities for tailoring their study to individual interests and career objectives. In addition, offerings in the Schools of City & Regional Planning and Building Construction, as well as those in areas of engineering, business, computing, and liberal arts, provide the basis for inter- and multi-disciplinary studies.

The School places design studio at the center of both the pre-professional and professional curricula and fosters a creative climate for engaging cultural, social, and environmental questions germane to contemporary practice and life. Students are guided in the staged development of requisite problemsolving and representational skills instrumental to the development of design alternatives and solutions addressing multiple site contingencies, programmatic parameters, and technological considerations. Studio projects engage a variety of conceptual and methodological approaches to architectural design, each attuned to the development of appropriate metrics for assessing performance and success. Acuity of analysis and interpretation, imagination and inventiveness, accuracy in modeling and simulation, clarity and expressiveness in oral, written, and visual communication: these are values and virtues instilled through faculty feedback and assessment and through public presentations, juries, and exhibitions of student work. The aim is to develop students' own self-confidence in their work and appreciation of the efforts of others.

Students are invested in their education and participate in the affairs of the School and professional community through: election to the Student Advisory Committee; offering feedback on faculty search candidates; membership in organizations such as the American Institute of Architecture Students, the National Organization of Minority Architecture Students, Alpha Rho Chi, and Women in Architecture; and selection as GTA's and GRA's to work in support of instruction, research, on lectures, exhibitions, or publications committees, the School website, or diversity initiatives.

# C. Architectural Education and the Regulatory Environment

The School of Architecture upholds professional responsibility for safeguarding and promoting the well-being of the public as its most fundamental role. Rather than narrowing the scope of professional liability, however, the Architecture Program treats the realm of professional responsibility as extending beyond the context of the individual building to encompass the quality of the inhabited and natural environment and its community of users.

The School of Architecture contributes to students' preparation for the process of professional licensure and lifelong learning through a rigorous professional education that exposes them to a range of both recurrent and emergent disciplinary concerns. One of the two required courses in the Practice of Architecture devotes time to setting the context of the architect's public obligations as manifest in the legal frameworks and regulatory controls. Each year, the Executive Director of the Georgia State Board of Architects and Interior Designers and an NCARB liaison participate in that course sequence in order to explain in detail the registration process in the state of Georgia and the reciprocity process nationally. In addition, the lead instructor and coordinator of the professional practice courses serves as the School's IDP Advisor and disseminates information pertaining to internship, examination, and licensure. Following the recent revisions of IDP rules pertaining to the accrual of learning units prior to the receipt of the professional degree, the IDP Advisor also communicates to students in both the pre-professional and professional programs about IDP procedures. The School of Architecture also contributes to the local professional community by serving as a provider of AIA Continuing Education credits through the public lecture series.

The efficacy of the professional education provided by Georgia Tech is demonstrated in one facet by the statistics compiled by the National Council of Architectural Registration Boards. NCARB data for Georgia Tech ARE candidates for years 2008-2011 are given in Table 23.

#### D. Architectural Education and the Profession

The School of Architecture is fully committed to the educational mission of producing informed, capable, and responsible graduates to whom we entrust the renewal and reproduction of the architecture profession to meet the challenges of an ever-changing world. Since its last NAAB review, the Master of Architecture curriculum has been revised to require two courses in the practice of architecture (as opposed to one course previously) in order to better contextualize and project the changing trajectories of architectural practice. Four major topical divisions in the two courses address: 1) the historical, social, legal, and ethical contexts of the profession, considered globally; 2) office procedures and project management; 3) professional leadership and entrepreneurship in an expanding marketplace for services; and 4) architectural research and emerging trends in practice. Exposing students to this continuum of change is key, we believe, to ensuring a future-leaning orientation for the profession.

Besides the required courses in professional practice, the School of Architecture communicates at many levels through all of its courses the range and diversity of roles that architects have played and are called to play in society. In addition, the seriousness of the architect's responsibility to the welfare of the public, both narrowly and broadly interpreted, serves as the basis for the curriculum of required and free elective courses. The grasp of the architect's responsibility cannot be contained, however, within the bounds of the classroom. Wherever practical, therefore, course projects and assignments extend beyond the confines of the Institute to interface with the community in urban design, building design, and design-build projects which bring architecture students face-to-face with the potential benefactors and beneficiaries of their proposals and the responsibilities there involved. Public exhibitions of such work further extend the dialog between the community and the designers and reinforce to other students the importance of architecture's participation in the public realm and impact on safety and culture.

Given the School of Architecture's presence within a major engineering-oriented research institution, we are optimistic about prospects of forging productive collaborative exchanges between our professions out of inherited disciplinary divides. Likewise, because of the multi-disciplinary character of

the College of Architecture and its faculty, the Master of Architecture Program is able to contextualize the role of the architect within the milieu of the allied disciplines. In the professional program, a range of free elective courses is offered to architecture students by the Building Construction and City & Regional Planning faculty. In the graduate program, some students pursue dual degrees between architecture, city planning, engineering, computing, and management. A designated Master of Science in Urban Design program and a post-professional research-oriented Master of Science program with concentrations in High Performance Buildings, Digital Design & Fabrication, and Healthcare Design provide students with opportunities for advanced architectural research and coursework while enriching the environment of the professional degree program.

The School considers the inclusion of health and safety concerns in design to be a fundamental expectation within the professional program. Safeguarding the welfare of the public serves as a basic consideration within a number of courses in both theory and practice of architecture, including the series of courses in architectural technology, structures, site design and construction, and professional practice. This attitude is specifically cultivated as a design responsibility within the setting of the comprehensive architectural design studio through projects and co-requisite coursework that emphasize the integration of a range of planning considerations including accessibility, circulation, egress, site design, structural selection, fire protection, and integration of construction systems.

Architectural Design + Research Studios bring into the foreground the School's serious commitment to research- and performance-driven design practice and to the reciprocity of practice and research. Each semester, third-year Master of Architecture students are presented studio platforms formulated around strong research questions and agendas related to areas of faculty expertise and active inquiry, formulated in relation to defined knowledge bases such as Urban Design, High-Performance Building, Digital Design & Fabrication, or Healthcare Design. Collaborative effort is organized, and self-organized, external consultants are engaged, in order to magnify students' depth of consideration of design strategies and to inform the negotiation of choices. Students exhibiting individual or joint initiative and gaining faculty support may pursue an Independent Thesis Option in order to develop research questions and agendas more specifically aligned with individual interests and goals.

Furthering broadening their views of the range of possibilities available to them, students participate as research assistants with both academic and research faculty. Students are also encouraged to participate in practice through the Graduate Cooperative Program. While the number of available positions has been significantly diminished in the recent economic downturn, this program provides participating students with tuition waivers in addition to normal stipends for professional internships while studying for their professional degrees. In addition, the Co-Op Program provides an invaluable resource for students through the professional mentorship they receive. Summer study abroad and year-long international exchange programs further expose students to issues of cultural diversity in professional practice and in life.

Graduates of the program have contributed to the advancement of the profession in numerous ways. Alumni of the School of Architecture have gone on to become faculty members at a range of other schools, including: University of Michigan, Mississippi State University, Iowa State University, State University of New York at Buffalo, Harvard University, Southern Polytechnic University, Texas Tech, University of Utah, Cal Poly Pomona, and Seoul National University. School of Architecture alumni are also among some of the leading architectural practitioners in the nation and include among others John C. Portman, Hugh Stubbins, Tom Ventulett, Mack Scogin, Merrill Elam, Anthony Ames, William Stanley, Harry Wolf, Karl Backus, and Michael Arad.

#### E. Architectural Education and the Public Good

The School of Architecture is committed to the highest standards of ethical conduct as the basis for professional action. The School interprets the obligations of practice in the broadest manner to encompass the reciprocal relations between private interests and the public good. While concerned with the promulgation of ethical standards within the context of the contemporary profession, the School promotes an awareness of the traditions and culture of architectural practice and the ways in which social, economic, and technological changes necessitate the development of alternative models of professional service.

The School of Architecture contends that ethical action is primarily a product of individual character as it is socially nurtured in multiple settings over the course of one's lifetime. From this perspective, the Master of Architecture Program contributes to the development of students' ethical awareness through both support for and expectations for academic honesty, respect for fellow students, respect for the physical environment, through the model of conduct of the architecture faculty, and through the opportunities for service to the School, College, Institute and the community.

Professional ethics, as articulated by the American Institute of Architects, are highlighted within the required professional practice courses. In addition, the design studio itself provides a continuing reinforcement for ethical behavior due to the nature of individual and collaborative design processes and to the understanding that ethical questions, in the guise of issues of appropriateness, reside at the center of any architectural project. The upper-level studios especially emphasize the development of hierarchical decision-making skills and an attitude of accountability. In addition, the School exposes students to exemplary role models--through its faculty, visiting professors and lecturers, and its alumni--who establish a high standard of character and accomplishment worthy of emulation.

The School of Architecture prepares its students to meet the social and environmental challenges of the present and future through a thorough grounding in the discipline and profession of architecture, through an emphasis upon analytical and analogical thinking as means of both problem identification and problem solving, and through an awareness of the potential impacts of both individual and concerted actions. And while design studios continue to press matters of formal expression, they are never preoccupied with mere formalism. Within the professional program, graduate-level studios regularly conduct in-depth studies of expanded project sites to include frameworks of social, environmental, economic, and political issues and to directly engage community groups, developers, and governmental agencies. The scope of projects in options studios and Design + Research Studios extends beyond the limits of building perimeters to encompass the architecture of urban and suburban landscapes, districts, and infrastructure. Likewise, coursework in architectural theory, practice, and technology at Georgia Tech is also bound within the social milieu, helping students to understand the range of ideological positions that inform architectural practice. Students are challenged to identify their own motivating concerns with regard to social responsibility and to articulate scenarios of practice that realize their values.

While providing a sanctuary for professional study, the School of Architecture also thrusts its students into the world outside through projects and assignments that require direct engagement in the varied social tapestry of the contemporary city. Community outreach is fundamental to a public university and is essential to the strategic vision of Georgia Tech. The School of Architecture strives to be a welcoming and inclusive place for its students, faculty, staff, alumni, friends, and community. We pride ourselves on participating in meaningful projects that will make our graduates good global citizens and help the

communities in which we operate. Not only are the problems of housing and inner-city redevelopment addressed, but the challenges of sprawl and conventions of strip and suburban development are analyzed and tested as well. Our outreach initiatives involve curricular and extracurricular projects, alumni engagement, K-12 initiatives, and networking and professional development opportunities.

#### I.1.4. Long-Range Planning

#### **Long-Range Planning Process**

At the unit-level of the School of Architecture, the establishment of long-range goals and objectives, the staking of yearly initiatives guided by those, the assessment of progress toward them, and then their recalibration and refinement is, ideally, a dynamic process of interaction, input, and feedback between and among School faculty, students, staff, administrative leaders, and external constituents. Since the merger of the stand-alone Architecture Program and PhD Program in 2010, the unified faculty of the new School of Architecture has endeavored to establish and enact a common governance structure consisting by-laws, a School of Architecture Faculty Advisory Committee, and a School of Architecture Reappointment, Promotion, and Tenure Committee. Student governance at the moment is fragmented between and among several student affinity organizations (AIAS, NOMAS, Women in Architecture, Alpha Rho Chi), and revamping the former Architecture Program Student Advisory Committee to encompass undergraduate and graduate students from all five degree programs in the School is a task still underway in the administrative reorganization of the School.

At Georgia Tech, the School Chair is charged with the responsibility of "facilitating goal setting by individuals, programs, and by the Unit as a whole." This process is accomplished through exchange and dialog between the Chair and individual faculty members around submission of annual Faculty Activity Reports which include annually updated Goals and Objectives and self-assessments of progress toward them. These individual goals and objectives both inform and are informed by the strategic directions identified by the School Faculty as a whole through regular monthly faculty meetings, special ad hoc task forces, meetings of the Faculty Advisory Committee, and annual faculty workshops at the beginning and end of each academic year. The School Chair provides regular assessments and updates toward School goals and seeks faculty input and feedback regarding the staking of each year's agenda to accomplish progress toward those goals. A School of Architecture Advisory Board has been established to provide external insights from alumni and professional communities. Ongoing and iterative effort is made to craft a consensual vision for the School, to ensure that it adequately and inclusively represents the aspirations of the entire organization within the framework of goals set by the College and the Institute.

# **Data and Information Sources Informing Process**

Georgia Tech's Office of Institutional Research and Planning (<a href="http://www.irp.gatech.edu/">http://www.irp.gatech.edu/</a>) is responsible for the development and maintenance of data resources to support the strategic planning and policy-making processes at Georgia Tech. IRP facilitates the flow of accurate, timely information and assists all levels of management in defining issues, selecting research designs, obtaining information and interpreting results. For purposes of this NAAB Architecture Program Report and self-study, and for other mandated academic program review processes, the IRP compiles a data portfolio for the School containing relevant admissions, demographic, and graduation rate data among other statistics related to financial, physical, and human resources. (That data portfolio will be provided in the NAAB Visit Team Room.)

Georgia Tech's Office of Assessment aggregates a variety of survey data in its Assessment Data Online Retrieval System (<a href="https://webapps.gatech.edu/cfcampus/adors/">https://webapps.gatech.edu/cfcampus/adors/</a>). This assessment data query tool is designed to give campus users real-time access to assessment data in a usable format that can be used to provide information for specialized accreditation reports such as ABET and NAAB, project proposals to funding agencies such as the NSF, annual reporting needs, educational research projects, and a variety of other uses.

The context of significant and ongoing change in the profession of architecture is a constant concern and the background against which our future planning efforts must be weighed. Some statistical and narrative studies informing our deliberations include:

- AIA Foresight Report: The Changing Context, Business and Practice of Architecture 2013 http://www.aia.org/press/releases/AIAB099362
- Occupational Outlook Handbook: Architects, Bureau of Labor Statistics http://www.bls.gov/ooh/architecture-and-engineering/architects.htm
- The Architectural Profession in Europe 2012, A Sector Study Commissioned by the Architects'
  Council of Europe, Draft 4 November 2012
   http://www.ace-cae.eu/public/documents/sector\_study\_2012\_draft\_final.pdf
- The Future for Architects? RIBA Building Futures, 2010
   <a href="http://www.buildingfutures.org.uk/projects/building-futures/the-future-for-architects/the-future-for-architects-report/">http://www.buildingfutures.org.uk/projects/building-futures/the-future-for-architects/the-future-for-architects-report/</a>

Peer school benchmarking data which has played a role in College of Architecture planning efforts in the past has not been recently updated and therefore is unavailable as a comparative basis in current planning efforts. It is expected that such data will be gathered and analyzed in the next round of College of Architecture strategic planning now underway (see below). NCARB pass-rate statistics for the Architectural Registration Exam do provide a significant metric, however, for a comparative analysis of the efficacy of the school's professional curriculum. In most categories Georgia Tech graduates perform better than national averages as is shown on Table 23.

#### Role of Long-Range Planning in College and Institute Planning Processes

Georgia Tech's most recent strategic planning exercise commenced in 2009 and concluded with the release of Georgia Tech's Strategic Plan, "Designing the Future," in August 2010 (<a href="http://www.gatech.edu/vision/">http://www.gatech.edu/vision/</a>). All constituents of the Georgia Tech community were included in the planning process—faculty, students, staff, and administrators. Members of the College of Architecture were key contributors to the formulation of several important proposals including the interdisciplinary Burdell Design Center and the TechArts initiative for enriching the culture of the campus. The five goals articulated in the plan serve as an important reference and umbrella for planning efforts in the Colleges and Schools:

- Be Among the Most Highly Respected Technology-Focused Learning Institutions in the World
- Sustain and Enhance Excellence in Scholarship and Research
- Ensure That Innovation, Entrepreneurship, and Public Service are Fundamental Characteris- tics of Our Graduates
- Expand Our Global Footprint and Influence to Ensure That We Are Graduating Good Global Citizens
- Relentlessly Pursue Institutional Effectiveness

At the College of Architecture level, the occasion of the appointment of a new Dean in July 2013 has initiated a new strategic planning cycle to commence during academic year 2013-14.

# Role of NAAB Five Perspectives in Long-Range Planning in the School of Architecture

As presented below, the aims articulated in the School of Architecture Strategic Plan—a culture of interdisciplinarity, curricular innovation, focused research domains, student and faculty recruitment, public outreach and communication—establish a strong correspondence between and among the institutional goals and aspirations of Georgia Tech (above) and the NAAB perspectives relating architecture and the academic community, students, the regulatory environment, the profession, and the public good.

# GEORGIA TECH SCHOOL OF ARCHITECTURE STRATEGIC PLAN Imagining a Better Future through Architecture, Design, and Research

Architects can only serve society if they are as attentive to enduring needs as they are open to new possibilities. Likewise, desire for social progress ought to be at the core of architects' aspirations to derive truly enabling, enriching architectures, ones equally transformative of practice, place, and form. In the face of unparalleled social, technological, and environmental challenges, architects must dedicate themselves to a common project, to imagining a better future through architecture, design, and research.

Georgia Tech's vision to "define the technological research university of the 21st century" sets the context for the College of Architecture's aspiration to be "a center for design thinking and pedagogy that takes full advantage of its location in a leading technological university." While advances in knowledge and technology often yield as many new questions as they do answers, the disciplinary aim of architecture is to draw the right lessons for the built environment from both the advances and unanticipated consequences of our progress, to extract inspiration out of circumstance and opportunity out of constraint.

#### **Our Vision**

The School of Architecture at Georgia Tech will be a leader in the expansion of architectural knowledge to meet the demand for research- and performance-driven architectural practices; and in the reform of architectural education to prepare creative designers and innovative practitioners dedicated to advancing the health and well-being, both globally and locally, of people, the environment, and society.

#### **Multiple Missions**

The School of Architecture has multiple missions in teaching, research, and service, each reflected in its distinct degree programs. The School advances Georgia Tech's general education mission at the undergraduate level through a rigorous studio-based design curriculum providing a thorough grounding in liberal and scientific knowledge. At the heart of the School is the professional program in architecture, the Master of Architecture, its mission to prepare a new generation of technologically capable, ecologically aware, and socially responsible practitioners. Advanced and doctoral-level programs build linkages with practice and industry and provide leadership in architectural and urban research. All of these missions overlap, and their cross-pollination extends the impact of each.

# **Strategic Aims**

In order to fulfill this vision and to advance the mission of professional education, the strategic aims along with relevant objectives critical to our success over the next five to ten years are outlined below. Actions Items germane to the Master of Architecture Program are further expanded and elaborated.

#### Aim 1. A Culture of Inter-disciplinarity

**Cultivate and contribute to a shared design culture** at Georgia Tech through multi-disciplinary collaboration and exchange joining disciplines in the respective Colleges of Architecture, Engineering, and the Liberal Arts.

Objective 1.1: Inter-disciplinarity in Undergraduate Education

#### Objective 1.2: Inter-disciplinarity in Graduate Education, Advanced Studies, and Research

- Action 1: Build stronger bridges between architecture and engineering-related disciplines through
  collaborative instruction and research projects in order to define a truly unique context for and
  approach to architecture and the building arts at Georgia Tech.
- Action 2: Support and make full use of the Digital Fabrication Lab and the Digital Building Laboratory
  as physical infrastructure and organizational framework for interdisciplinary instruction and
  research in architecture, engineering, and construction.
- Action 3: Grow the Master of Science programs into vital rather than ancillary programs that leverage and extend key capacities of our professional and research programs.
- Action 4: Build upon existing relationships with the Colleges of Computing and Engineering and the Ivan Allen College to define cross-disciplinary interests and opportunities informing both professional education and research.

# Aim 2. Curricular Innovation

**Prepare our students to be innovative and creative**, to command a critical understanding of principles governing the constructed world, to be appreciative of difference, and thereby able to respond flexibly to the contingencies of global and local practice and communicate with fluency in visual, verbal, and technical media.

# **Objective 2.1: Assessment of Curricular Objectives and Outcomes**

 Action Step: Articulate clear expectations, high standards, and well-considered and informative evaluative criteria through engagement of Georgia Tech's internal assessment system and the professional program accrediting agency.

**Objective 2.2: Innovation in Undergraduate Education** 

# **Objective 2.3: Innovation in Professional Education**

- Action 1: Continue to implement and refine recent curricular revisions to the professional curriculum in order to embrace both the challenges and opportunities of new media, new tools, and new processes of design.
- Action 2: Craft collaborative pedagogies with Engineering and Building Construction disciplines that
  are effective and relevant for changing modes of design practice including the rise of Building
  Information Modeling and Integrated Project Delivery.
- Action 3: Continue bolstering comprehensive design skills by engaging active and experienced practitioners in the instruction of professionally focused and integrative architectural design studios and courses.
- Action 4: Continue refining the Design+Research studio model through staged pedagogical
  experiments aimed at shaping a truly collaborative environment with projects team-led and
  conducted, and focused upon integrative approaches to analysis, problem-seeking, problem-solving,
  form generation, simulation, and evaluation.

#### Aim 3. Focused Research Domains

**Bridge the gap between architectural research and design practice** by building partnerships and exchanges with leading architectural firms to advance the state of the art of architectural practice and strive for better building performance.

# Objective 3.1: Expand Support for Sponsored Research Activity

- Action 1: Solidify support for the School's primary sponsored research activity through the Digital Building Laboratory, the High-Performance Buildings Laboratory, and the SimTigrate Design Laboratory.
- Action 2: Forge productive partnerships between the discipline and adjacent professional practices
  and the construction industry in order to stimulate opportunities for research collaboration and to
  generate new seed moneys for research support.

# Objective 3.2: Increase Overall Productivity in Research, Scholarship, and Creative Activity

- Action 1: Support and encourage expansion of research initiatives and scholarly productivity through publications, exhibitions, and competitions in the areas of urban design, organizational and cognitive performance, history and culture, and creative research in practice in the areas of architecture, design, and the visual arts.
- Action 2: Where new faculty hires are available, recruit strategically to balance core instructional needs with opportunities for building sponsored research capacity in key and emergent research domains.

### **Objective 3.3: Integrate Research with Instruction in Meaningful Ways**

- Action 1: Increase undergraduate research opportunities and the contact between the School's leading researchers and introductory level students.
- Action 2: Use venues such and the Design + Research Studios as a mechanism for testing alternative design approaches that make use of relevant research as an evidence base for informed decision making and that provide data, feedback, and validation for research propositions.
- Action 3: Seek partnerships with leading architectural practices interested in forging research relationships around well-defined questions and problems for which their experience and our faculty expertise are well-matched.
- Action 4: Encourage and assist students and faculty to publish the results of these studio and seminar projects for wider distribution.

#### Aim 4. Student And Faculty Recruitment

**Build a highly qualified, motivated student body and a distinguished faculty** that are appropriate to our strategic aims, each reflective and respectful of the others' diversity—demonstrated and destined leaders all—able to inspire and reinforce in each other a commitment to both intellectual rigor and high social purpose in architecture.

**Objective 4.1: Undergraduate Student Recruitment** 

# **Objective 4.2: Graduate Student Recruitment**

- Action 1: Focus upon advancing awareness and external recognition of our professional program as reflected in national and international rankings and publications. Related actions include inviting Chairs, Deans of other schools to reviews and lectures to inform/promote our SOA program; updating the SOA website frequently with news, faculty accomplishments, student projects.
- Action 2: Active Recruitment at Other Schools. Activate contacts with selected colleges in GA/US and

attend open houses and recruiting events with SOA promotion.

- Action 3: Active Recruitment at Georgia Tech. Make every effort to recruit capable students from the B.S.Arch. Program into the M.Arch. Program; expose the M.Arch. Program to other undergraduate majors at Georgia Tech in engineering, computing, sciences, business, and the liberal arts who may have an interest in the professional program.
- Action 4: Increase print and web presence of the School. Establish online presence on architecture blogs, websites; publish an annual yearbook with student work; create Promotional Videos of SOA; place online advertisement on Architecture blogs (SP, Archinect, Bustler etc); position keywords in Google Search (MSUD is already doing this, we could extend to M.Arch); produce small giveaways e.g. USB stick with data, flyers, brochures (we already have some in place, but it needs to be intensified).

#### Objective 4.3: Faculty Recruitment, Retention, Advancement

We must ensure the ongoing vitality, relevance, and future orientation of the professional curriculum by hiring new faculty to advance strategic program directions and by supporting and encouraging all faculty members in their ongoing efforts to stay on the cutting-edge of professional and scholarly expertise in the face of ongoing transformations of architectural practice.

- Action 1: Assess areas of current faculty strength and identify areas where expertise is needed.
- Action 2: Aggressively recruit new faculty members to ensure diversity of gender and ethnic representation on the faculty.
- Action 3: Mentor and support tenure-track faculty in the development of their teaching and research agendas.
- Action 4: Support efforts by tenured faculty to stay abreast of rapidly changing technical requirements of practice, for example in attaining LEED accreditation, mastering new computer software applications, or other professional development activities.

#### Aim 5. Public Outreach And Communication

Serve the public by helping shape public discourse about architecture and urban design, by making our research accessible and the benefits of design tangible through robust efforts to evaluate, communicate, and connect and to convey a heightened understanding of our role and standing in the architectural and educational communities.

#### **Objective 5.1: Focus on Improving our Rankings**

Key to all recruitment and resource development efforts is advancing the reputation our School as reflected in national rankings. *Design Intelligence* remains the one source providing rankings of U.S. architecture colleges, schools, and programs. The publishers of *Design Intelligence* have linked rising mobility in the rankings with three factors, as suggested by these action steps.

- Action 1: Increase the number of replies to the DI survey from regional architectural firms, school alumni, and professional contacts.
- Action 2: Promote the growing reputations of practicing faculty members, to which we would add the impacts of faculty contributions in research.
- Action 3: Effectively communicate School achievements to the architectural community.

#### **Objective 5.2: Lectures and Exhibitions that Matter**

- Action 1: Maintain a robust public lecture series by local and visiting practitioners and thinkers of
  established and emerging reputations focusing on diverse cultures and contexts, and alternative
  forms of practice that are future leading.
- Action 2: Exploit the new opportunity of the Stubbins Gallery to develop a program of exhibitions that highlights School priorities in research and instruction, that provoke public exchange, and that become a point of reference for scholars, thought leaders, and policy makers.
- Action 3: Continue to partner with other institutions (AIA, Art Papers, Atlanta Contemporary Arts Center, Swiss Consulate, etc) to bring in prominent speakers and exhibitions.
- Action 4: Organize public symposia on issues of local, national, and international import regarding the design and built environment.

#### **Objective 5.3: Engage the Community and Professions**

- Action 1: Enhance established partnerships with the Georgia Conservancy and form new ones like
  Architecture for Humanity that provide students with the opportunity for situated learning and
  service in local and extended communities.
- Action 2: Support student extra-curricular efforts for public and community service through their own student-led organizations and initiatives.
- Action 3: Encourage faculty participation and presence in professional organizations such as the American Institute of Architects.
- Action 4: Foster an active and engaged Professional Advisory Board.

# **Objective 5.4: Communicate, Communicate, Communicate**

- Action 1: Work with the COA Communications Officer to identify priorities, strategies, and responsibilities for various components of a comprehensive communications plan.
- Action 2: Organize administrative, faculty, and student roles in shaping and communicating appropriate components of the School's message.
- Action 3: Develop accurate and up-to-date alumni lists, keep track of alumni trajectories and accomplishments, and maintain open lines of communication through regular newsletters.

# Aim 6. Resource Development

# Objective: Work with the COA Dean / Development Officer to Develop New Resources that Advance these Aims

- Action 1: Develop new endowments and endowed faculty chair positions with the sort of leadership potential that the Ventulett Distinguished Chair in Architectural Design has had for the Master of Architecture Program.
- Action 2: Develop new endowments supporting Graduate Student Fellowships and Undergraduate Student Scholarships to enhance recruitment of the most qualified students to Georgia Tech.
- Action 3: Develop new endowments supporting Distinguished Visiting Critics and Professors of the Practice to ensure student exposure to experienced and leading-edge architectural practitioners and urban designers.
- Action 4: Develop new endowments supporting prominent Lectures, Exhibitions, and Publications for the School.
- Action 5: Develop new unrestricted endowments and/or streams of expendable annual funds to assist the School Chair in advancing the mission and reputation of the School.

#### **Challenges and Opportunities in Realizing These Aims**

- C+O 1: The profession of architecture is undergoing a period of significant recalibration and transformation based upon sweeping economic, technological, environmental, and demographic trends, both nationally and globally. Whether the dominant system of education and profession, accreditation and registration is agile enough to anticipate and accommodate such change is a daunting question. The setting of a professional architecture program at Georgia Tech presents some unique opportunities for fashioning a more engineering-oriented, performance- and research-driven model of disciplinary knowledge than is typical of U.S. architecture programs. The challenge is to establish a proper balance between practice-based and research-focused approaches to design while both maintaining the richness of received architecture culture and being open to the emergence of new, hybridized, and variegated models of professional service.
- C+O 2: Recent downward trends in School enrollment, (primarily in the undergraduate program), are partially a consequence of prevailing economic conditions and uncertainty about the financial promise of careers in architecture. These challenges must be considered in a strategic rather than a reactionary manner, however. Given ongoing demographic trends which suggest a continuing and growing demand for design professionals in spite of economic cycles, priority must be given to "right-sizing" our programs to ensure continuity in the face of the vicissitudes of the market. Longterm, our goal is to grow enrollment in the M.Arch., M.S. (Arch.), and MSUD degree programs while stabilizing enrollment in the B.S.Arch. and Ph.D. degree programs.
- C+O 3: Declining investment in higher education as manifest in State budget reductions and related increases in student tuition and fees are conditions potentially linked with the enrollment picture and affecting access to professional architectural education. In the last five years, the State budget allocation for the School of Architecture has been reduced approximately 8.5% relative to the FY 2009 baseline. Meanwhile, over the same period, graduate tuition costs at Georgia Tech have increased by 101%, and professional program tuition by 163% (the result of a special assessment for professional students of \$1995 per semester, the yield from which is returned directly to the School for support of professional education). So while the financial health of the Master of Architecture is substantially stronger today than it was at the time of the last NAAB visit, the continual improvement of educational quality, value, and access will be at the center of attention in coming years.
- C+O 4: The last five years have witnessed the gradual retirement of the generation of faculty stalwarts hired in the 1970s and 80s concomitant with the adoption of the M.Arch. and Ph.D. degrees and the establishment of the College. Over the next two to three years, the School must hire new replacement faculty members whose expertise and experience can contribute to the advancement of the School's strategic priorities in instruction, research, and service.

#### I.1.5 Self-Assessment Procedures

#### **Self-Assessment Process**

There is a wide range of both formal (institutional) and informal procedures for self-assessment in the School of Architecture. Students, alumni, practitioners, faculty and the administration are offered multiple venues for contributing to the critique and development of the Program. Their participation is also incorporated into the nested self-assessment procedures required by the College of Architecture, Georgia Tech, and the University System of Georgia. These include the following:

# Strategic Planning

The School of Architecture has contributed within the College of Architecture to Georgia Tech's ongoing process of strategic planning, most recently in 2009-2010. With the appointment of a new Dean, the College of Architecture Strategic Plan will be updated during the coming academic year 2013-2014. The current School of Architecture Strategic Plan has been under development since the establishment of the new School in 2010. In essence, a new vision has been crafted out of those previously articulated by the precursor Architecture and Ph.D. Programs. The shaping of consensus about how to position the School to take advantage of synergies between once partitioned approaches to professional education and research has occupied significant attention since January 2010 and continues today. In all of this, the NAAB Perspectives provide a framework for an expanded consideration of what constitutes a well-rounded and resourced professional education in architecture within the context of a research-oriented technological institute. (See Section I.1.3. Responses to the Five Perspectives and Section I.1.4. Long-Range Planning.)

# Academic Program Review

The Board of Regents of the University System of Georgia has mandated a formal self-assessment process for all academic degree programs. This review occurs on a rotating basis every 5 to 7 years and includes the preparation of a self-study, an external review committee and report, and follow-up actions with progress annually reported. Key factors informing the review concern the program's quality, impact, and consistency with the established mission and strategic plan, including the specification of desired educational outcomes, measurable results, and assessment measures. A combination of exit surveys, alumni surveys, employer surveys, portfolio reviews, and student interviews are used to provide input information. The Bachelor of Science in Architecture, Master of Science (Architecture), and Doctor of Philosophy degree programs were reviewed during academic year 2012-2013. The Academic Program Review of the Master of Architecture degree program is concurrent with the NAAB accreditation review which serves in lieu of a separate review.

#### Internal Curriculum Review

The current governance structure of the School of Architecture includes an elected Faculty Advisory Committee representing the interests of the full-time and part-time faculty with regard to its curricular responsibilities. Among other roles, this committee advises the Chair on curriculum design and assessment while responsibility for curricular matters resides with the tenured and tenure-track faculty who are charged with assessing the efficacy of program courses in satisfying accreditation criteria as well as contributing to broader curricular objectives. This has included self-assessment of program courses by faculty members individually and by subject area work-groups with regard to accreditation criteria and establishment year-end reviews by all faculty of results from every graduate and undergraduate architectural design studio.

At the *end of each semester*, faculty in the School of Architecture review the student work outcomes from each architectural design studio. Because the design studio work is expected to demonstrate a synthesis of other subject areas in the professional curriculum, the accomplishment of this work is considered an index of overall curricular efficacy. Currently, this faculty review represents only an informal assessment of curricular outcomes. We plan to formalize this process through a survey instrument to be administered at the conclusion of this adjudication process each semester. At the *end of each year*, faculty in the School of Architecture convene to reflect upon and assess the efficacy of the Master of Architecture curriculum and to propose possible curricular revisions for future enactment and ongoing assessment.

Additional ad hoc feedback has resulted from the presentation by numerous faculty of their pedagogy and the resulting student work in publications and at numerous conferences. Exhibition of current student work – both in the display windows of the library and periodic exhibits in the College of Architecture provide further opportunities for assessment by multiple constituencies related to the School.

#### External Curriculum Review

At the *end of each semester*, faculty and practicing professionals from outside the school are invited to review the student work outcomes from each architectural design studio. Because the design studio work is expected to demonstrate a synthesis of other subject areas in the professional curriculum, the accomplishment of this work is considered an index of overall curricular efficacy. While this external curricular review represents only an informal assessment of curricular outcomes, we have begun to formalize this process through a survey instrument administered at the conclusion of this adjudication process each semester.

#### Course-Instructor Online Surveys

Each semester, the Center for the Enhancement of Teaching and Learning (CETL) at Georgia Tech administers and tabulates on-line course opinion surveys that are completed by students for each academic course in the Institute. CETL makes student comments directly available to the faculty member of record, along with tabulated results that are shared with the School administration. Each fall, CETL distributes normative data for various class sizes, enabling a comparison of results at the College and Institute levels. These results are also considered as one factor among others in faculty members' annual performance reviews.

#### Other Student Input

Architecture students participate in several student organizations that facilitate formal contact and communication between School administration and the student body. These organizations include the American Institute of Architecture Students (AIAS), the National Organization of Minority Architecture Students (NOMAS), and Women in Architecture (WIA). As previously noted, the School of Architecture Student Advisory Committee is being reconstituted to better represent the range of students in the School's five degree programs.

# Online Assessment Tracking System (OATS)

As a part of the regional accreditation process by the Southern Association of Colleges and Schools (SACS), each academic degree program at Georgia Tech is self-assessed bi-annually against a set of defined, observable, and measureable program outcomes. These program outcomes are refined in order to focus upon specific learning outcomes. For the Master of Architecture degree, these may include issues related to previously cited deficiencies in NAAB Student Performance Criteria, for example. This ongoing process also provides a framework within which the outcomes of curricular modifications may be assessed in terms of their efficacy in achieving intended improvements in student performance.

# Graduate Exit and Alumni Surveys

Georgia Tech administers annual surveys of graduating students, both undergraduates and graduates, with regard to their satisfaction with curriculum, faculty, and resources of their respective degree programs. Graduate alumni surveys are administered every five years and solicit alumni perceptions about how well their education prepared them in a number of focused knowledge and skill domains.

The Development Council and the Advisory Board have been organized to provide volunteer leadership for fund-raising and alumni affairs, respectively. Although these organizations are not engaged in a process of formal external assessment of the College and School, they do serve an advisory role and as a resource for this function. In addition, the School of Architecture Program is served by a 10-member advisory board. Comprised of local alumni and practitioners, the Board meets with the School Chair once or twice a year. They serve as a reviewing body (of the Strategic Plan and School initiatives and directions,) and as a liaison with the profession.

# Results of Self-Assessments: Master of Architecture Curriculum and Learning Context

#### **Faculty Assessments**

Faculty assessment of the learning context and curriculum of the professional program is based upon discussions at regular monthly faculty meetings, end-of-year faculty reviews, and surveys of faculty and external reviewers following semester juries for Core and Options Studios. Revisions to the Master of Architecture curriculum initiated in academic year 2010-2011 and implemented beginning academic year 2011-2 were in part responses to the 2008 NAAB Visiting Team Report and subsequent self-assessments.

#### Learning Context – Strengths

- Georgia Tech's reputation as a top-ranked, internationally recognized, technologically-focused research institution with rigorous academic standards.
- A multi-disciplinary College of Architecture providing a rich context of allied disciplines for professional studies in architecture, including urban design, city planning, industrial design, and building construction.
- The setting in Atlanta, a vibrant metropolis, whose amenities and challenges provide an inexhaustible laboratory for design speculation.
- A productive, attentive, and well-supported tenured and tenure-track faculty active in creative practice, scholarship, and research, energized by the new potentials of the School of Architecture out of the combined strengths of once separate Architecture and Ph.D. Programs.

- Exemplary part-time Professors of the Practice, Senior Lecturers, and Lecturers who bring experience and expertise from active practices into their teaching.
- A strong culture of sponsored research, interdisciplinary scholarship, and creative work engaging both art and science, both humanistic and technological values.
- o A well-qualified, diverse, and engaged student body.
- For the first time in many accreditation reviews, instructional and research facilities adequate to our needs and ennobling to our purposes.
- Budgetary resources that in spite of economic challenges have allowed the expansion of ambitions and the enhancement of quality.
- A supportive base of alumni and local practitioners interested in helping the School succeed and extend its reputation and quality.

#### Learning Context – Challenges and Opportunities

- o Lack of faculty diversity in terms of gender and ethnicity.
- Recent drops in undergraduate enrollment which could adversely affect professional program enrollment and staffing levels in future years.
- o Low profile of art, humanities, and visual culture at Georgia Tech.
- Incommensurability of creative/scholarly/research products between architecture and engineering disciplines
- Perceptions and realities of Architecture being an insular discipline not yet well-integrated with other disciplines at Georgia Tech, especially those in the College of Engineering.

# Professional Curriculum – Strengths

- o Intellectually rich and culturally sensitive approach to philosophical and historical discourse about place, community, and meaning.
- Outcomes of Comprehensive Design Studio integrating architectural design, structures, and building technology courses.
- o Recent curricular updates in required professional courses:
  - a new three course sequence in Architecture Media and Modeling brings clarity and consistency to instruction in manual and digital media.
  - modularization of the two-course Theory of Architecture sequence to focus on theoretical and practical issues of 1) program and function, 2) sites and contexts, 3) rhetoric of representation, and 4) tectonics and construction.
  - expansion of the Practice of Architecture requirement from one to two courses to include modules focused on 1) historical, social, and ethical frameworks of the architecture profession, 2) leadership and entrepreneurship, 3) office procedures and project management, and 4) emerging models of architectural practice and research.
- Creation of new Design + Research Studios meant to spur innovation and initiative in advanced architectural design around well-defined research agendas and knowledge bases such as building performance, digital design and fabrication, urban design, and healthcare design.

#### Professional Curriculum – Challenges and Opportunities

- Need for instructional innovations in courses in architectural history, building technology, and design studio that take advantage of full capabilities of digital tools and instructional media.
- Opportunity for greater emphasis upon emergent paradigms of practice through Building Information Modeling and Integrated Project Delivery through liaisons with the Schools of Building Construction and Civil and Environmental Engineering.

- Need for continued efforts to improve design studio outcomes especially in areas of schematic design, in terms of building/site relationships and development of interior spaces relative to issues of program and use.
- Need for greater emphasis upon student communication, especially in written and oral communication.
- Ongoing concerns relative to those Student Performance Criteria identified as deficiencies in 2008 NAAB Visiting Team Report:
  - Condition 13.25 Construction Cost Control
  - Condition 13.26 Technical Documentation
  - Condition 13.28 Comprehensive Design

#### **Student Assessments**

Student assessments are based in part upon graduate student online exit surveys completed between the time students file their M.Arch. degree petitions and the time of graduation. The latest data sets available are from Spring 2012 and Spring 2013. The program-specific questions assess student satisfaction with both curriculum and learning context. Students rate each queried criterion on a scale of 1 to 5 where 1 = Very Dissatisfied; 3 = Neither Satisfied nor Dissatisfied; and 5 = Very Satisfied. Response rates for the Graduate Exit Survey: for 2012, N = 13; for 2013, N = 12. (Responses below are in the format of 2012/2013 in order to show linear variations.)

- Learning Context Strengths
  - Quality of Faculty. Students were generally satisfied with the quality of faculty as reflected in the following rankings: Currency in Field = 4.17/4.17; Relevance to Profession = 3.64/4.33;
     Mentoring Support for Research = 3.17/4.42; Research Expertise = 4.0/4.5; Relevance of Research = 3.83/4.5; and Overall Teaching Ability = 3.83/4.42.
  - Learning Support. Students were generally satisfied with the quality and availability of resources in support of their professional education as reflected in the following rankings: Library Resources = 4.83/4.22; Computer, Information Technology, and Digital Media Resources = 4.33/4.22; Model Shop = 4.5/4.3; Other Services = 4.29/4.0.
- Learning Context Challenges and Opportunities
  - Learning Support. Students expressed some ambivalence with Academic Advising, though with some signs of improvement, as reflected in the following ranking: Academic Advising = 3.0/4.63. An organizational study of the School of Architecture administrative office completed in Fall 2011 resulted in the expansion of the advising staff from 2 to 3 with the addition of a new Academic Advising Manager and an Academic Advisor I.
- Professional Curriculum Strengths
  - Overall Satisfaction with Curriculum. Students were generally satisfied with the professional curriculum as reflected in the following rankings: Overall Satisfaction = 3.85/4.17; Preparation to Work in Discipline = 4.08/4.33; Required Program Courses = 3.85/4.33; College and Program Electives = 4.31/3.92; Studio Courses = 4.08/4.55; Computer Literacy, Information Technology, and Digital Media Courses = 3.67/4.33.

- Professional Curriculum Challenges and Opportunities
  - Co-ops, Internships, and Other Work Experience Courses = 2.0/3.5. Students were less than satisfied in this area due, we surmise, to the significant reduction in the availability of Co-op positions in local architecture offices due to the economic downturn since 2008.

#### **Graduate Alumni Assessments**

The Georgia Tech Graduate Alumni Survey was undertaken to identify alumni satisfaction with employment skills preparation and experiences at Georgia Tech. The most recent survey was conducted in the fall and winter of 2011, surveying alumni who graduated from the Institute between Fall 2000 and Spring 2003. Alumni rate each queried criterion on a scale of 1 to 5 where 1 = Not Prepared; 3 = Prepared; and 5 = Very Well Prepared. Response rate for the 2012 Graduate Exit Survey: N = 27.

- Professional Curriculum Strengths
  - Alumni were satisfied that they were more than prepared in the following knowledge domains as reflected in these rankings: Architectural and Urban History = 4.11; Architectural Theory = 3.93; Architectural Design = 4.26; Urban Design and Development = 3.7; Sustainability = 3.3; Construction Methods and Systems = 3.22; Structures = 3.52; Site Planning and Design = 3.67; Integration of Architectural Technology and Design = 3.44; Visual Arts and Communication = 3.73; Design Computing = 3.85.
- Professional Curriculum Challenges and Opportunities
  - Alumni expressed the view that they were less than prepared in the following knowledge domains as reflected in these rankings: Environmental Systems = 2.96; Legal and Ethical Aspects of Practice = 2.56; Business Aspects of Practice = 2.3; International Practice = 1.89; Facility Programming and Post-Occupancy Evaluation = 2.26.
- NCARB ARE Pass Rates as an Indicator of Professional Curriculum Effectiveness
  - In the most recently available results, Georgia Tech Master of Architecture alumni pass rates on the ARE exceeded national pass rates by significant margins in all divisions except one, Schematic Design. Pass rates available in <u>Table 23</u> similarly show performance in this area below the average pass rates for each year between 2008 and 2011.

2011 ARE 4.0 Pass Rates	ALL	GT
Programming Planning & Practice	62%	90%
Site Planning & Design	73%	79%
<b>Building Design &amp; Construction Systems</b>	62%	76%
Structural Systems	71	73%
Building Systems	68%	81%
Construction Documents & Services	64%	79%
Schematic Design	77%	74%

#### **Institutional Requirements for Self-Assessment**

As outlined above, regular assessment regimes are mandated on a five to seven year cycle by the Board of Regents for each academic degree program in University System of Georgia. In the case of the Master of Architecture degree, external review by NAAB is deemed to be sufficient for purpose of that

Academic Program Review. Action plans responding to the findings of these external reviews must be formulated and progress reported on an annual basis. As part of the maintenance of its accreditation by the Southern Association of Colleges and Schools, Georgia Tech requires ongoing assessment of the curriculum of each degree program on a bi-annual basis. These outcomes-based assessments are not comprehensive but rather focus upon three or four specific areas within each degree program previously identified as needing improvement or verification of continued efficacy. These assessments are recorded in an Online Assessment Tracking System.

# How Self-Assessment is Integrated into Planning and Curriculum Development

As described above in Self-Assessment Process, ongoing analysis- and performance-driven assessments of student, faculty, administrative, and curricular outcomes are part of the landscape of higher education in Georgia in order to ensure public accountability. Similar metrics are also institutionally required in order to establish need and demand for any newly proposed programs. At the level of the specific degree program, self-assessment propels the aspiration for continual improvement of student and program outcomes; likewise, once modifications are indicated, subsequent self-assessment assures that the changes result in the improvements intended. These assessments are reported annually through internal Institute mechanisms such as OATS, described above.

# PART ONE (I): SECTION 2 - RESOURCES

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

# **Faculty and Staff**

Fulltime tenured and tenure-track in the School of Architecture for Fall 2013 numbers 28. Three of this number hold joint appointments of 25% in the School of Architecture and 75% in the Schools of Building Construction, City & Regional Planning, and Mechanical Engineering respectively. Two additional faculty members, one in the College of Computing and one in Emory University's Hodgson School of Nursing, hold adjunct appointments in the School of Architecture. Three faculty positions in the School of Architecture are presently vacant due to attrition through retirement.

Of the 28 tenured and tenure-track faculty, nine are professors, thirteen are associate professors, and six are assistant professors. Fourteen (50%) hold Ph.D. degrees, six are U.S. registered architects, nine are registered architects in other jurisdictions, three are engineers, five are historians, and one is an environmental psychologist. Only four of the twenty-eight are female. Both adjunct professors, described above, are female. Furthermore, 38% of the tenure and tenure track faculty are included in the 20% most productive researchers and scholars in the US according to Dr. Garry Stevens' Key Center for Architectural Sociology: <a href="http://www.archsoc.com/kcas/researchschool4.html">http://www.archsoc.com/kcas/researchschool4.html</a>

Non-tenured faculty, both part-time and full-time, fluctuates in number each year but currently totals 19 individuals. Of these, five hold non-tenured positions as Professors of the Practice of Architecture in the School along with one other in the School of Building Construction. Twelve of the 19 individuals are U.S. licensed architects. Additionally, there are four research faculty within the School.

Faculty resumes in the required format are provided in Part 4 of this report.

The matrices linking faculty expertise and credentials to courses taught during academic years 2012-2013 and 2011-2012 (reverse chronological order) are provided below:

TABLE 2: Matrix of Faculty Expertise by M.Arch. Curriculum, 2012-2013

Faculty Member	Title/ Status	Faculty Credentials	Summary of expertise, recent research, or experience	Semester	Course Number	Course Title	Required or Elective
AL-HADDAD, Tristan	Asst. Professor/ Tenure Track	M.Arch, Georgia Institute of Technology, 2006 B.S., Georgia Institute of Technology, 2001	Specializes in parametric systems, Digital fabrication, Materiality, Finite element analysis for conceptual design	FALL 2012 SPRING 2013 SPRING 2013	ARCH 8803 ARCH 6072 ARCH 8803	PLASTICITY + PORTLAND ARCH DESGN & RESRCH STUDIO II PHOTOVOLTAIC WORKSHOP	Elective Required Elective
ALKANOGLU, Volkan	Visiting Assistant Professor/ Non- Tenure Track	Master of Architectural Design, The Bartlett, University College London, United Kingdom, 2003 Diploma in Architecture, Peter Behrens School of Architecture, FH Düsseldorf, Germany, 2001	Has contributed to building and research in the field of architectural design and sustainable projects and received awards and recognition for visionary building designs, master plans, art installations, exhibition and product design and sustainable environments.	FALL 2012 FALL 2012 SPRING 2013 SPRING 2013	ARCH 6026 ARCH 8803 ARCH 6072 ARCH 8803	ARCH CORE STUDIO II INFAMOUS LINES ARCH DESGN & RESRCH STUDIO II MODELING & MEDIA III	Required Elective Required Required
ALLEN, Douglas	Professor Emeritus/ Retired	MLA, Graduate School of Design, Harvard University, 1976 BLA, School of Environmental Design, University of Georgia, 1971	Specializations include urban design; sustainable urban development; landscape history	FALL 2012 FALL 2012 SPRING 2013 SPRING 2013 SUMMER 2012	ARCH 8833 COA 6151 ARCH 4220 ARCH 6152 COA 6115	CONSTRUCTION TECHNOLOGY II HISTORY OF URBAN FORM CONSTRUCTION TECHNOLOGY II LANDSCAPE ARCHITECTURE ART + ARCH IN ITALY I	Required Required Required Elective
ANDREOTTI, Libero	Professor/ Tenured	Ph.D., Massachusetts Institute of Technology 1989 M.Arch., Georgia Institute of Technology, 1982	Research includes the cultures of cities; European modernism before & after WWII; situationist theory and practice; arch, technology and perception	FALL 2012 FALL 2012 SPRING 2013 SUMMER 2013	ARCH 8823 ARCH 8823 ARCH 6072 COA 6116	ARCHITECTURE AND SPECTACLE ARCHITECTURE THEORY II ARCH DESGN + RESRCH STUDIO II ART & ARCH IN ITALY II	Elective Required Required Elective
AUGENBROE, Godfried	Professor/ Tenured	MS CE, Delft University of Technology, 1975	Specializes in building performance concepts & simulation, control of smart systems, system monitoring & diagnostics, building process studies	FALL 2012 FALL 2012 SPRING 2013 SPRING 2013	COA 8685 COA 8833 COA 8833 COA 8833	BUILDING SIMULATION BUILDG SIM SEMINAR ZERO ENERGY HOUSE BUILDG SIM IN DESIGN PRACTICE	Elective Elective Elective Elective
BAERLECKEN, Daniel	Assit. Professor/	Diploma in Engineering ( Dipl Ing.), RWTH Aachen University,	Research focuses on the exploration of the	FALL 2012 SPRING 2013	ARCH 8803 ARCH 6072	BIOCONSTRUCTS ARCH DESGN + RESRCH STUDIO II	Elective Required

	Tenure Track	Department of Architecture, 1999- 2003 Pre- diploma in Engineering, RWTH Aachen University, Department of Architecture, 1997-1999	algorithmic potential of computing and of the resulting innovative architectural forms	SPRING 2013 SUMMER 2013	ARCH 8833 ARCH 6426	REVIT 3D MODELING	Elective Elective
BAFNA, Sonit	Assoc. Professor/ Tenured	PhD Georgia Institute of Technology, 2001 SMArchS Massachusetts Institute of Technology, 1993 GrDiplArch Center for Environmental Planning and Technology, 1991	Specializes in spatial & visual analysis of buildings; history and theory of modern arch; design studies; theories of interpretation, meaning, & aesthetics in arch	FALL 2012 Fall 2012 SPRING 2013 SUMMER 2013	ARCH 6171 COA 8863 ARCH 8803 ARCH 8843	DESIGN INTENTION IN ARCH FORMULATN OF INTENT IN ARCH SOCIAL PRACTICE OF ARCH DIAGRMS:TOOLS CNCPTL THNKG	Elective Elective Elective Elective
BELL, Brian	Professor of Practice/ Non- Tenure Track	M.ARCH, Harvard University, Graduate School of Design, 1997 B.ART in Architecture, University of Washington, Seattle, 1990	Director, BLDGS, Atlanta, GA; Registered architect, State of GA; NCARB Certification	FALL 2012 SPRING 2013	ARCH 6051 ARCH 6052	ARCH OPTIONS STUDIO I ARCH OPTIONS STUDIO II	Required Required
BONNER, Jennifer	Visiting Assistant Professor/ Non- Tenure Track	MArch, Harvard University, Graduate School of Design, 2009 BArch, Auburn University, 2002	Director of Studio Bonner with offices in Atlanta and Miami. Design and research interests include contested landscapes, material investigations, and typological complexities	FALL 2012 SPRING 2013	ARCH 6053 ARCH 8803	ARCH OPTIONS STUDIO III ROLE OF THE GUIDEBOOK	Required Elective
BRANUM, Cassie	Lecturer/ Non- Tenure Track	MS in Architecture, Georgia Institute of Technology, 2010 MCRP, Georgia Institute of Technology, 2010 M.Arch, Georgia Institute of Technology, 2008 Interior Design, Florida State University, 2004	Trained as an architect, city planner and urban designer. Focuses on large-scale urban design and planning projects in the Middle East and North America	FALL 2012	ARCH 8811	URBAN DESIGN MEDIA LAB	Elective
BROWN, Jason	Asst. Professor/ Tenure Track	2010, Ph.D. in Architecture, Georgia Institute of Technology 1998, MS in Mechanical Engineering, Georgia Institute of Technology 1995, Bachelor of Science in Engineering, Baylor University	Specializes in multi-domain building performance simulation; equation-based modeling; computational fluid dynamics	FALL 2012 SPRING 2013	ARCH 6242 ARCH 3231	BUILDING PHYSICS MODELING ENVIRONMENTAL SYSTEMS I	Elective Required
COTTLE, Mark	Assoc. Professor/ Tenured	Master of Design Studies in Contemporary Theory and Criticism,	Specializes in architecture design and practice; art	FALL 2012 SPRING 2013 SPRING 2013	ARCH 6051 ARCH 6350 ARCH 6052	ARCH OPTIONS STUDIO I THEORY OF ARCHITECTURE I ARCH OPTIONS STUDIO II	Required Required Required

DAGENHART, Richard	Assoc. Professor/ Retired	Harvard University, 1989 M.Arch, Rice University, 1988 Bachelor of Arts in English, Clemson University, 1979 Master of City Planning, University of Pennsylvania, 1972 Master of Architecture, University of Pennsylvania, 1972 Bachelor of Architecture (Honors), University of Arkansas, 1970 Bachelor of Arts (Anthropology), University of Arkansas, 1970	practice; color in modern and contemporary architecture; ornament and the detail  Specializes in contemporary urban design theories; design strategies and practices	SPRING 2013 SPRING 2013 SUMMER 2013 SUMMER 2013	ARCH 6154 ARCH 8801 ARCH 6153 ARCH 6155	INTRO TO URBAN DESIGN MODERN ARCH/MODERN CITY HIST AND THEORY MODERN CITY CONTEMP ARCH IN EUROPE	Elective Elective Elective Elective
DEBO, Thomas	Professor Emeritus/ Retired	Ph.D., Civil Engineering, Georgia Institute of Technology, 1975 Master of City Planning, Georgia Institute of Technology, 1972 B.S. in Civil Engineering, 1963	Specializes in environmental planning; urban stormwater planning	FALL 2012	ARCH 8803	STORMWATER MANAGEMENT	Elective
DIMITROPOUL OS, Harris	Assoc. Professor/ Tenured	Ph.D. Aristoteleion University, Greece, 1983 M.Arch, Georgia Institute of Technology, 1984 Undergraduate Professional Diploma in Architecture and Engineering, National Technical University, Greece, 1977 Ph.D. Aristoteleion University, Thessaloniki, Greece, 1983	Specializes in art, design, theory; esearch explores issues of representation and aesthetics, especially as they pertain to digital media	FALL 2012 FALL 2012	ARCH 6026 ARCH 6420	ARCHITECTURE CORE STUDIO II DESIGN COMPUTING	Required Required
DO, Ellen	Professor/ Tenured	Ph.D., Design Computing, Georgia Institute of Technology Master of Design Studies, Harvard University Bachelor of Architecture, National Cheng-Kung University, Taiwan	Research explores new modalities of communication, collaboration & coordination, as well as physical & virtual worlds that push boundaries of computing environs for design	FALL 2012 FALL 2012	ARCH 6271 COA 8823	HEALTHCARE DESGN OF FUTURE HEALTH ENVIRN OF THE FUTURE	Elective Elective
DOBBINS, Michael	Professor of Practice/ Non- Tenure Track	M.Arch, Yale University, 1965 B.A., Yale University, 1960	Research includes bridging disciplines in academia & practice; improvement of the regulatory frameworks that direct development of civic and private environ	FALL 2012	ARCH 6303	URBAN DESIGN POLICY	Elective

DUNCAN, Lane	Senior Lecturer/ Retired	Master of Design Studies, Harvard University, 1987 Bachelor of Architecture, Georgia Institute of Technology, 1968	Has received AIA Design Awards for constructed projects, unbuilt projects and design theory. Architectural work has been exhibited at the Chicago Architectural Foundation, the INTERBUILD Exposition in Birmingham, England and other venues.	FALL 2012	ARCH 4414	REPRESENT IN WATERCOLOR	Elective
DUNHAM- JONES, Ellen	Professor/ Tenured	A.B., Architecture and Planning, Princeton University, 1980 M.Arch, Princeton University, 1983	Specializes in sustainable urban design; suburban redevelopment; new urbanism and smart growth; health and urban design; contemporary arch theory	FALL 2012 SPRING 2013	ARCH 6151 COA 6120	THEORIES OF URBAN DESIGN RETROFITTING SUBURBIA	Elective Elective
EASTMAN, Charles	Professor/ Tenured	B.Arch., UC Berkeley, 1964 MS Arch., UC. , 1966	Specializes in building information modeling (BIM); solids and parametric modeling; engineering databases and product models and interoperability	FALL 2012 SPRING 2013 SPRING 2013	COA 8672 ARCH 6503 COA 8690	DESIGN COMPUTATION BIM APPLICATIONS BUILDING MODELS	Elective Elective Elective
ECONOMOU, Athanassios	Professor/ Tenured	Diploma Arch (5 yrs), National Technical University of Athens University, 1990 M. Arch, University of Southern California (USC), 1992 Ph.D. Arch, University of California (UCLA), 1998	Specializes in shape grammars; parametric design; computer aided design; discrete mathematics and design (combinatorics, symmetry, proportion)	FALL 2012 FALL 2012 SPRING 2013 SUMMER 2013	ARCH 6053 ARCH 6508 ARCH 6501 COA 6114	ARCH OPTIONS STUDIO III SHAPE GRAMMARS ANALOG-DIGITAL DESIGN COMPUTING ARCHITECTURE IN GREECE	Required Elective Elective Elective
FLOWERS, Benjamin	Assoc. Professor/ Tenured	BA, Wesleyan University, 1996 Ph.D., University of Minnesota, 2003	Specializes in architectural history and theory, urban history, skyscrapers, football (soccer) stadiums, the political economy and cultural significance of architecture	FALL 2012 FALL 2012 FALL 2012 SPRING 2013	ARCH 6137 ARCH 6160 ARCH 8831 ARCH 6106	POSTWAR ARCH AND URBANISM RACE AND SPACE GRAY MATTERS HISTORY OF ARCHITECTURE II	Elective Elective Elective Required
GAMBLE, Michael	Assoc. Professor/ Tenured	Auburn University, Bachelor of Architecture May 1989 Burckhardt Award - Graduated first in the design class Georgia Institute of Technology, Master of Architecture May 1991	Specializes in houses/housing; urban design; construction technology and fabrication; low energy housing	FALL 2012 FALL 2013 SPRING 2013	ARCH 6052 ARCH 8843 ARCH 8833	ARCH OPTIONS STUDIO II PROFESSIONAL PRACTICE II ZERO ENERGY HOUSE	Required Required Elective

GENTRY, Russell	Assoc. Professor/ Tenured	Harvard University, Master of Design Studies Degree awarded with Distinction June 1996 B.S., Civil Engineering, Georgia Institute of Technology, 1985 M.S., Civil Engineering (Structures), Georgia Institute of Technology, 1986	Specializes in structural materials, systems, and fabrications; fiber reinforced composites; engineered wood; composites;	FALL 2012 FALL 2012 FALL 2012 SPRING 2013 SPRING 2013	ARCH 4251 ARCH 6226 ARCH 6506 ARCH 4252 COA 8833	STRUCTURES I GREEN CONSTRUCTION MATERIALS/FABRICATIONS STRUCTURES II ZERO ENERGY HOUSE	Required Elective Elective Required Elective
GOKMEN, Sabri	Teaching Assistant	Ph.D., Civil Engineering (Structures), University of Michigan, 1992 B.Arch., Middle East Technical University, 2007 M.S. in Digital Design and Fabrication, Georgia Institute of Technology, 2010	environmental impact of construction  Specializes in arch, interiors, landscape, urban planning, development, photography, graphic design/signage, furniture design & computer programming	SPRING 2013	ARCH 8833	REVIT	Elective
GORDON, Judy	Senior Lecturer/ Non- Tenure Track	Master of Architecture, Columbia University, New York, New York, 1986 Bachelor of Environmental Design, Miami University, Oxford, Ohio, 1979 Diploma Unit 8 (attended), The Architectural Association, London, England, UK, 1978	Specializes in tectonics, materials, and making, with an emphasis on critical thinking; experience in historic preservation, interior arch & arch projects	FALL 2012 SPRING 2013	ARCH 6051 ARCH 6027	ARCH OPTIONS STUDIO I ARCH CORE III STUDIO	Required Required
GREEN, David	Professor of Practice/ Non- Tenure Track	B.Science, Georgia Institute of Technology, 1987 M.Arch., Georgia Institute of Technology, 1991	Focuses on develpmnt within urban framework, sustainability, public policy implementn, criteria for implementn of develpmnt controls	FALL 2012 SPRING 2013 SPRING 2013	ARCH 6051 ARCH 6052 ARCH 8843	ARCH OPTIONS STUDIO I ARCH OPTIONS STUDIO II LEGAL FRMWRKS & BUILT ENVIRN	Required Required Elective
HARRISION, Timothy	Lecturer/ Non- Tenure Track	B.S.E., Structural Engineering, Duke University, 1989 (Minor: Architectural History) M.Arch., Harvard University, 1994	Specializes in sustainable design history and theory; methods in architectural education; leadership and ethics in architectural practice	FALL 2012 SPRING 2013 SPRING 2013	ARCH 3241 ARCH 6027 ARCH 3241	FUNDAMENTALS OF STRUCTURES ARCHITECTURE CORE III STUDIO FUNDAMENTALS OF STRUCTURES	Required Required Required
HAYMAKER, John	Assistant Professor/ Tenure Track	Ph.D., Civil Engineering, Stanford University, 2004 SMarchS, Design Computation, Massachusettes Institute of	Specializations include collaborative process modeling/managmnt, building info modeling,	SPRING 2013	ARCH 8833	MULTIDSCPL DSGN ANLYS & OPTM	Elective

		Technology, 2000 M.Arch, University of Illinois-Chicago, 1996	sustainable design & construction of buildings & infrastructure				
HOLLENGREE, Laura	Assoc. Professor/ Tenure Track	A.B., Princeton University, 1985 M.A., University of California, Berkeley, 1989 Ph.D., University of California, Berkeley, 1998	Specializes in medieval art, arch & urbanism; medieval cathedrals, cathedral decoration; museums and cultures of display; history, theory of urban public space	FALL 2012 SPRING 2013 SPRING 2013	ARCH 6105 ARCH 6143 ARCH 8823	ARCHITECTURE HISTORY I MUSEUMS,HIST,THRY & DESGN LANDSCAPES OF WAR	Required Elective Elective
JOHNSTON, George	Professor/ Tenured	Doctor of Philosophy Emory University. American Studies/Cultural History. 2006 Master of Architecture Rice University,1984 Bachelor of Architecture Mississippi State University,1979	Research interrogates social, historcl & cultural implications of making arch in American context; projects explore how arch perpetuates & challenges socio-cultural conventions	SPRING 2013	ARCH 6350	THEORY OF ARCHITECTURE I	Required
KHAN, Sabir	Assoc. Professor/ Tenured	M.ARCH. Rice University, 1987 BA. Princeton University, 1983	Partner in the firm Cottle Khan Architects, with work in the United States, India, and Pakistan	FALL 2012	ARCH 8803	BELTLINE WORKSHOP	Elective
LEBLANC, Jude	Assoc. Professor/ Tenured	B.Arch., University of Houston, 1980 M. Arch., Harvard University, 1982	Research interests include the relation of architecture to painting and film. Received a GTF grant from Georgia Tech for "LessLow Energy Furniture Design"	FALL 2012 SPRING 2013 SPRING 2013	ARCH 6229 ARCH 6052 ARCH 8803	CONSTRUCTION TECHNOLOGY I ARCH OPTIONS STUDIO II FORM AND NARRATIVE	Required Required Elective
PARKER, Ennis	Professor of Practice/ Non- Tenure Track	MBA, Real Estate and Urban Affairs, Georgia Institute of Technology, 1965 Bachelor of Architecture, Georgia Institute of Technology, 1965	Specializations include Construction Program Management, Professional Practice, Industry Outreach	FALL 2012 SPRING 2013	ARCH 8843 ARCH 8843	PROFESSIONAL PRACTICE II PROFESSIONAL PRACTICE I	Required Required
PEARSALL, Frederick	Senior Lecturer/ Non- Tenure Track	A.B. Art History cum laude, University of North Carolina-Chapel Hill, 1973 M.Arch Program, University of Pennsylvania, Philadelphia, PA 1973-76	Specializes in sustainable habitat integration + ecosocial performance; environ conception, perception, interaction; public space, affordable housing	FALL 2012	ARCH 6051	ARCH OPTIONS STUDIO I	Required
PEPONIS, John	Professor/ Tenured	Ph.D. 1983 University College, University of London. Architecture M.Sc. 1977 University College, University of London. Architecture	Specializes in spatial analysis; space syntax; urban design; design logic; spatial cognition; work	FALL 2012	ARCH 8823	ARCHITECTURE THEORY II	Required

		B.Sc. 1976 University College, University of London. Architecture	environments; museums				
RIETHER, Gernot	Assist. Professor/ Tenure Track	Dipl. Ing., University of Innsbruck, 1998 M.S. AAD Columbia University, 2000	Researches digital design technologies, testing potential beneficial roles for emerging digital tools to improve arch's relationship to natural & built environs	FALL 2012 FALL 2012	ARCH 4420 ARCH 6420	INTRO DESGN COMPUTG + RHINO DESIGN COMPUTING	Elective Elective
ROMM, Stuart	Professor of Practice/ Non- Tenure Track	B.Arch., Cornell University, 1974	Multidisciplinary practices focused on civic & educational buildgs, advanced automotive facilities & urban social housing	FALL 2012 SPRING 2013	ARCH 8843 ARCH 8843	PROFESSIONAL PRACTICE II PROFESSIONAL PRACTICE I	Required Required
RUDOLPH, Charles	Assoc. Professor/ Tenured	Master of Science/Building Design Columbia University, New York, New York May 1989 Bachelor of Architecture Rice University, Houston, Texas May 1983 Bachelor of Arts/Art and Art History Rice University, Houston, Texas May 1981	Investigates the role of representation (analogical and digital) in construction technology pedagogy, particularly with respect to the industry goals of multidisciplinary integration	FALL 2012 FALL 2012 FALL 2012 SPRING 2013 SPRING 2013 SUMMER 2013 SUMMER 2013	ARCH 8833 ARCH 8803 ARCH 6229 ARCH 4220 ARCH 6072 ARCH 6024 ARCH 6470	CONSTRCTION TECHNOLOGY II NEW YORK SEMINAR CONSTRUCTION TECHNOLOGY I CONSTRUCTION TECHNOLOGY II ARCH DESGN + RESRCH STUDIO II ARCHITECTURE CORE I STUDIO ARCH MODELING AND MEDIA I	Required Elective Required Required Required Required Required
SAMI, Vikram	Lecturer/ Non- Tenure Track	GD.Arch., Academy of Architecture, Mumbai, 1997 M.S. Bldg Des., Arizona State University, 2003	Daylight & energy analyst; performs energy & daylighting simulations to help create high- performance, energy- efficient bldg designs	FALL 2012	ARCH 4231	ENVIRONMENTAL SYSTEMS II	Required
SANFORD, Jon	Associate Professor/ Tenured	M.Arch, Georgia Institute of Technology B.S.Arch, Georgia Institute of Technology	Engaged in accessible & universal design, involved in research & development related to accessibility & usability of products, technologies & environs	FALL 2012	ARCH 8843	UNIVERSAL DESIGN	Elective
SHARP, Leslie	Assist. Vice- Provost	Ph.D., History, Technology and Society, Georgia Institute of Technology, 2004 MA, Historic Preservation, Middle Tennessee State University, 1993 B.A., University of Georgia, 1989	Specializes in Historic Preservation, History of Technology, Women's History, Architectural History, Race and Gender	SPRING 2013	ARCH 6107	INTRO HISTORIC PRESERVATION	Elective
SIMMONS,	Professor	Professinal Bachelor of	A leading advocate for	FALL 2012	ARCH 8803	NEW YORK SEMINAR	Elective

Marc	of Practice & Ventulett Chair/Non -Tenure Track	Architecture, University of Waterloo, Canada Bachelor of Environmental Studies, University of Waterloo, Canada	innovative & critical practice; produced seminal works in contemporary arch, including China Central Television Headquarters with OMA	SPRING 2013	ARCH 6072	ARCH DESGN + RESRCH STUDIO II	Required
SPUYBROEK, Lars	Professor/ Tenured	M.S., cum laude, Technical University, Dept. of Architecture, Delft, 1989	Researches relationshp betwn art,arch & computg; internat'l recognitn for Water Pavilion, 1st bldg fully incorporatg new media & topological, continuous geometry	FALL 2012 FALL 2012	ARCH 6053 ARCH 8833	ARCH OPTIONS STUDIO III MOSAIC + FABRIC	Required Elective
SWARTS, Matthew	Research Scientist /Non- Tenure Track	Ph.D. Candidate, School of Architecture, Georgia Institute of Technology, 2014 M.S., School of Architecture, 2011 B.S. Arch, Georgia Institute of Technology, 2006	3D modeling & visualization experience ranging from photorealistic stills & classical animations to realtime analysis & video game develpmnt	FALL 2012	ARCH 6502	DESIGN SCRIPTING	Elective
YANG, Perry	Assoc. Professor/ Tenure Track	Ph.D., Building and Planning, National Taiwan University M.S., Urban Studies and Planning, MIT M.Sc. Building and Planning, National Taiwan University	Perry Yang was chief planner for the 2009 World Games Park which opened July 16 in Kaohsiung, Taiwan	FALL 2012	ARCH 8823	SITE PLANNING	Elective
YOCUM, David	Professor of Practice/ Non- Tenure Track	M.Arch., Harvard University, 1997 B.A., Dartmouth College, 1992	Trains students in critical design thinking with particular emphasis on the challenges of architecture in the public realm	FALL 2012 SPRING 2013	ARCH 6051 ARCH 6052	ARCH OPTIONS STUDIO I ARCH OPTIONS STUDIO II	Elective Elective
ZIMRING, Craig	Professor/ Tenured	Ph.D., Environmental Psychology, Univ. of Mass at Amherst, 1978 M.S., Psychology, Univ. of Mass at Amherst, 1978 B.S., Psychology, Univ. of Michigan, 1973	Environmental psychologist & professor of arch; researches relationships between physical environ of healthcare & other facilities, human satisfaction, performance & behavior	FALL 2012 SPRING 2013	ARCH 6271 COA 8823	HEALTHCARE DESGN OF FUTURE ARCHITECTURE AND BEHAVIOR	Elective Elective

TABLE 3: Matrix of Faculty Expertise by M.Arch. Curriculum, 2011-2012

Faculty Member	Title/Sta tus	Faculty Credentials	Summary of expertise, recent research, or experience	Semester	Course Number	Course Title	Required or Elective
AL-HADDAD, Tristan	Asst. Professor/ Tenure Track	M.Arch, Georgia Institute of Technology, 2006 B.S., Georgia Institute of Technology, 2001	Specializes in parametric systems, Digital fabrication, Materiality, Finite element analysis for conceptual design	FALL 2011 FALL 2011	ARCH 6053 ARCH 6505	ARCH OPTIONS STUDIO III GEOMETRIC CONSTRUCTS	Required Elective
ALLEN, Douglas	Professor Emeritus/ Retired	MLA, Graduate School of Design, Harvard University, 1976 BLA, School of Environmental Design, University of Georgia, 1971	Specializations include urban design; sustainable urban development; landscape history	FALL 2011 SPRING 2012 SPRING 2012 SUMMER 2012 SUMMER 2012	COA 6151 ARCH 6152 ARCH 4220 COA 6115 COA 8823	HISTORY OF URBAN FORM LANDSCAPE ARCHITECTURE CONSTRUCTION TECHNOLOGY II ART + ARCH IN ITALY I ARCH IN GREECE	Required Elective Required Elective
ANDREOTTI, Libero	Professor/ Tenured	Ph.D., Massachusetts Institute of Technology 1989 M.Arch., Georgia Institute of Technology, 1982	Research includes the cultures of cities; European modernism before and after WWII; Situationist theory and practice; architecture, technology and perception	FALL 2011 SPRING 2012 SPRING 2012	ARCH 8823 ARCH 8806 ARCH 6132	ARCHITECTURE AND SPECTACLE MASTERS PROJECT STUDIO THEORY & CRITICISM II	Elective Required Required
AUGENBROE, Godfried	Professor/ Tenured	MS CE, Delft University of Technology, 1975	Specializes in building performance concepts & simulation, control of smart systems, system monitoring & diagnostics, building process studies	SPRING 2012 SPRING 2012	COA 8833 COA 8833	BUILDG SIM IN DESIGN PRACT ZERO ENERGY HOUSE	Elective Elective
BAERLECKEN, Daniel	Assit. Professor/ Tenure Track	Diploma in Engineering ( Dipl Ing.), RWTH Aachen University, Department of Architecture, 1999- 2003 Pre- diploma in Engineering, RWTH Aachen University, Department of Architecture, 1997-1999	Research focuses on the exploration of the algorithmic potential of computing and of the resulting innovative architectural forms	SPRING 2012 SUMMER 2012	ARCH 8803 ARCH 6426	DIGITAL WORKSHOP 3D MODELING	Elective Elective
BELL, Brian	Lecturer/ Non- Tenure Track	M.ARCH, Harvard University, Graduate School of Design, 1997 B.ART in Architecture, University of Washington, Seattle, 1990	Director, BLDGS, Atlanta, GA; Registered architect, State of GA; NCARB Certification	FALL 2011	ARCH 6053	ARCH OPTIONS STUDIO III	Required
BAFNA, Sonit	Assoc. Professor/	PhD, Georgia Institute of Technology, 2001	Specializes in spatial & visual analysis of buildings; history	SPRING 2012 SPRING 2012	ARCH 8803 COA 8625	DIAGRAMS: CONCEPTUAL THNKG THEORIES OF INQUIRY	Elective Elective

	Tenured	SMArchS, Massachusetts Institute of Technology, 1993 GrDiplArch, Center for Environmental Planning and Technology, 1991	and theory of modern arch; design studies; theories of interpretation, meaning, & aesthetics in arch	SUMMER 2012	ARCH 8843	SOCIAL PRACTICE OF ARCH	Elective
BERNAL, Marcelo	Teaching Assistant/ Non- Tenure TRack	Ph.D. Candidate, School of Architecture, Georgia Institute of Technology, August 2007-Present M.Arch, Pontificia Universidad Catolica de Valparaiso, 1996	Research area in knowledge- based models for design automation. Expertise in design methodologies, a wide range of CAD modelers, BIM tools, and programming languages	SPRING 2012	ARCH 8833	INTRO DESIGN COMPUTG + RHINO	Elective
BRANUM, Cassie)	Lecturer/ Non- Tenure Track	MS in Architecture, Georgia Institute of Technology, 2010 MCRP, Georgia Institute of Technology, 2010 M.Arch, Georgia Institute of Technology, 2008 Interior Design, Florida State University, 2004	Trained as an architect, city planner and urban designer. Focuses on large-scale urban design and planning projects in the Middle East and North America.	FALL 2011	ARCH 8811	URBAN DESIGN MEDIA LAB	Elective
BROWN, Jason	Asst. Professor/ Tenure Track	2010, Ph.D. in Architecture, Georgia Institute of Technology 1998, MS in Mechanical Engineering, Georgia Institute of Technology 1995, Bachelor of Science in Engineering, Baylor University	Specializes in multi-domain building performance simulation; equation-based modeling; computational fluid dynamics	FALL 2011 FALL 2011 SPRING 2012	ARCH 4231 ARCH 8833 ARCH 3231	ENVIRONMENTAL SYSTEMS II BUILDING PHYSICS ENVIRONMENTAL SYSTEMS I	Required Elective Required
CARPO, Mario	Professor/ Tenured	D.Arch., University of Florence, 1983 Ph.D., European University Institute	Specializes in history of arch theory; work focuses on the relationship between arch design & cultural technologies, past & present	SPRING 2012 SPRING 2012 SUMMER 2012	COA 8853 ARCH 6501 COA 8823	ARCH DESIGN INFO TECHNOLOGY ANALG-DIGITL DESGN COMPUTNG ARCH IN GREECE	Elective Elective Elective
COTTLE, Mark	Assoc. Professor/ Tenured	Master of Design Studies in Contemporary Theory and Criticism, Harvard University, 1989 M.Arch, Rice University, 1988 Bachelor of Arts in English, Clemson University, 1979	Specializes in architecture design and practice; art practice; color in modern and contemporary architecture; ornament and the detail	FALL 2011 FALL 2011 SPRING 2012	ARCH 6051 ARCH 6225 ARCH 8806	ARCH OPTIONS STUDIO I REINVESTIGATING DETAILS MASTERS PROJECT STUDIO	Required Elective Required
DAGENHART, Richard	Assoc. Professor/ Tenured	Master of City Planning, University of Pennsylvania, 1972 Master of Architecture, University of Pennsylvania, 1972	Specializes in contemporary urban design theories; design strategies and practices	FALL 2011 FALL 2011 SPRING 2012 SPRING 2012	ARCH 6053 ARCH 6151 ARCH 6154 ARCH 8801	ARCH OPTIONS STUDIO III THEORIES OF URBAN DESIGN INTRO TO URBAN DESIGN MODERN ARCH/MODERN CITY	Required Elective Elective Elective

		Bachelor of Architecture (Honors), University of Arkansas, 1970 Bachelor of Arts (Anthropology), University of Arkansas, 1970		SUMMER 2012 SUMMER 2012	ARCH 7045 ARCH 8813	URBAN DESIGN WORKSHOP SHANGHAI WORKSHOP	Elective Elective
DEBO, Thomas	Professor Emeritus/ Retired	Ph.D., Civil Engineering, Georgia Institute of Technology, 1975 Master of City Planning, Georgia Institute of Technology, 1972 B.S. in Civil Engineering, 1963	Specializes in environmental planning; urban stormwater planning	SPRING 2012	ARCH 8803	STORMWATER MANAGEMENT	Elective
DIMITROPOUL OS, Harris	Assoc. Professor/ Tenured	Ph.D. Aristoteleion University, Greece, 1983 M.Arch, Georgia Institute of Technology, 1984 Undergraduate Professional Diploma in Architecture and Engineering, National Technical University, Greece, 1977 Ph.D. Aristoteleion University, Thessaloniki, Greece, 1983	Specializes in art, design, theory. Research explores issues of representation and aesthetics, especially as they pertain to digital media	FALL 2011 FALL 2011 SPRING 2012	ARCH 8803 ARCH 4022 ARCH 8803	DIGITAL WORKSHOP ARCH CORE STUDIO II EMBODIMENT & DIGITAL REALM	Elective Required Elective
DO, Ellen	Assoc. Professor/ Tenured	Ph.D., Design Computing, Georgia Institute of Technology Master of Design Studies, Harvard University Bachelor of Architectur, National Cheng-Kung University, Taiwan	Research explores new modalities of communication, collaboration & coordination, as well as physical & virtual worlds that push boundaries of computing environs for design	FALL 2011 SPRING 2012 SPRING 2012 SPRING 2012	COA 8823 ARCH 6509 COA 6763 COA 8843	HEALTHCARE ENVIRON OF FUTURE COMP CREATIVITY & DESGN COGN DESIGN OF ENVIRONMENTS CREATIVITY & DESIGN COGNITION	Elective Elective Elective Elective
DOBBINS, Michael	Professor of Practice/ Non- Tenure Track	M.Arch, Yale University, 1965 B.A., Yale University, 1960	Research includes bridging disciplines in academia & practice; improvement of the regulatory frameworks that direct development of civic and private environ	FALL 2011	ARCH 6303	URBAN DESIGN POLICY	Elective
DUNCAN, Lane	Senior Lecturer/ Retired	Master of Design Studies, Harvard University, 1987 Bachelor of Architecture, Georgia Institute of Technology, 1968	Has received AIA Design Awards for constructed projects, unbuilt projects and design theory. Architectural work has been exhibited at the Chicago Architectural Foundation,	FALL 2011 SUMMER 2012	ARCH 4414 ARCH 4411	REPRESENT IN WATERCOLOR INTRO TO VISUAL ARTS	Elective Elective

			the INTERBUILD Exposition in Birmingham, England and other venues.				
DUNHAM- JONES, Ellen	Professor/ Tenured	A.B., Architecture and Planning, Princeton University, 1980 M.Arch, Princeton University, 1983	Specializes in sustainable urban design; suburban redevelopment; new urbanism and smart growth; health and urban design; contemporary arch theory	FALL 2011 FALL 2011 SPRING 2012	ARCH 6053 ARCH 6151 COA 6120	ARCH OPTIONS STUDIO III THEORIES OF URBAN DESIGN RETROFITTING SUBURBIA	Required Elective Elective
DUSSEAULT, Ruth	Visiting Assistant Professor/ Non- Tenure Track	MFA, Fine Art, Florida State University	Lectured on photography & urban form; work at Atlantic Steel mill site includes photographs before & during demolitn, envirnmtl remediatn & infrastrcture constructn	FALL 2011 SPRING 2012	ARCH 4415 ARCH 4415	PHOTOGRAPHY I PHOTOGRAPHY I	Elective Elective
EASTMAN, Charles	Professor/ Tenured	B.Arch., UC Berkeley, 1964 MS Arch., UC. , 1966	Specializes in building information modeling (BIM); solids and parametric modeling; engineering databases and product models and interoperability	FALL 2011 SPRING 2012 SPRING 2012	COA 8676 ARCH 6503 COA 8690	DESIGN ENGINEERING DATABASES BIM APPLICATIONS BUILDING MODELS	Elective Elective Elective
ECONOMOU, Athanassios	Professor/ Tenured	Diploma Arch (5 yrs), National Technical University of Athens University, 1990 M. Arch, University of Southern California (USC), 1992 Ph.D. Arch, University of California (UCLA), 1998	Specializes in shape grammars; parametric design; computer aided design; discrete mathematics and design (combinatorics, symmetry, proportion)	FALL 2011 FALL 2011 SPRING 2012 SPRING 2012 SPRING 2012 SUMMER 2012	ARCH 6051 ARCH 6508 ARCH 6127 ARCH 8806 ARCH 6501 COA 8823	ARCH OPTIONS STUDIO I SHAPE GRAMMARS INTRO TO ARCH AND ART IN ITALY MASTERS PROJECT STUDIO ANALOG-DIG DESGN COMPUTG ARCH IN GREECE	Required Elective Elective Required Elective Elective
FARROW, Robert	Lecturer/ Non- Tenure Track	B.Arch., Auburn University, 1974	Composed hospitls in Midwest for major healthcare design firm; designed corporate & retail bldgs; part of team who designed master plan for Natve Americn health servcs in Alaska	FALL 2011 SPRING 2012	ARCH 8803 ARCH 8806	HEALTHCARE DESIGN DATELINE MASTERS PROJECT STUDIO	Elective Required
FLOWERS, Benjamin	Assoc. Professor/ Tenured	BA, Wesleyan University, 1996 Ph.D., University of Minnesota, 2003	Specializes in architectural history and theory, urban history, skyscrapers, football (soccer) stadiums, the political economy and	FALL 2011 FALL 2011 FALL 2011 SPRING 2012 SPRING 2012	ARCH 6137 ARCH 6160 COA 8831 ARCH 4106 ARCH 8801	POSTWAR ARCH AND URBANISM RACE AND SPACE GRAY MATTERS HISTORY OF ARCHITECTURE II GRAY MATTERS	Elective Elective Elective Required Elective

			cultural significance of architecture				
GAMBLE, Michael	Assoc. Professor/ Tenured	Auburn University, Bachelor of Architecture May 1989 Burckhardt Award - Graduated first in the design class Georgia Institute of Technology, Master of Architecture May 1991 Harvard University, Master of Design Studies Degree awarded with Distinction June 1996	Specializes in houses/housing; urban design; construction technology and fabrication; low energy housing	FALL 2011 FALL 2011 SPRING 2012 SPRING 2012	ARCH 6053 ARCH 8803 COA 8833 ARCH 6052	ARCH OPTIONS STUDIO III CONT. DESIGN AND RESEARCH PRACTICE ZERO ENERGY HOUSE ARCHITECTURE OPTIONS STUDIO II	Required Elective Elective Required
GENTRY, T. Russel	Assoc. Professor/ Tenured	B.S., Civil Engineering, Georgia Institute of Technology, 1985 M.S., Civil Engineering (Structures), Georgia Institute of Technology, 1986 Ph.D., Civil Engineering (Structures), University of Michigan, 1992	Specializes in structural materials, systems, and fabrications; fiber reinforced composites; engineered wood; composites; environmental impact of construction	FALL 2011 FALL 2011 FALL 2011 SPRING 2012 SPRING 2012	ARCH 4251 ARCH 6226 ARCH 6506 COA 8833 ARCH 4252	STRUCTURES I GREEN CONSTRUCTION MATERIALS/FABRICATIONS ZERO ENERGY HOUSE STRUCTURES II	Required Elective Elective Elective Required
GOODMAN, Joseph	Senior Research Engineer/ Non- Tenure Track	M.S., Mechanicl Engineering, Georgia Institute of Technology, 2006 B.S., Mechanical Engineering, University of Southern California, 2003	Awarded grant for proposal on advanced solar technology through the Department of Energy's (DOE) SunShot Initiative	SPRING 2012	ARCH 8833	SOLAR SEMINAR	Elective
GORDON, Judith	Senior Lecturer/ Non- Tenure Track	Master of Architecture, Columbia University, New York, New York, 1986 Bachelor of Environmental Design, Miami University, Oxford, Ohio, 1979 Diploma Unit 8 (attended), The Architectural Association, London, England, UK, 1978	Specializes in tectonics, materials, and making, with an emphasis on critical thinking; experience in historic preservation, interior arch & arch projects	SPRING 2012	ARCH 4023	ARCHITECTURE CORE STUDIO III	Required
GRAVEL, Karen	Lecturer/ Non- Tenure Track	M.Arch, Georgia Institute of Technology, 1999 B.A., History, Centre College, 1993	Senior Associate at Lord Aeck Sargent. Founding advisor of student organization, Women in Architecture @GA Tech	FALL 2011	ARCH 8803	WOMEN IN ARCHITECTURE	Elective
GREEN, David	Professor of Practice/ Non-	B.Science, Georgia Institute of Technology, 1987 M.Arch., Georgia Institute of	Focuses on develpmnt within urban framework, sustainability, public policy	FALL 2011 Spring 2012 Spring 2012	ARCH 6051 ARCH 6052 ARCH 8843	ARCH OPTIONS STUDIO I ARCHITECTURE OPTIONS STUDIO II LEGAL FRAMEWORKS AND THE BUILT ENVIRONMENT	Required Required Elective

	Tenure Track	Technology, 1991	implementn, criteria for implementn of develpmnt controls				
HARRISION, Timothy	Lecturer/ Non- Tenure Track	B.S.E., Structural Engineering, Duke University, 1989 (Minor: Architectural History) M.Arch., Harvard University, 1994	Specializes in sustainable design history and theory; methods in architectural education; leadership and ethics in architectural practice	FALL 2011 SPRING 2012 SPRING 2012	ARCH 3241 ARCH 4023 ARCH 3241	FUNDAMENTALS OF STRUCTURES ARCHITECTURE CORE STUDIO III FUNDAMENTALS OF STRUCTURES	Required Required Required
HOLLENGREE, Laura	Assoc. Professor/ Tenure Track	A.B., Princeton University, 1985 M.A., University of California, Berkeley, 1989 Ph.D., University of California, Berkeley, 1998	Specializes in medieval art, arch & urbanism; medieval cathedrals, cathedral decoration; museums and cultures of display; history, theory of urban public space	FALL 2011 SPRING 2012 SPRING 2012 SUMMER 2012	ARCH 4105 ARCH 8823 ARCH 8823 COA 6116	HISTORY OF ARCHITECTURE I HOW DO WE DWELL? MEDIEVAL ARCHITECTURE ART + ARCH IN ITALY II	Required Elective Elective Elective
JOHNSTON, George	Professor/ Tenured	Doctor of Philosophy Emory University. American Studies/Cultural History. 2006 Master of Architecture Rice University,1984 Bachelor of Architecture Mississippi State University,1979	Research interrogates social, historcl & cultural implications of making arch in American context; projects explore how arch perpetuates & challenges socio-cultural conventions	FALL 2011	ARCH 6131	THEORY & CRITICISM I	Required
LEBLANC, Jude	Assoc. Professor/ Tenured	B.Arch., University of Houston, 1980 M. Arch., Harvard University, 1982	Research interests include the relation of architecture to painting and film. Received a GTF grant from Georgia Tech for "LessLow Energy Furniture Design"	FALL 2011 SPRING 2012 SPRING 2012 SUMMER 2012	ARCH 4219 ARCH 6052 ARCH 6417 ARCH 4411	CONSTRUCTION TECHNOLOGY I ARCHITECTURE OPTIONS STUDIO II FURNISHING BUILDINGS INTRO TO VISUAL ARTS	Required Required Elective Required
LESNIEWSKI, Anatoliusz	Senior Academic Profession al/Non- Tenure TRack	Ph.D., Electrical Engineering, Technical University of Warsaw M.S., Electrical Engineering, Technical University of Warsaw	Specializes in digital technique, control systems, computer programming, computer aided design & computer renderings & animation	FALL 2011	ARCH 6426	3D MODELING	Elective
MAING, Minjung	Assit.Prof essor/Ten ure Track	M.Arch, Massachusettes Institute of Technology M.S., Engineering, Stanford University B.A. & BSc, University of Pennsylvania	Experience in arch, structrl enginr & bldg techn develping specializatn in bldg envelope performnce; integratn of desgn, testing & constructn processes toward holistic desgn	SPRING 2012 SPRING2012	ARCH 6052 ARCH 8803	ARCHITECTURE OPTIONS STUDIO II BUILDING FACADES	Required Elective
MALLGRAVE,	Adjunct	Ph.D. Architecture, University of	Has authored more than a	SPRING 2012	ARCH 8823	ARCH IN THE AGE OF BIOLOGY	Elective

Harry	Professor/ Non- Tenure TRack	Pennsylvania	dozen books, including Theory and Design in the Age of Biology: Reflections on the 'Art' of Building				
PARKER, Ennis	Professor of Practice/ Non- Tenure Track	MBA, Real Estate and Urban Affairs, Georgia Institute of Technology, 1965 Bachelor of Architecture, Georgia Institute of Technology, 1965	Specializations include Construction Program Management, Professional Practice, Industry Outreach	SPRING 2012	ARCH 4315	PROFESSIONAL PRACTICE	Required
PEARSALL, Frederick	Senior Lecturer/ Non- Tenure Track	A.B. Art History cum laude, University of North Carolina-Chapel Hill, 1973 M.Arch Program, University of Pennsylvania, Philadelphia, PA 1973-76	Specializes in sustainable habitat integration + ecosocial performance; environ conception, perception, interaction; public space, affordable housing	FALL 2011 SPRING 2012	ARCH 6051 ARCH 8803	ARCH OPTIONS STUDIO I VISUAL PRACTICE	Required Elective
PEPONIS, John	Professor/ Tenured	Ph.D. 1983 University College, University of London. Architecture M.Sc. 1977 University College, University of London. Architecture B.Sc. 1976 University College, University of London. Architecture	Specializes in spatial analysis; space syntax; urban design; design logic; spatial cognition; work environments; museums	FALL 2011 FALL 2011 SPRING 2012	COA 8813 ARCH 6131 COA 8630	SPACE SYNTAX/URBAN SPACE THEORY & CRITICISM I ARCH SPACE AND CULTURE	Elective Required Elective
PYBURN, Jack	Lecturer/ Non- Tenure TRack	Master of Architecture and Urban Design, Washington University-St. Louis, 1973 Bachelor of Architecture, Texas A&M University, 1969	Historic preservation architect with awards from professional landscape architecture, architecture, interiors and planning organizations	FALL 2011	ARCH 6053	ARCH OPTIONS STUDIO III	Required
RIETHER, Gernot	Assist. Professor/ Tenure Track	Dipl. Ing., University of Innsbruck, 1998 M.S. AAD Columbia University, 2000	Specializations include generative design strategies and digital fabrication with a focus on environmental friendly building systems	FALL 2011	ARCH 8803	DESIGN WKSHOP II - INTRO TO DESIGN COMPUTATION	Elective
ROMM, Stuart	Senior Lecturer/ Non- Tenure Track	B.Arch., Cornell University, 1974	Multidisciplinary practices focused on civic & educational buildgs, advanced automotive facilities & urban social housing	FALL 2011 FALL 2011 SPRING 2012	ARCH 4315 ARCH 6051 ARCH 4315	PROFESSIONAL PRACTICE ARCH OPTIONS STUDIO I PROFESSIONAL PRACTICE	Required Required Required
RUDOLPH, Charles	Assoc. Professor/ Tenured	Master of Science/Building Design Columbia University, New York, New York May 1989	Investigates the role of representation (analogical and digital) in construction	FALL 2011 SPRING 2012 SPRING 2012 SUMMER 2012	ARCH 4219 ARCH 6052 ARCH 4220 ARCH 6024	CONSTRUCTION TECHNOLOGY I ARCHITECTURE OPTIONS STUDIO II CONSTRUCTION TECHNOLOGY II ARCHITECTURE CORE I STUDIO	Required Required Required Required

		Bachelor of Architecture Rice University, Houston, Texas May 1983 Bachelor of Arts/Art and Art History Rice University, Houston, Texas May 1981	tech pedagogy, particularly with respect to the industry goals of multi-disciplinary integration				
SANFORD, Jon	Associate Professor/ Tenured	M.Arch, Georgia Institute of Technology B.S.Arch, Georgia Institute of Technology	Engaged in accessible & universal design, involved in research & development related to accessibility & usability of products, technologies & environs	FALL 2011	ARCH 8843	UNIVERSAL DESIGN	Elective
SHARP, Leslie	Assist. Dean	Ph.D., History, Technology and Society, Georgia Institute of Technology, 2004 MA, Historic Preservation, Middle Tennessee State University, 1993 B.A., University of Georgia, 1989	Specializes in Historic Preservation, History of Technology, Women's History, Architectural History, Race and Gender	SPRING 2012 SUMMER 2012	ARCH 6107 ARCH 6120	INTRO TO HISTORIC PRESERVATION HISTORY OF ATLANTA ARCHITECTURE	Elective Elective
SPUYBROEK, Lars	Professor/ Tenured	M.S., cum laude, Technical University, Dept. of Architecture, Delft, 1989	Researches relationshp betwn art,arch & computg; internat'l recognitn for Water Pavilion, 1st bldg fully incorporatg new media & topological, continuous geometry	Fall 2011 SPRING 2012	ARCH 6053 ARCH 6132	ARCH OPTIONS STUDIO III THEORY & CRITICISM II	Required Required
STAFFORD, Barbara	Visiting Professor/ Non- Tenure Track	Ph.D., Art History, University of Chicago, 1972 M.A., Art History, Northwestern University-London, 1966 B.A., Philosophy and Comparative Literature, Northwestern University-Paris, 1964	Internationally recognized scholar of visualization at forefront of dialog on the relation between cultural uses of images & medical, scientific & technological research	SPRING 2012	ARCH 8833	NEUROBASED ARCHITECTURE	Elective
YANG, Perry	Assoc. Professor Tenure Track	Ph.D., Building and Planning, National Taiwan University M.S., Urban Studies and Planning, MIT M.Sc. Building and Planning, National Taiwan University	Perry Yang was chief planner for the 2009 World Games Park which opened July 16 in Kaohsiung, Taiwan	SPRING 2012 SPRING 2012	ARCH 8803 ARCH 8806	URBAN ECOLOGICAL DESIGN MASTERS PROJECT STUDIO	Elective Required
YOCUM, David	Lecturer/ Non- Tenure Track	M.Arch., Harvard University, 1997 B.A., Dartmouth College, 1992	A co-founder and principal of BLDGS, he trains students in critical design thinking with particular emphasis on	FALL 2011	ARCH 6053	ARCH OPTIONS STUDIO III	Required

			the challenges of				
			architecture in the public				
			realm				
ZIMRING,	Professor/	Ph.D., Environmental Psychology,	Environmental psychologist	FALL 2011	COA 8823	HEALTHCARE ENVIRON FUTURE	Elective
Craig	Tenured	Univ. of Mass at Amherst, 1978	& professor of arch;	SPRING 2012	COA 8823	EVIDENCE BASED DESIGN	Elective
		M.S., Psychology, Univ. of Mass at	researches relationships	SPRING 2012	COA 8823	ADV ARCH CULTURE & BEHAVIOR	Elective
		Amherst, 1978	between physical environ of				
		B.S., Psychology, Univ. of Michigan,	healthcare & other facilities,				
		1973	human satisfaction,				
			performance & behavior				

## Policies and Procedures Relative to Equal Employment Opportunity / Affirmative Action for Faculty, Staff and Students

- The Georgia Institute of Technology is an Equal Employment Opportunity (EEO) employer: http://policies.gatech.edu/policy-nondiscrimination-and-affirmative-action
- The Georgia Institute of Technology is committed to diversity equity and inclusion: http://www.diversity.gatech.edu/institute-commitment-diversity-equity-inclusion
- The Georgia Institute of Technology was among the first institutions to receive ADVANCE funding from the NSF to increase the participation of women in the scientific and engineering workforce through the increased representation and advancement of women in academic scientific and engineering careers: http://www.advance.gatech.edu/
- The College of Architecture has a faculty diversity committee charged with developing and monitoring diversity initiatives: http://www.coa.gatech.edu/coa/resources/admin/fac committees

### **Expectations Regarding Faculty Currency With Evolution of Professional Practice**

Teaching work load is 2 courses per semester often reduced to 1.5 courses per semester to allow more time for creative work, scholarship and research. The faculty are expected not merely to stay current but to advance knowledge in their fields. The record of faculty publications, faculty design awards and faculty research testifies to success in this regard. Over the last three years, faculty have published at least 8 books, 25 book chapters, 52 refereed journal articles, 80 refereed conference proceedings, participated in 35 exhibitions of creative work, and have received new awards of \$6.25 million in sponsored research contracts. Twenty one current instructors have active licenses in the US and are actively practicing thus keeping abreast of developments in professional practice directly (see <u>Table 22</u>).

#### **Resources Available to Assist Faculty Development**

- Faculty initiatives towards external grants are supported by the Office of Sponsored Programs of Georgia Tech (OSP): http://www.osp.gatech.edu/.
- COA provides support towards the preparation of budgets for research applications through the COA business office.
- In addition to receiving support towards obtaining external grants, faculty are invited annually to apply for Georgia Tech Foundation grants to support their research, scholarship or teaching and seed larger projects. These are awarded based on recommendations by a COA faculty committee that advises the Dean's office. As shown in the tables below, SOA faculty have received a good share of these funds to pursue a wide variety of subjects.

TABLE 4: Georgia Tech Foundation Research Grants COA and SOA, 2007-2013

	#COA	\$COA	#SOA	\$SOA	#COA	\$COA	#SOA	\$SOA
YEAR	proposals	requested	proposals	requested	funded	funded	funded	funded
2007	8	62609	3	25285	5	34093	2	17279
2008	8	47613	3	17325	8	47613	3	17325
2009	8	78388	4	29847	4	29847	4	29847
2010	8	61409	3	18300	2	20324	0	0
2011	8	82261	5	49203	5	33457	2	12300
2012	8	81708	3	30000	3	30000	3	30000
2013	9	76945	2	10000	3	24000	1	8000
TOTAL	57	490933	23	169960	30	219334	15	114751

TABLE 5: SOA Faculty Research Funded by the Georgia Tech Research Foundation

Year	Faculty	Topic
2007	Hsu	Rem Koolhaas/OMA
2007	Dagenhart	Hapeville Studio & Brownfield Research
2008	Johnston	Drafting Culture, a social history of Architectural Graphic Standards
2008	Rudolph/Gamble	A comparison of construction technology pedagogies: towards integration of the construction disciplines
2008	Craig	Scholar-architect: the architecture of Frances Palmer-Smith and Julian Hoke
		Harris
2009	Dangenhart	Urban design methods lab
2009	Flowers	Constructing the modern skyscraper
2009	Gentry	Increasing the power generation efficiency in the solar decathlon house
2009	Trubiano	The Solar decathlon house
2011	Flowers	The architecture and iconography of the beautiful game
2011	Riether	LICHTRAUM solar screen
2012	Al-Haddad	Ulta-high performance concrete cladding systems
2012	Brown	Overhaul of architecture environmental systems courses
2012	Maing	Rethinking project-specific performance testing protocols
2013	Hollengreen	Picturing Chartres Cathedral

- Incoming faculty receive hiring packages intended to help them jump-start their creative, research and scholarly work. This support typically includes allowances for equipment, research travel, GRA support, and reduced teaching loads during the first two years of appointment.
- The three research laboratories associated with the School, particularly the Digital Buildings Lab, provide faculty with opportunities to seek pilot grants from industry, through regular joint academia-industry symposia.

# Additional Facilitation of Faculty Research, Scholarship, Creative Activities and Attendance of Professional Meetings

Faculty development is supported by adjusting course loads to allow independent creative work (two courses per semester, often reduced to 1.5 courses.) While Georgia Tech offers no formal sabbaticals, faculty may apply for leaves of absence either with or without pay in support of specific research opportunities and initiatives. The School offers faculty support to:

- Attend conferences and symposia to present their work, particularly where conferences are refereed. The School also supports faculty travel to professional conferences and meetings. In 2011-2012 \$51,000.00 were spent to have 16 members of the faculty attend conferences to make a total of 34 presentations; an additional \$17,000 were spent to get 5 members of the faculty to 7 meetings of professional associations. In 2012-2013 \$42,000 were spent to have 13 members of faculty attend conferences to make a total of 28 presentations; an additional \$7,000.00 were spent to get 3 members of the faculty to 4 meetings of professional associations.
- Develop ambitious Design and Research studio agendas that document and promote the use of innovative enabling or end-product technologies or the effectiveness of innovative approaches to design. This policy, first introduced in 2012-2013 has allowed faculty apply for amounts up to \$10,000.00 per studio section.
- Discuss current trends and get the work of their students evaluated by highly qualified external reviewers thanks to the invitation of visiting critics and visiting examiners in addition to the invitation of speakers for the lecture series or special symposia.

#### Procedures, Polices and Criteria for Faculty Reappointment, Promotion and Tenure

The College of Architecture evaluates faculty according to creative work, teaching and service. The definition of creative work is inclusive; it comprises all work that is publicly available and attracts documented public attention and criticism; for example refereed publications, professional work that has received public recognition, exhibitions of work in venues of high standing, articles by others about one's creative work. The College of Architecture standards and procedures for re-appointment, promotion and tenure are described in detail here: <a href="http://www.coa.gatech.edu/coa/resources/faculty-affairs">http://www.coa.gatech.edu/coa/resources/faculty-affairs</a>. School of Architecture RP&T policies will be available in Team Room.

New faculty hired as Assistant Professors go through administrative reviews annual, receiving feedback from the School Chair on all aspects of their performance. They go through critical review in their third year, in order to be formally advised on the course of their progress towards promotion and tenure. The review for promotion and tenure normally occurs after five years of service. Sometimes, and depending on their prior career at other institutions, faculty are hired with advance standing so that their review for tenure and/or promotion is brought forward. Faculty going for promotion and tenure review prepare a dossier with their vitae, description of work and other information. The School Chair requests external letters of evaluation and reference after discussion with the candidate. The candidate's dossier and external letters are first reviewed by a School committee that makes a recommendation based on closer familiarity with the faculty's expertise and contributions. This recommendation, together with the letter of assessment from the School chair and the External letters, are submitted to the College RP&T committee. The recommendation of the College committee, along with the letters of the Chair and the Dean, are forwarded to the Institute RP&T committee which makes its recommendation to the Institute Committee, which in turn makes a recommendation to the Provost and President of Georgia Tech. The final decision is made by the Board of Regents of the University System of Georgia.

**TABLE 6: List of Invited Lectures Since Previous NAAB Site Visit** 

Year	Lecture	Remark
2007-2008	Eizenberg, Julie	Portman Visiting Critic
2007-2008	Tardio, Carlos	
2007-2008	Elln, Nan	
2007-2008	Rodriguez, Francisco Javier	
2007-2008	Spuybroek, Lars	Ventulett Symposium
2007-2008	Hight, Christopher	Ventulett Symposium
2007-2008	DeLanda, Manuel	Ventulett Symposium
2007-2008	Rahim, Ali	Ventulett Symposium
2007-2008	Mertins, Detlef	Ventulett Symposium
2007-2008	Kirschner, Marc	Ventulett Symposium
2007-2008	Cywinski, Bernard	
2007-2008	Bernstein, Philip	
2007-2008	John, Richard	
2007-2008	Duany, Andres	
2007-2008	Spuybroek, Lars	
2007-2008	Lukez, Paul	Suburban Transformations
2007-2008	Heath, Ellen	Suburban Transformations
2007-2008	Dunham-Jones, Ellen	Suburban Transformations
2007-2008	Heery, George	
2007-2008	Bowen, Brian	The Dean's Symposium: The Duomo of Santa Maria del Fiore
2007-2008	Carpo, Mario	The Dean's Symposium: The Duomo of Santa Maria del Fiore
2007-2008	Clark, Frank	The Dean's Symposium: The Duomo of Santa Maria del Fiore
2007-2008	Gentry, Russell	The Dean's Symposium: The Duomo of Santa Maria del Fiore

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2007-2008	Geva, Anat	The Dean's Symposium: The Duomo of Santa Maria del Fiore
2007-2008	Kahn, Sabir	The Dean's Symposium: The Duomo of Santa Maria del Fiore
2007-2008	Usselman, Steve	The Dean's Symposium: The Duomo of Santa Maria del Fiore
2007-2008	Carpo, Mario	We have never been pre-disciplinary symposium
2007-2008	Waldman, Peter	We have never been pre-disciplinary symposium
2007-2008	Maynard, Patrick	We have never been pre-disciplinary symposium
2007-2008	Eizenberg, Julie	Portman Visiting Critic
2008-2009	Portman, John	Centennial Celebrations - lectures by alumni
2008-2009	Elam, Merrill and Scogin,	
	Mack	Centennial Celebrations - lectures by alumni
2008-2009	Love-Stanley, Ivenue and	
	Stanley, Bill	Centennial Celebrations - lectures by alumni
2008-2009	hays, Michael	Centennial Celebrations - lectures by alumni
2008-2009	Ventulett, Tom	Centennial Celebrations - lectures by alumni
2008-2009	Arad, Michael	Centennial Celebrations - lectures by alumni
2008-2009	Segal, Jonathan	Portman Visiting Critic
2008-2009	Balmond, Cecil	Ventulett Symposium organized by Spuybroek
2008-2009	Benjamin, Andrew	Ventulett Symposium organized by Spuybroek
2008-2009	Burry, Mark	Ventulett Symposium organized by Spuybroek
2008-2009	Douglis, Evan	Ventulett Symposium organized by Spuybroek
2008-2009	Hensel, Michael	Ventulett Symposium organized by Spuybroek
2008-2009	Spuybroek, Lars	Ventulett Symposium organized by Spuybroek
2008-2009	Cadrecha, Manuel	Centennial Celebrations - lectures by alumni
2008-2009	Heery, George	The Future of the Firm
2008-2009	Harrison, Bill	The Future of the Firm
2008-2009	Bayder, Bulent	The Future of the Firm
2008-2009	Housworth, Marvin	The Future of the Firm
2008-2009	Lineberry, Susan	The Future of the Firm
2008-2009	Wittschiebe, Janice	The Future of the Firm
2008-2009	Dotson, Kahila	The Future of the Firm
2008-2009	Bolton, Niles	The Future of the Firm
2008-2009	· · · · · · · · · · · · · · · · · · ·	The Future of the Firm
	Reynolds, Cannon	
2008-2009	Cantley, Kevin	The Future of the Firm
2008-2009	Goodman, David	The Future of the Firm
2008-2009	Badanes, Steve	Women in Architecture, GT NOMAS panel discussion
2008-2009	Balfour, Alan	Women in Architecture, GT NOMAS panel discussion
2008-2009	Trimble, Dawn	Women in Architecture, GT NOMAS panel discussion
2008-2009	Levy, Nadine	Women in Architecture, GT NOMAS panel discussion
2008-2009	Dunham-Jones, Ellen	Women in Architecture, GT NOMAS panel discussion
2008-2009	Love-Stanley, Ivenue	Women in Architecture, GT NOMAS panel discussion
2008-2009	Dowling, Betty	Women in Architecture, GT NOMAS panel discussion
2008-2009	Wittschiebe, Janice	Women in Architecture, GT NOMAS panel discussion
2008-2009	Trubiano, Franca	Women in Architecture, GT NOMAS panel discussion
2009-2010	Kulper, Perry	Kulper, Perry
2009-2010	Voron, Vince	Voron, Vince
2009-2010	Olgiati, Valerio	Olgiati, Valerio
2009-2010	Ledbetter, Ben	Ledbetter, Ben
2009-2010	Williams, Jordan (Plexus R+D)	Williams, Jordan (Plexus R+D)
2009-2010	Lewitt, Eric (Plexus R+D)	Lewitt, Eric (Plexus R+D)
2009-2010	Harmon, Frank	Harmon, Frank
2009-2010	Wishne, Brian	Wishne, Brian
2009-2010	Rizutto, Tony	Rizutto, Tony
2009-2010	Mesko, Michael	Mesko, Michael
2009-2010	Coker, Coleman	Coker, Coleman
2009-2010	Njoo, james	Njoo, james
2010-2011	Manaugh, Geoff and Twilley,	Manaugh, Geoff and Twilley, Nicola
-	5 ,	

	Nicola	
2010-2011	McLeod, Mary	McLeod, Mary
2010-2011	Fry, Ben	Fry, Ben
2010-2011	Brinkmann, Jens	Brinkmann, Jens
2010-2011	Allen, Stan	Allen, Stan
2010-2011	Christensen, Julie	Christensen, Julie
2010-2011	Benedikt, Michael	Benedikt, Michael
2010-2011	Backus, Karl	Backus, Karl
2010-2011	Ingels, Bjarke	Ingels, Bjarke
2010-2011	Howeler, Eric	Howeler, Eric
2010-2011	Dyson, Anna	Dyson, Anna
2010-2011	Hargreaves, George	Hargreaves, George
2011-2012	Baumgardner, Kinder	Baumgardner, Kinder
2011-2012	Sheppard, Jeff	Sheppard, Jeff
2011-2012	Menges, Achim	Menges, Achim
2011-2012	Gang, Jeanne	Gang, Jeanne
2011-2012	Oliveri, Michael	Oliveri, Michael
2011-2012	Ra, Michael	Ra, Michael
2011-2012	Ibarra-Sevilla, Benjamin	Ibarra-Sevilla, Benjamin
2011-2012	Roney, Danielle	Roney, Danielle
2011-2012	Iwamoto, Lisa	Iwamoto, Lisa
2011-2012	Hoang,Mimi	Hoang, Mimi
2011-2012	Schumacher, Patrik	Schumacher, Patrik
2011-2012	Cruz, Marcos	Cruz, Marcos
2011-2012	Sharples, Bill	Sharples, Bill
2011-2012	Rodríguez, Francisco	RodrÍguez, Francisco
2011-2012	Ingram, Scott	Ingram, Scott
2011-2012	Mueckenheim, Mark	Mueckenheim, Mark
2011-2012	Bernstein, Phil	Bernstein, Phil
2012-2013	Alkanoglu, Volkan	
2012-2013	Lake, David	
2012-2013	Adjaye, David	
2012-2013	Simmons, Marc	
2012-2013	MacAslan, John	
2012-2013	Salewski, Christian	
2012-2013	Bonner, Jennifer	
2012-2013	Krier, Leon	Academy of Medicine Lecture
2012-2013	Anderson, Mark and	
	Anderson, Peter	
2012-2013	Cohen, Preston Scott	Infamous Lines / Drawing Summit
2012-2013	Epstein Jones, Dora	Infamous Lines / Drawing Summit
2012-2013	Geuze, Adriaan	Doug C. Allen Lecture
2012-2013	Wernick, Jane	Portman Visiting Critic
2012-2013	Malkawi, Ali	Doctoral Students' Symposium
2012-2013	Wait, Brian	Doctoral Students' Symposium
2012-2013	Shelden, Dennis	Doctoral Students' Symposium
2012-2013	Williams, Chris	Doctoral Students' Symposium
2012-2013	Dellinger, Barbara	Doctoral Students' Symposium
2012-2013	Getty, Jeff	Doctoral Students' Symposium
2012-2013	Pack, Jon and Huswit, Gary	

In addition to the lecture series of the School of Architecture, faculty and students can attend the lecture series organized by the School of City and Regional Planning and the School of Industrial Design, as well as the Research Forum lecture series organized by the College (<a href="http://www.coa.gatech.edu/research/forum/archive">http://www.coa.gatech.edu/research/forum/archive</a>)

TABLE 7: List of Public Exhibitions at the SOA Since Previews NAAB Site Visit

Year	Exhibition	Curator	Participants (SOA faculty and students in italics)
2011	Vision: I imagine, I see, I make	Barbara Stafford	Ruth Dusseault, Mike Hunter, Carl DiSalvo, Jonathan Lukens, Jason Freeman, Sang Won Lee, Mason Bretan, Ian Bogost, Simon Ferrari, Thomas Lodato, <i>Daniel</i> Baerlacken, Gernot Rieter, Jude Lablanc, Tim Harrison, Lars Spuybroek, Sabri Gokman
2011	Harris Dimitropoulos	Harris Dimitropoulos	Harris Dimitropoulos
2012	Neuro-Salon: Consider Attention	Barbara Stafford	Fred Pearsall, Mathew Swarts, James Murray, Patrick Di Rito, Shota Vashakmadze, Jun Ueda, Aude Sapere, Harris Dimitropoulos, Daneil Baerlecken, Gernot Riether, Aaron Goffman, Almir Divanovic, Daniel Dixon, Emilo Hernandez, Azzam Issa, Cole Loomis, Ali Mazalek, Claudie Rebola, Paul Cliffton, Scott Hoag, Andy Wu, Jason Clarck, Chelsea McClinton, Sarah Nelson, Vivek Sangubholtam Audrius Plioplys, David Bashwiner
2012	60 Years Anniversary of Architecture East Building	Alan Balfour	A reproduction of the 1955 Exhinition "A Half Century of Architectural Education"
2013	School of Architecture Alumni Exhibition	Alan Balfour	Over 200 alumni

**TABLE 8: External Reviewers, School of Architecture** 

Academic year 2010-2011	Academic Year 2011-2012
Fall 2010	Fall 11
Lee Ann Gamble, G+G Architects, Atlanta	Lee Ann Gamble, Gamble + Gamble Architects, Atlanta
Kate Mandel, Architect, Atlanta	Catherine Muller, Architect, CLM Design, Atlanta
Jeffrey Collins, Architect, Atlanta	Frederick Godbolt, SLAM Collaborative, Atlanta
Danny England, Rutledge Alcock Architects, Atlanta	Ian Reves, ASD Architecture +Design, Atlanta
Dan Watch, Perkins+Will, Atlanta	Ingaborg Rocker, Harvard GSD, Cambridge
Ben Elliot, Lord Aeck Sargent Architects, Atlanta	Brian Campa, Cooper Carry, Atlanta
Jeff Williams, Perkins+Will, Atlanta	Eric Lewitt, Plexus R&D, Atlanta
Brian Tanner, Praxis 3, Atlanta	Winfred Elysse Newman, Florida International University,
	Miami
Allison Isaacs, TVS Design, Atlanta	Ben Elliot, Perkins + Will, Atlanta
Ermal Shpuza, Southern Polytechnic State University	Jeff Williams, Perkins + Will, Atlanta
Forest Fulton, Washington University, St. Louis	Brad Pollitt, Shands/University of Florida, Gainesville
Jennifer Bonner, Woodbury University, Los Angeles	Brian Tanner, Praxis3, Atlanta
Ryan Salvas, Auburn University, Auburn	Judith Wasserman, UGA
Ben Gilmarten, Diller+Scofidio+Renfro, New York	Howard Wertheimer, Capital Planning, GA Tech
Mariam Mojdehi, Architect, New York	Aria Finkelstein, Georgia Conservancy, Atlanta
Jerry Percifield, Lord Aeck Sargent Architects, Atlanta	Gunny Harboe, Harboe and Associates Architects, Chicago
Judith Kinnard, Tulane University, New Orleans	Bill Harrison, Harrison Design, Atlanta
Dan Harding, Clemson University, Clemson	Herman Howard, Lamina, Houston
Jordan Williams, Plexus R+D, Atlanta	Tim Nichols, Architect, Atlanta
Christine Theodoropoulos, University of Oregon	Tyler Johnson, TVSDesign, Atlanta
Rajiv Wanasundera, Perkins+Will, Atlanta	Kevin Lackey, Praxis3, Atlanta
Ryan Gravel, Perkins+Will, Atlanta	Matt Weaver, Ai3 Architects
Jeff Rader, Dekalb County Commissioner	Merrill Elam, MSME Architects, Atlanta
Tom Ventulett, TVS Design, Atlanta	Frank Clark, Chair School of Music, Atlanta
Eric Lewitt, Plexus R+D, Atlanta	
Nadine Kashlan, Perkins+Will, Atlanta	

Spring 2011	Spring 2012
Marty Doscher, Morphosis, Los Angeles	Ann Carpenter, AICP, Federal Reserve Bank, Atlanta
Branko Kolarevic, University of Calgary	Bud Shenefelt, RAUM, Atlanta
Jordan Williams, Plexus R+D, Atlanta	Kevin Lackey, Praxis3, Atlanta
Amy Landesberg, Architect, Atlanta	Robin Lackey, Architect
Hugh Crawford, Associate Professor, School of LCC, Georgia	Anthony Coker, Suniva, Norcross
Tech	
James Milevic, TVS Design, Atlanta	Brian Karlowitz, LAS Architects
Sylvia Acosta, Rhode Island School of Design	Roger Newman, Suniva, Norcross
Roger Sherman, University of California, Los Angeles	Gabriel Presley, Urban Collage, Atlanta
Barbara Stafford, Visiting Professor, Georgia Tech	Katherine Dunatov, TVSDesign, Atlanta
Tom Ventulett, TVS Design, Atlanta	Tom Ventulett, TVS Design, Atlanta
Jack A. Rodgers, Ferst Center, Georgia Tech	Mine H. Hashas-Degertekin, SPSU, Marietta
Joseph Minatta, Lord Aeck Sargent Architects, Atlanta	Jack Honderd, Atlanta Friends, Atlanta
Travis Ridenbaugh, Menefee+Winer, Atlanta	Brian Bell, BLDGS, Atlanta
Michael Filisky, Mack Scogin Merrill Elam Architects, Atlanta	Ed Akins, Southern Polytechnic State University, Marietta
Tim Nichols, NO Architecture, Atlanta	Sheri Locke, MSME Architects, Atlanta
David Brown, Bjarke Ingels Group	Jennifer Bonner, Woodbury University, Los Angeles
Karl Backus, Bohlin Cywinski Jackson, San Francisco	Rafael Longoria, University of Houston
Ceren Bingol, Grimshaw Architects, New York	Brain Kinsley, GSA
Brian Bell, BLDGS, Atlanta	Dan Gallagher, NADAAA Architects, Boston
David Yocum, BLDGS, Atlanta	Merrill Elam, MSME Archit-ects, Atlanta
Merrill Elam, Mack Scogin Merrill Elam Architects, Atlanta	Roz Cama, Center for Healthcare Design, New Haven
Fareh Garba, Architect, New York	Stephen Macauley, Macauley+Schmidt, Atlanta
Jack Pyburn, Lord Aeck Sargent Architects, Atlanta	Lew Oliver, Urban Planner, Roswell
Walt Miller, John Portman and Associates, Atlanta	George Smith, Grady Hospital, Atlanta
Gordon Beckman, Jack Portman and Associates, Atlanta	Alice Wakefield, City Planner, Roswell
Eric Lewitt, Plexus R+D, Atlanta	Rashid Nuri, Truly Living Well: Center for Urban Agriculture,
	Atlanta
Wendy Newstetter, Department of Biomedical Engineering,	James Shelby, City of Atlanta Department of Planning and
Georgia Tech	Development
John Colton, School of Mechanical Engineering, Georgia Tech	Jeanette Yen, School of Biology, Georgia Tech
Ken Cunefare, School of Mechanical Engineering, Georgia	Marc Weissburg, School of Biology, Georgia Tech
Tech	
Michael E. Chang, Brook Byers Institute for Sustainable	lan Rattray, Rattray+Magness, Atlanta
Systems, Georgia Tech	St. M. CHALOTELO, S. T. I.
Steve Foran, HOK, Atlanta	Steve Van Ginkel, GTRI, Georgia Tech
Katherine Moore, Georgia Conservancy, Atlanta	Wade Cotton, Architect
Shannon Powell, Midtown Alliance, Atlanta	David Yocum, BLDGS, Atlanta
Dan Hourigan, Midtown Alliance, Atlanta	Pegah Zamani, SPSU, Marietta
Ginny Kennedy, Midtown Alliance, Atlanta	Volkan Alkanoglu, SciArc, Los Angeles
John Skach, Urban Collage, Atlanta	Mehmet Dogu, Action Figure Studios, Atlanta
Ed McKinney, AECOM, Atlanta	Aria Ritz Finkelstein, Freelance Urban Designer, Atlanta
Shaun Green, Georgia Regional Transit Authority, Atlanta	Jim Choate, SBCH Architects, Atlanta
	Denise Dumais, Johnston + Dumais Architects, Atlanta
	Frank André, Lord Aeck Sargent Architects, Atlanta
	Jim Bynum, Perkins+Will, Atlanta
	Brad Pollitt, Shands at UF, Gainesville
	Francisco Rodriguez, University of Puerto Rico
	Roy Decker, Duval + Decker Architects, Jackson
	Karen Gravel, Lord Aeck Sargent Architects, Atlanta
	Tyler Johnson, TVS Design, Atlanta
	LeAnn Sheldon, Rockwell Group, New York
	Ann Carpenter, AICP, Federal Reserve Bank, Atlanta
	Bud Shenefelt, RAUM, Atlanta
	Kevin Lackey, Praxis3, Atlanta

Robin Lackey, Architect
Anthony Coker, Suniva, Norcross
Brian Karlowitz, LAS Architects
Roger Newman, Suniva, Norcross
Gabriel Presley, Urban Collage, Atlanta
Katherine Dunatov, TVSDesign, Atlanta
Tom Ventulett, TVS Design, Atlanta
Mine H. Hashas-Degertekin, SPSU, Marietta

TABLE 9: Portman Visiting Critics, M.Arch. Program, School of Architecture

2008-2009	Jonathan Segal
2009-2010	
2010-2011	Karl A. Backus
2011-2012	Maryann Thompson
2012-2013	Jane Wernick

#### Students

#### **Applicant Evaluation for Admission**

Students are accepted after detailed review of qualifications, credentials and portfolio. This includes a detailed evaluation of the syllabi of courses taken for those students who seek exemption from any required courses. Students without an undergraduate 4-year degree in architecture from a US university are normally accepted for the full 3.5 course of studies, or, if they have a strong portfolio, for a slightly reduced 3 year course of studies. Students with an undergraduate 4-year degree in architecture from a US university are normally accepted for a 2 year course of studies. The GPA of students accepted into the program is improving slightly – it was 3.3 for 2007 and has been 3.4 and 3.5 for 2011 and 2012 respectively. GRE scores tend to be near the 50% percentile for quantitative (668 in 2007, 653 and 654 in 2011 and 2012 respectively) and the above the 60% percentile for verbal, with a regrettable trend for lower scores more recently (556 in 2007, 517 and 506 for 2011 and 2012 respectively).

Applicants to the Master of Architecture Program are required to submit the Georgia Tech Online Graduate Application for Admission, pay a \$30 application fee, submit three letters of recommendation, submit a transcript from each college attended since high school, submit official scores of the Graduate Record Examination (G.R.E.), as well as a portfolio. Information and instructions regarding the application process are available at <a href="http://www.arch.gatech.edu/academics/admissions/masters">http://www.arch.gatech.edu/academics/admissions/masters</a>. The application process is the same for internal and external applicants.

• Description of process by which preparatory and pre-professional education is evaluated: Verification of credentials and certification of compliance with Institute policies shall be the responsibility of the Office of Graduate Admissions. Policies and procedures that are approved by the Office of the President, Board of Regents of the University System of Georgia, and the Graduate Senate of the Institute shall be applied in determining eligibility for consideration for graduate study. From those eligible candidates, final admission decisions shall be the responsibility of the admitting department. Georgia Tech requires students in all undergraduate degree programs to complete the University System of Georgia Core Curriculum Requirements. Therefore, the academic transcripts of students holding an undergraduate degree in Architecture from Georgia Tech provide evidence of 45 credits of general education courses. The criteria used in determining the eligibility of applicants with external undergraduate degrees includes evidence of award of a bachelor's degree. http://www.gradadmiss.gatech.edu/admission\_standards.php

Applicants who meet the Institute's eligibility criteria for admission are then referred to the School of Architecture through ADMIT, an electronic admissions system. The School of Architecture advising staff and Associate Chair review the academic transcripts of the applicants and assign them to either the 2-Year or 3.5-Year admissions committees, based on the number of undergraduate studios they have successfully completed. The School of Architecture admissions committees are comprised of faculty who are appointed by the School Chair and serve for a period of two years. One committee reviews applicants with pre-professional degrees in architecture, while the other reviews applicants without the pre-professional degree, as well as those who hold an international architecture degree. Each applicant is reviewed by two committee members. The committees are typically allowed two weeks to review the students' credentials, which are then discussed and voted upon at the committee meetings. Following these meetings, the committees make recommendations to the School Chair, who is ultimately authorized to grant admission or denial to program applicants. The admissions process is coordinated by the Academic Advising Office in the School of Architecture.

## • Process for granting advanced placement:

Upon admission to the M.Arch Program, an in depth evaluation of each student's transcripts is conducted to determine if advanced placement can be awarded for pre-professional and professional courses taken at a prior institution. The granting of advanced placement does not reduce the student's course of study below the minimum required 60 credit hours for the M.Arch degree (except in cases where transfer credits of up to six hours are approved and accepted by the School of Architecture and the Office of the Registrar, according to Institute policy). The Advanced Placement policy is stated in the M.Arch Handbook (<a href="http://www.arch.gatech.edu/academics/masters/march">http://www.arch.gatech.edu/academics/masters/march</a>) at the School of Architecture website. Students are asked to submit course syllabi for courses that may qualify for advanced placement. The course syllabi are reviewed by the appropriate faculty to determine if the student performance criteria identified in the NAAB SPC Matrix have been met. Typically the instructor of record for that subject matter at the Georgia Tech School of Architecture is considered the appropriate authority to evaluate and approve courses for advanced placement. This process is documented on Advanced Placement Approval Form and placed in the student's academic file. This information is then used to develop an individualized curriculum plan for the student, to be used as a guide during the registration process each semester.

## **Student Advising and Support Services**

Prospective students and applicants are encouraged to meet with representatives in the Office of Scholarships and Financial Aid, as well as the Fellowships Office to learn about and apply for funding opportunities (<a href="www.finaid.gatech.edu">www.finaid.gatech.edu</a>, <a href="http://fellowships.gatech.edu">http://fellowships.gatech.edu</a>). Loans, grants and work-study programs based on financial need are administered by the Institute's Office of Scholarships and Financial Aid. The School of Architecture administers a limited number of scholarships, fellowships, and graduate research and teaching assistantships, some including a stipend plus a waiver of tuition for an academic year (<a href="http://www.arch.gatech.edu/academics/admissions/gradfund">http://www.arch.gatech.edu/academics/admissions/gradfund</a>). All applicants to the Master of Architecture Program are considered for these funding opportunities as a part of the admissions review process. The admissions committees make recommendations to the School Chair regarding funding offers for admitted students. Selected students are notified of funding offers at the time of admission.

Academic advising is available to prospective and enrolled students in the Master of Architecture Program. The School of Architecture employs an Academic Advising Manager, an Academic Advisor and an Academic Assistant, who are responsible for student recruitment, coordinating the admissions process, maintaining student records, explaining curricular requirements and study abroad

opportunities, providing routine academic advisement, administering course registration, and processing all institutional forms, including student petitions, degree petitions, and special requests. The School of Architecture Chair and Associate Chair are available to all students to assist in resolving any issues that cannot be adequately addressed by the advising team.

Changes to the SOA office structure in 2010 resulted in greater access to student advising, and were a direct result of student demand for greater access to advising as well as an audit conducted by Georgia Tech's Office of Human Resources. Each undergraduate student in the School of Architecture has access to faculty and academic advisors, who can assist and guide them in identifying their individual interests and establishing professional, scholarly, and career objectives. Students are encouraged to take advantage of the academic resources of the School of Architecture, College of Architecture, and Georgia Tech in the pursuit of those interests and objectives.

The Georgia Tech Counseling Center offers a full range of counseling and psychological services provided by counseling professionals to facilitate students' personal development, assist in the alleviation, remediation, and prevention of distress, as well as services that educate students in ways that develop self-awareness, self-reliance, and self-confidence. The center also provides individual and group counseling and psychotherapy, as well as a number of ongoing psycho-educational offerings, including relaxation/stress management workshops, women's groups, gay, lesbian, and bisexual support groups, and a bereavement and loss group. Workshops and groups are open to all Tech students. After-hours crisis counseling is available 24-hours a day and 7 days a week while school is in session by calling 404-894-2575. <a href="http://www.counseling.gatech.edu/">http://www.counseling.gatech.edu/</a>

Career advising and mentoring is provided by the faculty in the School of Architecture. Students may arrange for individual meetings with the faculty and are strongly encouraged to attend the annual School of Architecture Career Fair. Students may contact SOA faculty members directly to schedule an appointment or arrangements can be made through the SOA Advising Office. The Georgia Tech Career Services staff encourages students to realize their full potential by assisting them in obtaining educational and occupational information, developing effective job search skills, and ultimately attaining their employment and/or graduate school goals. Their program and services include career counseling, career fairs and seminars, coaching on resume writing and interview skills, and an internship/job board. <a href="http://www.career.gatech.edu/">http://www.career.gatech.edu/</a>

Student learning is enriched by the visiting lectures and exhibition series as well as by opportunities to travel in conjunction with particular studios or other courses. Students are strongly encouraged to evaluate all courses taken. Students are also encouraged to participate in the numerous student organizations active in the School. Finally, students are provided with incentives for excellence in the form of a variety of local awards, some with significant monetary value, while also being encouraged to participate in regional, national or international competitions.

### **Opportunities for Student Field Trips and Participation in Off-Campus Activities**

In 2011-2012 a total of \$3,200 was spent to support 7 students on field trips related to their individual work. In 2012-2013 a total of \$20,000 were spent in order to support 45 students from 6 studios to travel in relation to studio work. These include students in the final year who take Research and Design studios run by Marc Simmons, the Thomas W. Ventulett III Distinguished Chair in Architectural Design, and travel to the chosen sites with support from the Chair.

#### **Student Societies**

Students enrolled in the School of Architecture have the opportunity to participate in a number of student organizations, many affiliated with national organizations. Participation in these organizations enriches the academic experience by fostering a spirit of collaboration and presents opportunities for developing leadership skills. Some of the organizations available to Master of Architecture students include:

- American Institute of Architecture Students (AIAS) is a national organization of architecture students promoting excellence in architectural education and practice as well as community awareness and participation.
- National Organization of Minority Architecture Students (NOMAS) is Georgia Tech's NOMAS chapter is active at the local level in fostering opportunities for minority architecture students.
- Alpha Rho Chi is a national fraternity for architecture and the allied arts. Georgia Tech's Chapter, the Vitalis Colony, strives to achieve fellowship and unity by perpetuating merit in studies and rigor in tradition.
- Women in Architecture (WIA) strives to further integrate the student body by promoting unity
  and equality between genders within the College of Architecture at the Georgia Institute of
  Technology.

**TABLE 10: Student Officers of Student Societies** 

First name	Last name	Program	Organization	Position
Brianna	Rindge	Undergraduate	Alpha Rho Chi	President
Ashley	Rodriguez	Undergraduate	Alpha Rho Chi	Vice-President
Edwin	Krenson	Undergraduate	Alpha Rho Chi	Treasurer
Melissa	Ting	Undergraduate	Alpha Rho Chi	Secretary
Meghan	Doring	Undergraduate	Alpha Rho Chi	Chief Planning Officer
				Chief Membership
Catherine	Wong	Undergraduate	Alpha Rho Chi	Officer
Elvin	Chu	Undergraduate	Alpha Rho Chi	Chief Creative Officer
Paul	Reynolds	Undergraduate	Alpha Rho Chi	Sergeant of Arms
			American Institute of Architecture	
Jessica	Hughes	Undergraduate	Students	President
			American Institute of Architecture	
Sean	Fowler	Undergraduate	Students	Vice-President
			American Institute of Architecture	
Jonathan	Myers	Undergraduate	Students	Secretary
			American Institute of Architecture	
Clara	Winston	Undergraduate	Students	Treasurer
			American Institute of Architecture	
Gloria	Woods	Undergraduate	Students	Vice Treasurer
			American Institute of Architecture	Social Chair / Freedom
Colton	Wheatley	Undergraduate	Students	By Design Chair
			American Institute of Architecture	Marketing/Graphic
Marc	Whitley	Undergraduate	Students	Design Chair
			American Institute of Architecture	Marketing/Graphic
Quy	Le	Undergraduate	Students	Design Chair
			American Institute of Architecture	Freedom By Design
Hoang	Luu	Undergraduate	Students	Project Manager
			American Institute of Architecture	Freedom By Design
Taylor	Kitchens	Undergraduate	Students	Development Manager
			National Organization of Minority	
Audrey	Plummer	M.Arch/MCRP	Architecture Students	Treasurer
Jasmine	Kent	Undergraduate	National Organization of Minority	President

			Architecture Students	
Soleen	Karim	M.Arch	National Organization of Minority Architecture Students	PR Chair
			National Organization of Minority	
Linda	Ortiz	Undergraduate	Architecture Students	Secretary
			National Organization of Minority	
Yunxin	Hu	Undergraduate	Architecture Students	Vice-President
			National Organization of Minority	
Aileen	Vuong	M.Arch	Architecture Students	Outreach Chair
Christine	Cangelosi	M.Arch	Women in Architecture	Contact
Dawn	Riley	M.Arch/MCRP	Women in Architecture	Publications Chair
Claire	Pardo	M.Arch	Women in Architecture	Historian
Ann	Rogers	M.Arch	Women in Architecture	Service Outreach Chair
				Funding and Financial
Mary	Coleman Rogers	M.Arch	Women in Architecture	Chair
				Professional
Liz	Teston	M.Arch	Women in Architecture	Networking Chair
Katelyn	Bouret	M.Arch	Women in Architecture	Social Media Chair

#### **Support for Student Research, Scholarship and Creative Activities**

We are annually able to provide full fellowships (T. Gordon Little Fellowship) to two to three M.Arch. students with an approximate value of \$26,000 per student per year. Some M.Arch. students are funded through GTA appointments: \$50,895 were used to provide GTA stipends to 7 M.Arch. students in 2012-2013, and \$39,150 were used to provide GTA stipends to 5 M.Arch. students in 2011-2012.

In addition, a large number of awards are provided, some allowing students to pursue particular interests, and some rewarding achievement. Finally, a number of M.Arch. students get substantial support by working as Graduate Teaching Assistants or Graduate Research Assistants. A list of M.Arch. students who received scholarships and awards in the last two academic years, with brief description of the awards is provided below:

**TABLE 11: Student Awards** 

Year	Award	Description	Amount	Recipient
		Sponsored by the		
2012-2013	Masonry Award	National Concrete	\$200	James Boyer
		Masonry Association		
2012-2013			\$200	Lauren Griffith
2012-2013			\$200	Sarah McConnell
2012-2013			\$200	William Ramhold
2012-2013			\$200	Maria Velasquez
2012-2013			\$120	Daniel Alhadeff
2012-2013			\$120	Elaheh Damircheli
2012-2013			\$120	Heta Naukkarinen
2012-2013			\$120	Jessica Pierce
2012-2013			\$120	Logan Tuura
2012-2013			\$100	Mihir Patel
2012-2013			\$100	Madona Cumar
2012-2013			\$100	Jennifer Ingram
2012-2013			\$100	Bunny Tucker
2012-2013		M.Arch. students who		
	Dorothy P. Spence Memorial Scholarship	have demonstrated		
		exemplary academic	\$1,000	Sarah McConnell
		performance, design		
		ability, leadership and		

		service to the school		
2012-2013		and design community	\$1,000	Madona Cumar
2012-2013	Lindsay Pope Brayfield		\$1,000	IVIAUOTIA CUITIAI
2012-2013	Clifford & Associates International Study Abroad Award	Awarded to qualified student studying abroad	\$2,000	Kara Thomas
2012-2013	Robert D. Betzel Jr. Scholarship	Awarded to deserving student studying abroad	\$1,750	Morgan Strickland
2012-2013	Vernon McCoy-William Shipley Scholarship	Awarded to a student studying abroad, who has demonstrated excellence in design	\$3,500	William Louis Ramhold
2012-2013	Stevens & Wilkinson Award	Awarded to a minority student with exceptional professional promise	\$1,000	Travis Hampton
2012-2013	Stanley, Love-Stanley Award	Awarded to graduate and undergraduate students of African descent, based upon progressive academic achievement	\$500	Austin Wright
2012-2013	Marthame Sanders Fellowship	Awarded to an arch student who best demonstrates outstanding academic achievement, a marked flair for creativity, and evidence of determination to make a contribution to the betterment of society	\$3,500	Bunny Tucker
2012-2013	Charles R. Brown Urban Design Fellowship	Awarded to graduate students studying urban design or architecture	\$7,000	John Hightower
2012-2013	Jon Houston Wear, Jr. Award	Awarded to a deserving student majoring in Architecture	\$1,750	Elpida Peponis
2012-2013	T. Gordon Little Fellowship	Awarded to highly qualified Master of Architecture applicants who show exceptional academic and professional promise	full fellowship (tuition + stipend; work 15 hours per week)	Derin Yilmaz
2012-2013			full fellowship (tuition + stipend; work 15 hours per week)	Miguel Otero Fuentes
2012-2013			full fellowship (tuition + stipend; work 15 hours per week)	Anne McCarthy
2012-2013			full fellowship (tuition + stipend; work 15 hours per week)	Freya Schlemmer

	Т	I		T
2012-2013	Alpha Rho Chi Medal	Awarded by the Alpha Rho Chi Honorary Architecture Fraternity to a graduating senior who has demonstrated leadership, service to the school, and professional promise	No monetary award	Natasha Sanjaya
2012-2013	Henry Adams AIA Gold Medal & Certificate of Achievement	Awarded by the American Institute of Architects to the two top-ranking graduate students for their academic achievement and general excellence in Architecture	No monetary award	Mary Coleman Rogers (Medal and Certificate)
2012-2013			No monetary award	Anne McCarthy (Certificate)
2012-2012	Masonry Award	Masonry Competition sponsored by the National Concrete Masonry Association	\$83	Cynthia Ocampo
2012-2012			\$83	Claire Pardo
2012-2012			\$83	Audrey Plummer
2012-2012			\$83	Laura Richter
2012-2012			\$83	Rebecca Riley
2012-2012			\$83	Ann Rogers
2012-2012			\$60	Mary Coleman Rogers
2012-2012			\$60	Freya Schlemmer
2012-2012			\$60	Junying Shi
2012-2012			\$60	Elizabeth Teston
2012-2012			\$60	Derrick Tittle
2012-2012			\$34	Emily Tuttle
2012-2012			\$34	Justine Wallace
2012-2012			\$34	Erin West
2012-2012			\$34	Austin Wright
2012-2012			\$34	Tao Yan
2012-2012			\$34	Wenwen Zhao
2012-2012	Dorothy Spence Memorial Scholarship	M.Arch. students who have demonstrated exemplary academic performance, design ability, leadership and service to the school and design community	\$2,000	Kasia Zycinska
2012-2012			\$1,500	Mary Coleman Rogers
2012-2012			\$1,500	Nicholas Coffee
2012-2012	Georgia Veterans War Foundation Memorial Special Recognition	Recognizing excellence in collaboration, design and visualization	No monetary award	Alex Aleksandrov
2012-2012			No monetary award	Mike Bennett
2012-2012		1	•	Aaron Coffman
			No monetary award	Adron Comman
2012-2012			No monetary award	Almir Divanovic
2012-2012 2012-2012			No monetary award	+
				Almir Divanovic

2012-2012	Robert D. Betzel Jr. Scholarship	awarded to a deserving student studying abroad	\$1,500	Justin Wallace
2012-2012				
2012-2012	Paul M. Heffernan Travel Abroad Scholarship	awarded for study abroad that extends the learning experience	\$2,500	Heta Naukkarinen
2012-2012			\$2,500	Jessica Greenstein
2012-2012			\$2,500	James Keane
2012-2012			\$2,500	Erica Lee
2012-2012	Marthame Sanders Fellowship	awarded to students who best demonstrate outstanding academic achievement, a marked flair for creativity and evidence of determination to make a contribution to the betterment of society	\$1,500	Rebecca Dawn Riley
2012-2012			\$1,500	Christine Cangelosi
2012-2012	Charles Brown Urban Design Fellowship	awarded to graduate students studying urban design or architecture	\$7,000	Charles Lindberg
2012-2012			\$7,000	Emilie Schmitz
2012-2012			\$7,000	Jessica Steele-Hardin
2012-2012			\$7,000	Joshua Tooill
2012-2012	T. Gordon Little Fellowship	awarded to highly qualified master of architecture applicants who show exceptional academic and professional promise	full fellowship (tuition + stipend; work 15 hours per week)	Anne McCarthy
2012-2012		,	full fellowship (tuition + stipend; work 15 hours per week)	Freya Schlemmer
2012-2012			full fellowship (tuition + stipend; work 15 hours per week)	Anthony Payne
2012-2012			full fellowship (tuition + stipend; work 15 hours per week)	Su Hee Oh
2012-2012			full fellowship (tuition + stipend; work 15 hours per week)	Scott Kittle
2012-2012	Nix Mann Fellowship	awarded to highly qualified master of architecture applicants who show exceptional academic and professional promise	full fellowship (tuition + stipend; work 15 hours per week)	Emily Marvel
2012-2012	Lewis Lanter Memorial Award	awarded to a senior for excellent performance in senior design studio sequence	\$500	James Murray

2012-2012	Stanley, Love-Stanley Award	awarded to the most improved graduate and undergraduate students of African descent	\$500	Dvaqnuyah Reuven
2012-2012	Henry Adams AIA Gold Medal & Certificate of Achievement	awarded by the American Institute of Architects to the two top-ranking graduate students for their academic achievement and general excellence in architecture	No monetary award	Emilie Schmitz
2012-2012			No monetary award	Allison Bahe

## **Support to Attend Meetings of Student Organizations and Honorary Societies**

Funds are made available for student representatives to travel to AIAS Grass Roots Conferences, Quad Conferences, and Forums as well as conferences or meetings of other student organizations. Each year \$4000 is allocated to fund AIAS and NOMAS while extra funding becomes may become available according to proposals.

#### I. 2. 2 Administrative Structure and Governance:

#### **Administrative Structure**

The School of Architecture is the largest of the five Schools of the College of Architecture. The other four Schools are City and Regional Planning, Industrial Design, Building Construction, and Music. The head of the School of Architecture is the Chair who reports to the Dean of the College of Architecture. The School of Architecture offers the following five degrees: Bachelor of Science in Architecture; Master of Architecture; Master of Science with a major in Architecture and three distinct concentrations from which students choose when they apply and into which they are accepted (High Performance Buildings, Digital Design and Fabrication, Health and Design); Master of Science in Urban Design (in coordination with the School of City and Regional Planning); and Doctor of Philosophy with a major in Architecture.

The Chair is responsible for the strategic direction, faculty hires, budget, curriculum implementation, and all aspects of the School's administration. The School Chair works with the administrative and advisory staff of the School Office, as well as with program coordinators responsible for individual degrees or distinct concentrations in the case of the Master of Science with a major in Architecture degree. The School Office was reorganized, following an internal review by the Institute Office of Organizational Development, at the request of the School Chair, in order to better support the School mission (see below, section I.2.2). The reorganization substantially strengthened student advising by taking advantage of the union of the previously separate architecture program and the doctoral program into a School. Where the architecture program had one student advisor the School now has two, one of whom deals almost exclusively with graduate students. The re-organization also strengthened the ability of the School to support School efforts ranging from the organization of events to faculty travel, through the creation of a position of administrative director as well as a senior administrative professional.

Faculty pedagogical efforts are supported by advising staff in the School Office. Faculty travel and all expenditures associated with teaching are facilitated by administrative staff at the School Office. Faculty efforts to secure research funding are supported by staff in the College Business Office. School and College staff are encouraged to regularly take training courses through the Institute Office of Organizational Development: <a href="http://www.orgdev.gatech.edu/">http://www.orgdev.gatech.edu/</a>

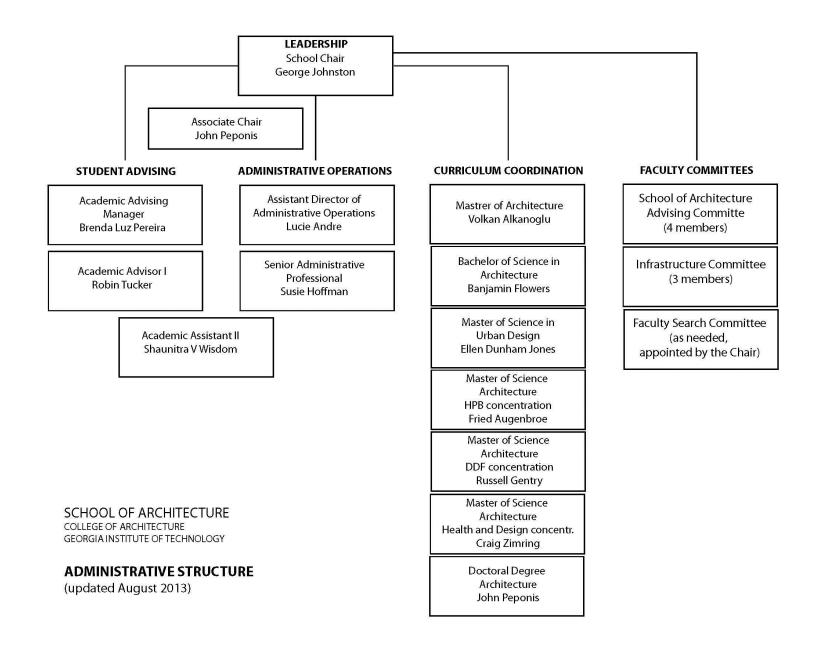
Duties at the School Office are distributed as follows:

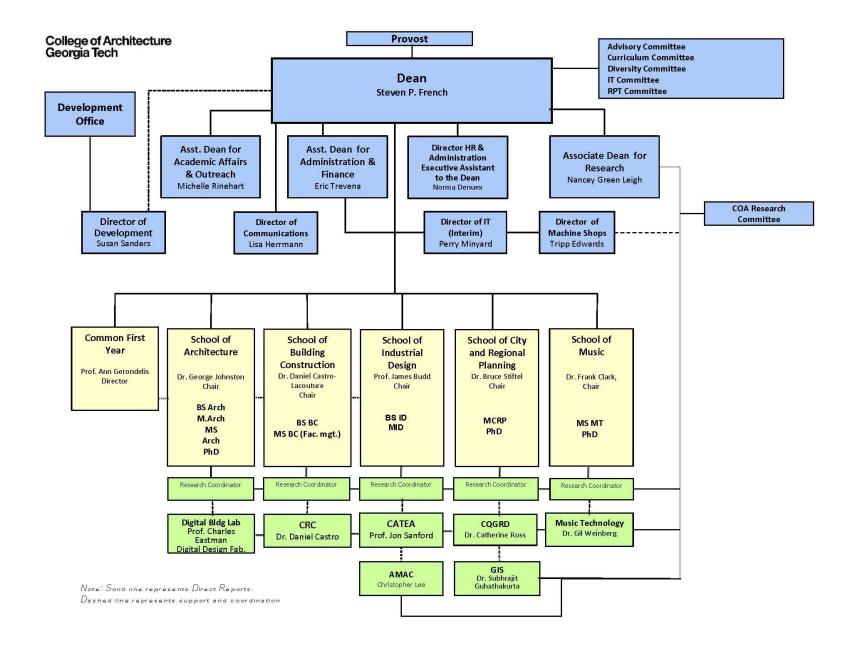
- **School Chair**: Strategic and intellectual leadership. Administrative responsibility for all matters pertaining to the School of architecture, including: curriculum delivery; faculty hiring; budget; academic program assessment and/or accreditation; student advising and recruitment; relationships with other parts of the College and the Institute; outreach; relationships with the profession at local and national levels.
- **School Associate Chair**: Works with the School Chair and shares the School Chair's responsibilities as assigned by the School Chair.
- Program Coordinators: Intellectual leadership, curriculum development and curriculum delivery associated with individual degree programs or concentrations of studies under the Master of Science with a major in Architecture. Program coordinators work with the faculty as well as the School leadership.
- Assistant Director of Administrative Operations: Direct day to day administration of the School; direct administrative functions of human resources issues; provide leadership, development, training, consultation and support to staff; budget coordination, planning and monitoring,

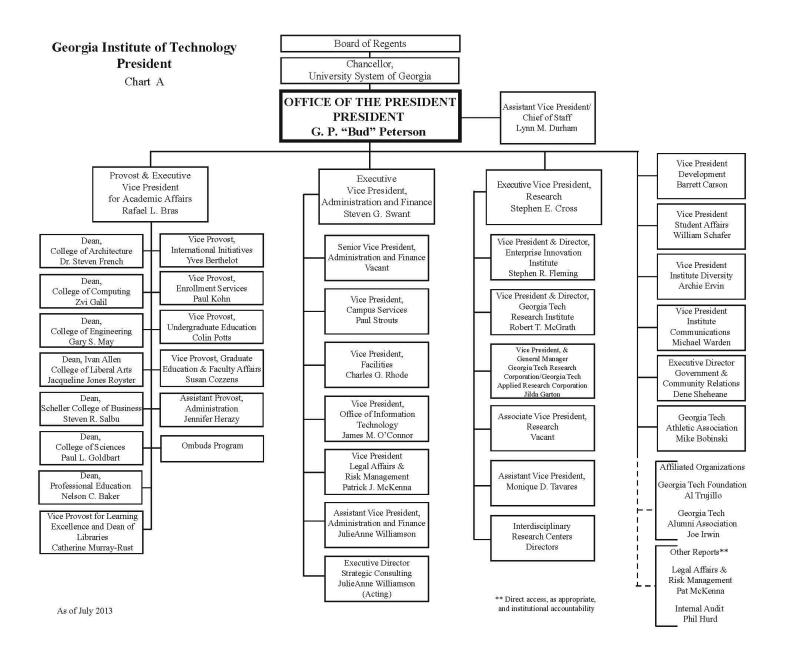
- preparation of budget reports and analysis; coordination of strategic events; input and advice on strategic discussions.
- **Senior Administrative Professional**: Faculty and student travel; calendar coordination; budget administration; procurement and report preparation; meeting and event coordination and preparation.
- Academic Advising Manager: Plan and administer the academic advising process for graduate
  and undergraduate students; supervise student recruitment processes; supervise scheduling for
  curriculum delivery; monitor and oversee the recording of student progress; review and approve
  student curriculum choices; supervise advising staff; contribute to data collection and to reports
  associated with academic program reviews.
- Academic Advisor I: Student advising; curriculum scheduling; report preparation; schedule and coordination of student related meetings and events; registration permits; overloads; degree petitions; change of major; degree petitions and commencement.
- Academic Assistant: Support the director of operations and the academic advice manager; develop and maintain data bases; write or contribute to reports; coordinate calendars; maintain filing system and office supply inventory.

In addition to the resources in the School, our position within the larger College of Architecture provides us with an additional level of administrative and staff support. Assistant deans for academic affairs/outreach and business/finance provide expertise and research as well as liaise with the Institute's central administration. College-wide initiatives, such as development and communications, fall within the dean's office, as do positions that support the infrastructure that services the broader college community. This college-wide network of support allows for greater opportunities for collaboration across and between the five schools in the college.

The administration charts of the School of Architecture, the College of Architecture and the Georgia Institute of Technology are provided below:







#### Governance

#### **Opportunities for Faculty Involvement in Governance**

The faculty is collectively responsible for the curriculum as all course proposals, new degree proposals, degree modifications and program self-assessments are subject to the approval of the faculty of the School before being submitted to the College and the Institute. In addition, faculty participate in the governance of the School and the College through a number of committees. At School level there is an elected Advisory Committee advising the School Chair; a Curriculum Network of evolving working groups fostering ideas for curriculum development and improvement; a faculty search committee appointed as needed by the Chair; and a Faculty Infrastructure Committee also appointed by the Chair to perform an annual audit of spaces, equipment, software, library materials and policies and procedures for the efficient conduct of teaching and research. At College level there is an Advisory Committee with representatives from all Schools; a Curriculum Committee with School representatives as well as members elected at large; a Diversity Committee with School representatives; an IT committee with School representatives; a research Scholarships and Awards Committee with School representatives and members elected at large. The structure of COA governance is described here:

<a href="http://www.coa.gatech.edu/coa/resources/faculty-affairs">http://www.coa.gatech.edu/coa/resources/faculty-affairs</a>; the faculty committees are described here: <a href="http://www.coa.gatech.edu/coa/resources/admin/fac">http://www.coa.gatech.edu/coa/resources/admin/fac</a> committees

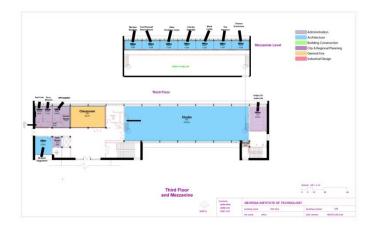
## List of Degree Programs Offered by the School of Architecture

- Bachelor of Science in Architecture (pre professional degree)
- Master of Architecture (professional degree)
- Master of Science with a major in Architecture (research degree)
- Master of Science in Urban Design (post professional degree)
- Dual M.Arch. M.C.R.P (professional degree)
- Ph.D. with a major in Architecture (research degree)

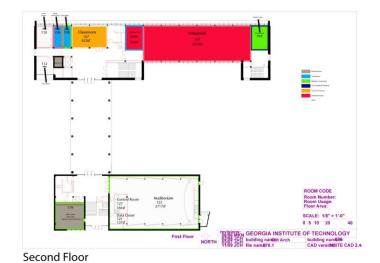
## **I.2.3 Physical Resources**

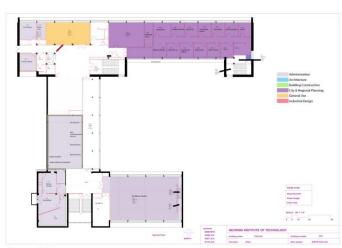
Primary facilities accommodating students, faculty, and staff of the School of Architecture include three buildings. The College of Architecture Building is comprised of two wings (East and West) completed in 1952 and 1980 respectively. This complex houses administrative offices for the School, undergraduate architectural design studios, design jury spaces, lecture-style classrooms of various sizes and capacities, seminar rooms, computer labs, and faculty offices. Other facilities accommodated here include a branch of the Georgia Tech Library housing the architecture-related collections, an exhibition gallery, design and model-making workshops, and digital output/printing resources. The Hinman Research Building, constructed in 1939 and renovated 2011, houses design studios for the Master of Architecture and Master of Science degree programs, jury spaces, computer lab, faculty offices, Design Computation and Building Technology research labs accommodating research scientists and Ph.D. student workspaces. The Digital Fabrication Lab supporting the School's initiatives in digital design and fabrication is located on the edge of campus and houses high-end fabrication equipment, offices, and project workspace. Additionally, the School's research initiatives in the area of Evidence Based Design, including the health and design focused SimTigrate Design Lab, are located adjacent to the Health Systems Institute in a fourth location on campus.

# **Building Plans: Architecture East**

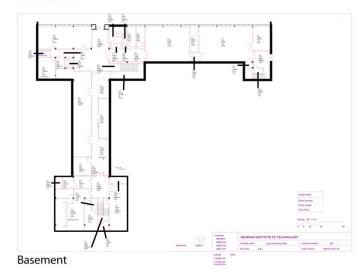


# Third Floor

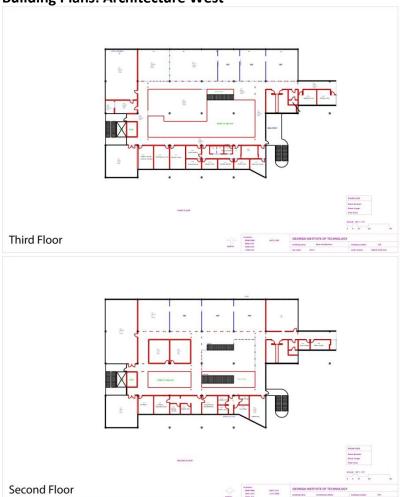




# **Ground Floor**

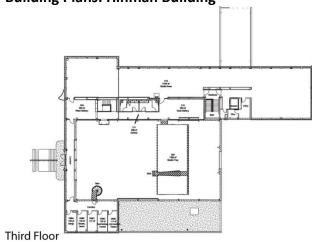


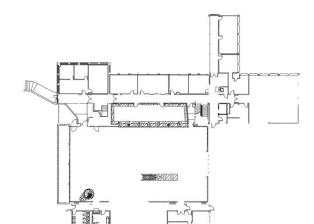
# **Building Plans: Architecture West**





# **Building Plans: Hinman Building**





Second Floor



First Floor

# **Information Technology Resources**

The School of Architecture has three primary physical computer labs [consisting of 90 computers (Arch room 358 (#24), room 359 (#40) and Hinman building room 209 (#26)]. These labs also contain flatbed scanners and color/B&W printers & large format plotters located nearby. Several smaller clusters (ranging from 2 to 9 computers per cluster, 25 total) are located in the Architecture Library, Common Freshman Year Studio, and Architecture studio areas on 2<sup>nd</sup> and 3<sup>rd</sup> floors.

The College of Architecture also maintains a 'virtual' lab that can be accessed via internet via the student's personally owned computer. It provides most of applications installed on physical computer labs & clusters. All COA labs and clusters are available 24 hours a day to students and faculty.

COA has a printing/plotting office that contains a high resolution wide-format scanner, 2 HP Design Jet plotters, and color/B&W printers.

**TABLE 12: Software Available on COA Labs and Clusters:** 

Adobe CS6 suite	Entire Suite
Rhino 5	Rhino 5 x86 and x64
Google Earth	Google Earth
Google Earth	Google Earth Pro
Arc-GIS	Arc-GIS 10.1 for Desktop
Arc-GIS	Interoperability for Desktop
Chrome Browser	Chrome Browser
Endnote	Endnote
SolidWorks	SolidWorks 2013 x64
Ansys	14
Digital Project	Digital project 64 bit
Grasshopper	Grasshopper 5 for Rhino
Axure	Axure RP Pro
Arduino	Arduino
V-Ray for Rhino	V-Ray for Rhino x64
IBM SPSS Statistics	SPSS 21
Keyshot Pro	KeyShot Pro
ERDAS	Erdas: Foundation, Imagine, LPS,Extensions,Desktop,Extensions for ARC-GIS.
Bentley	Microstation, Generative Components, Architecture
Paneling Tools for Rhino	Paneling Tools Plug-in for Rhino
Weaverbird for Rhino	Weaverbird for Grasshopper
Java	Java x86 and x64
Java SDK	JavaSDK x86 and x64
JMP	JMP
ModelCenter	ModelCenter
SketchUp	Sketchup Pro 8
Autodesk Education Master Suite	AutoCAD, AutoCAD Architecture, 3ds Max, Revit, Inventor, Showcase, Mudbox, NavisWorks, Alias Design, Sketchbook, Backburner.

Suite Ultimate	Maya, SoftImage, MotionBuilder, Suite Exclusives, Mental Ray Renderer
updated flash player for IE 10	Adobe Flash Player
UDK Engine	UDK Engine
IrFan Viewer	IrFan Viewer
Innovaya	Innovaya BIM Software
Bulge-o-matic for 3Ds Max 14	Bulge-o-matic
OIT print packages	B/W and Color print drivers for OIT printers
T-Splines for Rhino	T-Splines for Rhino plug-in
TransCAD	TransCAD
Wacom Tablet driver	Wacom tablet driver
Epson Scan drivers	Drivers for Epson GT15000, GT20000, 1640-XL
Roxio	Roxio Creator Starter
Visual Analysis	Visual Analysis
On Screen Take Off	On Screen Take off
Processing	Processing 2
Fritzing	Fritzing
AR Plugin for Maya	AR Plugin for Maya
AR Plugin for Max	AR Plugin for Max
HDR Light Studio	LightMap
VRED for AutoCAD	VRED for AutoCAD
Lumion	Lumion
Quicktime	Quicktime Player
VLC Player	VLC Player
WinSCP	WinSCP
7-zip	7-zip
Secure CRT	SecureCRT
Ecotect	Ecotect

Institute wide, there are additional facilities & clusters (<a href="http://www.oit.gatech.edu/service/computer-labs/computer-clusters">http://www.oit.gatech.edu/service/computer-labs/computer-clusters</a>):

- The Student Center (39 PC workstations, 6 quick-use walk-up computers), Library West Commons Productivity Cluster (66 PC workstations, 7 quick-use walk-up computers, 11 iMacs, flatbed scanners and color/B&W printers).
- The Commons at the Georgia Tech Library, located on the 1<sup>st</sup> floor of the Library include:
  - The Multimedia Studio (17 MAC Mini and 7 iMac workstations, a full suite of multimedia applications including Adobe CS: iMovie, Final Cut Pro, and Maya 3D. The studio includes video editing hardware including MiniDV decks and DVD recorders, a high-resolution large flatbed scanner, color/B&W printers, and 1 HP Design Jet plotter.
  - The Library West Commons Productivity Cluster a computer cluster (66 PC workstations with a wide array of productivity applications, 7 quick-use walk-up computers, 11 iMacs, 15 flatbed scanners, and Color/B&W printers.

The Library East Commons Group Computing Cluster – a computer cluster (30 PC workstations conducive to group work with the same suite of software in the Productivity Cluster, 14 quick-use walk up computers, Color/B&W printers.

The Office of Information Technology provides a suite of free software available to students and faculty. (<a href="http://software.oit.gatech.edu">http://software.oit.gatech.edu</a>). Students are able to download free or inexpensive software through special educational arrangements made with various software vendors such as Autodesk, E-Academy, Graphisoft, and Microsoft. (<a href="http://www.coa.gatech.edu/coa/resources/network/free\_cheap\_software">http://www.coa.gatech.edu/coa/resources/network/free\_cheap\_software</a>)

In addition to the general provisions above, MArch students have access to the unique capabilities of the Digital Fabrication Lab (<a href="http://www.dbl.gatech.edu/dfl/home">http://www.dbl.gatech.edu/dfl/home</a>).

GTNet, the Georgia Tech data network, is an ethernet based IP network spanning the 150 buildings on the main campus in Atlanta, as well as remote campuses in Savannah, GA and Metz, France. Network Services installs, maintains, and supports GTNet from the wall plate to our internet services.

The design of GTNet includes a border router, core routers, and distribution routers which are interconnected via 10 gigabit ethernet. The buildings on the Atlanta and Savannah campuses are interconnected via gigabit ethernet as well as fast ethernet. Connectivity to the wall plate is from 10/100/1000 ethernet switches or 10/100 ethernet switches.

The Georgia Tech LAWN (Local Area Walkup & Wireless Network) is designed for students, faculty, staff, and Institute guests who are mobile computer users. Mobile users may have wireless-enabled laptop computers, PDAs, phones, or similar devices. The LAWN gives mobile users network access to the Internet and campus information technology services similar to that which is available from a lab, campus office, or student residence hall.

Nearly every building on all three Georgia Tech campuses has wireless coverage, including all classrooms and most labs and common spaces. The Atlanta campus has full coverage in all residence halls, as well as significant coverage of outdoor walking paths, benches, bus stops, and bus routes. Many campus locations – classrooms and the library for example – also provide wired LAWN ports.

In addition to the general provisions above, M.Arch. students have access to the unique capabilities of the Digital Fabrication Lab (DFL) (<a href="http://www.dbl.gatech.edu/dfl/home">http://www.dbl.gatech.edu/dfl/home</a>). The Digital Fabrication Lab is a facility for the fabrication and assembly of full-scale building prototypes and mock-ups. The laboratories and equipment in the DFL support both faculty research and research-based studios and seminars. Students interact with faculty in the DFL in full-semester courses; the lab is not structured as a drop-by facility for student model-making. Much of the coursework, equipment, and research in the lab focuses on the automated production and assembly of building systems using information models and CNC equipment. The lab also houses a small structures and materials lab, a concrete casting lab, and outdoor workspaces for installation and testing of mock-ups.

The DFL contains equipment for working with metals, wood, plastics, concrete and masonry. The primary large-format machines (4 ft. x 8 ft. work volume or larger) in the lab are 3-axis and 5-axis milling machines – for working in wood and plastics and a 4-axis CNC waterjet cutting machine for work in metals, polymers, glass, stone and concrete. Small CNC machines for laser cutting, foam cutting, and

metals milling support the operations of the large format machines. A host of manual equipment for drilling, sanding, cutting, welding etc. complement the automated equipment.

The computer lab at the DFL supports seminars on parametric modeling tied to fabrication processes, and contains, in addition to the standard suite of design software used in the School of Architecture, specialized software tied to digital modeling and fabrication: Digital Project, Autodesk Inventor, Solidworks, Siemens NX, and AlphaCam. These software applications support the geometrical requirements for direct translation to computer-controlled fabrication machines – more so that the traditional architectural CAD and BIM applications.

#### I.2.4 Financial Resources.

## **Program Budgets**

Prior to Fiscal Year 2011, the College of Architecture existed as a single budgetary unit, and sub-unit allocations were distributed internally to each of the academic programs including the old Architecture Program. With the reorganization of the College of Architecture into School-level units beginning in FY 2011, each School is given a specific budgetary allocation, and separate organizational numbers are assigned to project accounts for purposes of budgetary tracking. In this reorganization, the School of Architecture was formed through a fusion of the once separate Architecture Program and Ph.D. Program, and a single budgetary unit was established. Additionally, the implementation of a differential tuition in support of the Master of Architecture degree program following the 2008 NAAB Visit resulted in a significantly altered budgetary paradigm making comparisons between the pre-FY 2011 budget of the Architecture Program and the post-FY 2011 budget of the School of Architecture incommensurate.

Table 11, below, reproduced from the School's Special Focused Evaluation Report in June 2010 illustrates the budgetary picture (excluding allocations for fringe benefits) just prior to budgetary consolidation of the Architecture and Ph.D. Programs and provides a context for interpreting the School of Architecture budgets illustrated in subsequent tables.

TABLE 13: School of Architecture Budg	get 2009-2011
---------------------------------------	---------------

	FY 2009	FY 2010	FY 2011
Fulltime Faculty and Staff	\$2,417,770	\$2,492,770	\$2,492,770
Other Personal Services	\$409,887	\$389,887	\$329,887
Non-Personal Services	\$92,134	\$92,134	\$65,434
TOTAL	\$2,919,791	\$2,974,791	\$2,888,091
FY Budget Cut	-\$104,780	-\$86,700	-\$86,643
Enrollment Impact	\$97,000	\$0	\$0
Differential Tuition		\$125,540	\$350,000
Summer Salary Incentive		\$33,400	\$65,000
GRAND TOTAL	\$2,912,011	\$3,047,031	\$3,216,448

#### Public Funding

The School of Architecture receives an annual budgetary allocation of State funds through the College of Architecture and Georgia Tech. Allocations and expenditures are comprised of salaries and wages, fringe benefits, travel, and operating expenses for support of the instructional mission of the School. The central administration of the College of Architecture provides support for all Schools and Research Centers in the areas of human resources, budget and finance, academic affairs, information technology, and fabrication facilities.

In addition to the State allocation, the School receives supplementary funding from a "differential tuition" assessment of \$1,995 per student per semester specifically in support of the Master of Architecture degree program. These funds are distributed in the same categories as above but within guidelines that require demonstration that expenditures are for the purposes intended in support of the M.Arch. program.

- Salaries and Wages include all full-time tenured and tenure-track faculty, part-time non-tenure-track faculty, School staff, and stipends for State-funded Graduate Teaching Assistants and Graduate Research Assistants. Fringe Benefits allocations are handled centrally by Georgia Tech.
- Travel includes all domestic and international travel expenses in support of administration, faculty, staff, students, and out-of-town guests participating in the School of Architecture Lecture Series, End of Semester Juries, and Faculty Searches.
- Operating Expenses includes materials and supplies in support of instruction, honoraria, and incidental equipment. Year-end budgetary close-out procedures for the expenditure of any residual funds typically include prioritization of needs in support of faculty research, studio or classroom furnishings, and small renovation projects and office upgrades.
- Expenditures for purposes of entertaining are strictly forbidden under State guidelines and must be supported with private funds.

State budgetary allocations and expenditures are described in Table 14.

# Private Funding

Georgia Tech, like many similar state research institutions, has a foundation that provides mechanisms for philanthropic support. The ways that the Institute intersects with the foundation varies broadly from project to project, and school to school, but by and large, the funds are kept very separate, with the Georgia Tech Foundation existing alongside as a completely separate non-profit entity with its own board, governance, procedures, and policies.

The 2012 market value of endowments in support of the School of Architecture is \$6.25, approximately half of the endowment of the College of Architecture. The School benefits from three primary philanthropic funds that contribute most significantly to our work, each established by an esteemed alumnus.

- The Thomas W. Ventulett III Distinguished Chair in Architectural Design was developed through gifts from and in honor of Tom Ventulett. Now valued at over \$2.6M, it enables us to hire leading practitioners in the field to catalyze and extend design excellence. Holders of the Ventulett Chair have included Monica Ponde de Leon, Nader Tehrani, Lars Spuybroek, and currently Marc Simmons. Earnings from this endowment are expended in support of the Chairholder's instruction through student travel, materials and supplies, publications, and public symposia. (http://www.arch.gatech.edu/people/ventulett)
- A subsidiary account of the Ventulett endowment funds the TVSDesign Distinguished Studio Critic program supporting the enrichment of professional program studio offerings with visiting design instructors. (<a href="http://www.arch.gatech.edu/people/ventulett">http://www.arch.gatech.edu/people/ventulett</a>)
- The Harrison Design Associates Visiting Scholars Program, now valued at \$448,000, provides income for visiting faculty in adaptive re-use. (http://www.arch.gatech.edu/people/harrison)
- The John Portman Visiting Critic and Competition fund, fueled annually, provides funding for three visits from a critic to work with graduate students on three occasions throughout the spring semester, culminating in a competition and jury overseen by the visiting critic. (http://www.arch.gatech.edu/people/portman)

Another significant income stream for student support comes from the T. Gordon Little Foundation. T. Gordon Little was an esteemed interior decorator, self-taught whose work enhanced many of Atlanta's finest homes and businesses. At his death, his estate was liquidated at auction and the proceeds fueled the Foundation that bears his name. The sole mission of the Foundation is to support Master of

Architecture Students at Georgia Tech.

Currently it supports full fellowships for four students. The corpus is invested outside the Georgia Tech Foundation and managed by BNY Mellon Wealth Management. The foundation trustees are very optimistic that it can continue to support four students per year for the foreseeable future; they are in close communication with us and pleased by the progress we have made since the foundation's establishment in 2007.

The School has two endowed lectures, the Douglas C. Allen Lecture in Landscape Architecture and The Academy of Medicine Lecture in Architecture, which supplement the School's Lecture Series. Additional endowments provide support for undergraduate scholarships and graduate fellowships. Allocations and expenditures of private funds are detailed in <u>Table 15</u>.

# **Expenditures per Student**

Georgia Tech's annual expenditures per student are compared across disciplinary units in <u>Table 16</u>.

SCHOOL OF ARCHITECTURE	STATE BUDGET ALL	OCATION	FISCAL YEAR REPO	DTS 2011_201
	STATE BUDGET ALL	OCATION	FISCAL YEAR REPO	JK 13 ZUII-ZUI:
Data from PeopleSoft				
Fiscal Year 2011 FINAL				
STATE	CURRENT BUDGET	ENCUMBRANCE	EXPENSE	BALANC
Salaries & Wages	2,953,060.00	0.00	2,911,159.49	41,900.5
Fringe (provided by Institute)	668,796.76	0.00	682,041.56	-13,244.8
Travel	37,795.00	0.00	54,592.93	-16,797.9
Operating Expenses	156,562.00	84,174.74	109,871.62	-37,484.3
Equipment	0.00	0.00	0.00	0.0
TOTAL	3,816,213.76	84,174.74	3,757,665.60	-25,626.5
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MS- ARCH STATE				
Differential Tuition Allocation Undesignated	381,336.00			
Salaries & Wage	0.00	0.00	347,072.58	34,263.42
Fringe (provided by Institute)	75,726.30	0.00	75,726.30	0.00
Travel	0.00	0.00	5,192.83	-5,192.83
Operating Expenses	0.00	0.00	11,401.66	-11,401.6
TOTAL	457,062.30	0.00	439,393.37	17,668.9
	·		·	·
Overall Total	4,273,276.06	84,174.74	4,197,058.97	-7,957.6
Fiscal Year 2012 FINAL				
STATE	CURRENT BUDGET	ENCUMBRANCE	EXPENSE	BALANCI
Salaries & Wages	2,950,841.00	0.00	2,835,712.05	115,128.9
Fringe (provided by Institute)	666,034.61	0.00	674,762.63	-8,728.0
Travel	50,000.00	0.00	101,721.34	-51,721.3
Operating Expenses	164,310.00	62,551.29	120,201.39	-18,442.6
Equipment	0.00	0.00	0.00	0.00
TOTAL	3,831,185.61	62,551.29	3,732,397.41	36,236.93
MS- ARCH STATE				
Differential Tuition Allocation Undesignated	499,607.00			
Salaries & Wage	0.00	0.00	441,771.50	57,835.50
Fringe (provided by Institute)	88,501.78	0.00	88,501.78	0.00
Travel	0.00	0.00	19,804.70	-19,804.70
Operating Expenses	0.00	0.00	37,561.84	-37,561.84
TOTAL	588,108.78	0.00	587,639.82	468.9
Overall Total	4,419,294.39	62,551.29	4 220 027 22	36 70F 9
Overall Total	4,419,294.39	62,551.29	4,320,037.23	36,705.87
Fiscal Year 2013 FINAL	CURRENT RURCET	ENCLINADDANCE	EVDENCE	DALANCI
STATE	CURRENT BUDGET	ENCUMBRANCE	EXPENSE	BALANCI
Salaries & Wages	3,009,020.00	0.00	2,974,746.73	34,273.2
Fringe (provided by Institute)	726,658.29	0.00	739,587.43	-12,929.14
Travel	50,000.00	0.00	107,299.88	-57,299.8
Operating Expenses	132,584.00	3,158.17	108,643.94	20,781.89
Equipment	0.00	0.00	0.00	0.00
TOTAL	3,918,262.29	3,158.17	3,930,277.98	-15,173.8
MS- ARCH STATE				
Differential Tuition Allocation Undesignated	476,382.00			
Salaries & Wage	0.00	0.00	390,333.41	86,048.5
Fringe (provided by Institute)	84,099.80	0.00	84,099.80	0.0
Travel	0.00	0.00	29,627.58	-29,627.5
Onerating Europeas	0.00	0.00	48,369.87	-48,369.8
Operating Expenses				
TOTAL	560,481.80	0.00	552,430.66	8,051.14

STATE	CURRENT BUDGET	ENCUMBRANCE	EXPENSE	BALANCE
Salaries & Wages	3,099,290.60	0.00	3,365,080.14	-265,789.54
Fringe (provided by Institute)	748,458.04	0.00	823,687.23	-75,229.19
Travel	50,000.00	0.00	136,927.46	-86,927.46
Operating Expenses	132,584.00	3,158.17	157,013.81	-27,587.98
Equipment	0.00	0.00	0.00	0.00
TOTAL	4,030,332.64	3,158.17	4,482,708.64	-455,534.17
MS- ARCH STATE				
Differential Tuition Allocation Undesignated	442,351.00			
Salaries & Wage	0.00	0.00	0.00	442,351.00
Fringe (provided by Institute)	0.00	0.00	0.00	0.00
Travel	0.00	0.00	0.00	0.00
Operating Expenses	0.00	0.00	0.00	0.00
TOTAL	442,351.00	0.00	0.00	442,351.00
Overall Total	4,472,683.64	3,158.17	4,482,708.64	-13,183.17
Fiscal Year 2015 Estimated	ı			
STATE	CURRENT BUDGET	ENCUMBRANCE	EXPENSE	BALANCE
Salaries & Wages	3,192,269.32	0.00	3,365,080.14	-172,810.82
Fringe (provided by Institute)	770,911.78	0.00	823,687.23	-52,775.45
Travel	50,000.00	0.00	136,927.46	-86,927.46
Operating Expenses	132,584.00	3,158.17	157,013.81	-27,587.98
Equipment	0.00	0.00	0.00	0.00
TOTAL	4,145,765.10	3,158.17	4,482,708.64	-340,101.71
MS- ARCH STATE				
Differential Tuition Allocation Undesignated	450,000.00			
Salaries & Wage	0.00	0.00	0.00	450,000.00
Fringe (provided by Institute)	0.00	0.00	0.00	0.00
Travel	0.00	0.00	0.00	0.00
Operating Expenses				
	0.00	0.00	0.00	0.00
TOTAL	450,000.00	0.00 0.00	0.00 0.00	0.00 450,000.00
TOTAL	450,000.00	0.00	0.00	450,000.00
TOTAL  Overall Total	450,000.00	0.00	0.00	450,000.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated	450,000.00 4,595,765.10	0.00 3,158.17	0.00	450,000.00 109,898.29
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE	450,000.00 4,595,765.10 CURRENT BUDGET	0.00 3,158.17 ENCUMBRANCE	0.00 4,482,708.64 EXPENSE	450,000.00 109,898.29 BALANCE
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages	450,000.00 4,595,765.10 CURRENT BUDGET 3,288,037.40	0.00 3,158.17 ENCUMBRANCE 0.00	0.00 4,482,708.64 EXPENSE 3,365,080.14	450,000.00 109,898.29 BALANCE -77,042.74
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)	450,000.00 4,595,765.10 CURRENT BUDGET 3,288,037.40 794,039.13	0.00  3,158.17  ENCUMBRANCE 0.00 0.00	0.00 4,482,708.64 EXPENSE 3,365,080.14 823,687.23	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute) Travel	450,000.00 4,595,765.10 CURRENT BUDGET 3,288,037.40 794,039.13 50,000.00	0.00  3,158.17  ENCUMBRANCE 0.00 0.00 0.00	0.00 4,482,708.64 EXPENSE 3,365,080.14 823,687.23 136,927.46	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10 -86,927.46
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel  Operating Expenses	450,000.00 4,595,765.10 CURRENT BUDGET 3,288,037.40 794,039.13 50,000.00 132,584.00	0.00  3,158.17  ENCUMBRANCE 0.00 0.00 0.00 0.00 3,158.17	0.00 4,482,708.64 EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel  Operating Expenses Equipment	450,000.00 4,595,765.10 CURRENT BUDGET 3,288,037.40 794,039.13 50,000.00 132,584.00 0.00	0.00  3,158.17  ENCUMBRANCE 0.00 0.00 0.00 3,158.17 0.00	0.00 4,482,708.64 EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel  Operating Expenses Equipment  TOTAL	450,000.00 4,595,765.10 CURRENT BUDGET 3,288,037.40 794,039.13 50,000.00 132,584.00 0.00	0.00  3,158.17  ENCUMBRANCE 0.00 0.00 0.00 3,158.17 0.00	0.00 4,482,708.64 EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel Operating Expenses Equipment TOTAL  MS- ARCH STATE Differential Tuition Allocation Undesignated Salaries & Wage	450,000.00  4,595,765.10  CURRENT BUDGET  3,288,037.40  794,039.13  50,000.00  132,584.00  0.00  4,264,660.53	0.00  3,158.17  ENCUMBRANCE 0.00 0.00 0.00 3,158.17 0.00	0.00 4,482,708.64 EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel Operating Expenses Equipment TOTAL  MS- ARCH STATE Differential Tuition Allocation Undesignated Salaries & Wage Fringe (provided by Institute)	450,000.00  4,595,765.10  CURRENT BUDGET  3,288,037.40 794,039.13 50,000.00 132,584.00 0.00 4,264,660.53  450,000.00 0.00 0.00 0.00	0.00  3,158.17  ENCUMBRANCE  0.00 0.00 0.00 3,158.17 0.00 3,158.17	0.00  4,482,708.64  EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00 4,482,708.64  0.00 0.00	450,000.00 109,898.29 BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00 -221,206.28 450,000.00 0.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel Operating Expenses Equipment TOTAL  MS- ARCH STATE Differential Tuition Allocation Undesignated Salaries & Wage Fringe (provided by Institute) Travel	450,000.00  4,595,765.10  CURRENT BUDGET  3,288,037.40 794,039.13 50,000.00 132,584.00 0.00 4,264,660.53  450,000.00 0.00 0.00 0.00 0.00	0.00  3,158.17  ENCUMBRANCE  0.00 0.00 0.00 3,158.17 0.00 3,158.17	0.00  4,482,708.64  EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00 4,482,708.64  0.00 0.00 0.00 0.00	450,000.00  109,898.29  BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00 -221,206.28  450,000.00 0.00 0.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute) Travel Operating Expenses Equipment TOTAL  MS- ARCH STATE Differential Tuition Allocation Undesignated Salaries & Wage Fringe (provided by Institute) Travel Operating Expenses	450,000.00  4,595,765.10  CURRENT BUDGET  3,288,037.40 794,039.13 50,000.00 132,584.00 0.00 4,264,660.53  450,000.00 0.00 0.00 0.00 0.00 0.00 0.00	0.00  3,158.17  ENCUMBRANCE 0.00 0.00 0.00 3,158.17 0.00 3,158.17  0.00 0.00 0.00 0.00 0.00	0.00  4,482,708.64  EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00 4,482,708.64  0.00 0.00 0.00 0.00 0.00	450,000.00  109,898.29  BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00 -221,206.28  450,000.00 0.00 0.00 0.00
TOTAL  Overall Total  Fiscal Year 2016 Estimated  STATE  Salaries & Wages Fringe (provided by Institute)  Travel Operating Expenses Equipment TOTAL  MS- ARCH STATE Differential Tuition Allocation Undesignated Salaries & Wage Fringe (provided by Institute) Travel	450,000.00  4,595,765.10  CURRENT BUDGET  3,288,037.40 794,039.13 50,000.00 132,584.00 0.00 4,264,660.53  450,000.00 0.00 0.00 0.00 0.00	0.00  3,158.17  ENCUMBRANCE  0.00 0.00 0.00 3,158.17 0.00 3,158.17	0.00  4,482,708.64  EXPENSE 3,365,080.14 823,687.23 136,927.46 157,013.81 0.00 4,482,708.64  0.00 0.00 0.00 0.00	450,000.00  109,898.29  BALANCE -77,042.74 -29,648.10 -86,927.46 -27,587.98 0.00 -221,206.28  450,000.00 0.00 0.00

TABLE 15			
SCHOOL OF ARCHTECTURE ENDOWM	ENT INCOME /	EXPENDITURES	2011
Fiscal Year 2011 FINAL			
Foundation and other private fund	INCOME	EXPENDITURES	
Со-ор	93,747.52	95,061.60	
Endowment income	222,726.54	179,658.27	
T. Gordon Little Foundation	108,276.00	103,276.00	
TOTAL	424,750.06	377,995.87	
Fiscal Year 2012 FINAL			
Foundation and other private fund	INCOME	<b>EXPENDITURES</b>	
Со-ор	65,464.93	66,742.79	
Endowment income	214,845.00	130,056.08	
T. Gordon Little Foundation	83,317.00	100,840.64	
TOTAL	363,626.93	297,639.51	
Fiscal Year 2013 Awaiting actuals			
Foundation and other private fund	INCOME	EXPENDITURES	
Co-op	38,753.00	38,636.13	
Endowment income	225,883.00	254,000.00	*
T. Gordon Little Foundation	99,700.00	100,000.00	
1. Gordon Little Foundation	33,700.00	100,000.00	
TOTAL	364,336.00	392,636.13	
Fiscal Year 2014 Estimated			
Foundation and other private fund	INCOME	EXPENDITURES	
Со-ор	43,000.00	43,000.00	
Endowment income	275,000.00	230,000.00	
T. Gordon Little Foundation	108,000.00	108,000.00	
TOTAL	426,000.00	381,000.00	
Fiscal Year 2015 Estimated			
Foundation and other private fund	INCOME	EXPENDITURES	
Co-op	58,000.00	58,000.00	
Endowment income	283,250.00	245,000.00	
T. Gordon Little Foundation	116,640.00	116,640.00	
TOTAL	4E7 900 00	410 640 00	
* used previous savings	457,890.00	419,640.00	
asea previous saviligs			

TABLE 16																												
	TITUTE OF TECHNOLOGY EXPEND	ITI IRES PER	STUDENT	V 2011-201	13																							
ILONGIA INS	INOTE OF TECHNOLOGY EXPEND	TIOKES FEE	STODENT	1 2011-20.	13																							
				EV2044					EV2044				EV2012					EV2012				EV2042					EV2042	
			1	FY2011					FY2011				FY2012		1			FY2012	1		ı	FY2013	1 1				FY2013	
C-11	Danastas ant (Cabasal	Coulted	Non Coultai	T-4-1	UG	Graduate	Total	Capital	Non-	Total	Combal	Non Control			Graduate	Total	Capital	Non-	T-4-1	Combal	Non Control		UG	Graduate T	Total	Capital	Non-	Total
College	Department/School	Capital	Non-Capital	Total	Enrollmen	Enrollmen	Enrollme	Exp./Studen	Capital	Exp/Studen	Capital	Non-Capital	Total Expense	UG	Enrollmen Er	nrollmen	Exp./Stude	Capital	Total	Capital	Non-Capital	Total Expense	Enrollme	Enrollmen Enro	ollmen	Exp./Stude	Capital	Exp/Stude
		Expense	Expense	Expense	t	t	nt	t '	xp/Stude nt	t	Expense	Expense		Enrollment	t	t	nt	Exp./Stude	Exp/Student	Expense	Expense		nt	t	t	nt t	xp/Stude nt	t
	School of Architecture	0	4.685.120	4.685.120	210	233	443	0	10.576	10.576	0	5.192.537	5.192.537	170	227	397	0	13.079	13,079	0	5,608,989	5,608,98	9 160	186	346	0	16.211	16,21
	School of Building Construction	0	1,587,360	1,587,360	116	118	234	0	6,784	6,784	39,831	1,673,059	1,712,890	86	110	196	203	8,536	8,739	251	1,952,013	1,952,26	7 50	105	155	2	12,594	12,5
College of	School of City and Regional Planning		1,637,352	1,637,352		116	116	0	14,115	14,115	0	1,826,491	1,826,491		105	105	0	17,395	17,395	0	1,957,620	1,957,62	6	104	104	0	18,823	18,82
Architecture	School of Industrial Design	0	1,142,156	1,142,156	138	39	177	0	6,453	6,453	10,673	1,265,394	1,276,067	126	39	165	65	7,669	7,734	0	1,626,488	1,626,48	8 111	44	155	0	10,493	10,49
Architecture	School of Music	31,550	1,112,363	1,143,913		17	17	1,856	65,433	67,289	0	1,172,630	1,172,630		22	22	0	53,301	53,301	0	1,200,532	1,200,53	2	24	24	0	50,022	50,02
	Dept & Majors Not Uniquely Associated	277,122	11,258,628	11,535,750	110		110	2,519	102,351	104,870	348,322	11,313,874	11,662,196	126		126	2,764		92,557	726,604	13,727,960	14,454,56		24	115	6,318	119,374	50,02
	Total	308,672	21,422,979	21,731,652	574		1,097	281	19,529	19,810	398,825	22,443,984	22,842,809	508		1,011	394		22,594	726,855	26,073,612	26,800,46		487	899	809	29,003	29,83
	Computational Science & Engr	1,569,368	5,475,553	7,044,921		41	41	38,277	133,550	171,827	49,670	6,180,287	6,229,956		51	51	974		122,156	3,473,423	6,376,022	9,849,44		59	59	58,872	108,068	166,94
College of	School of Computer Science	64,794	14,497,426	, ,	840		1360	48	10,660	10,708	448,754	16,811,621	17,260,375	838		1,291	348	,	13,370	27,080	15,941,072	15,968,15	, ,,,,	472	1,509	18	10,564	10,58
Computing	Dept & Majors Not Uniquely Associated	388,146	23,687,287	24,075,433	150		361	1,075	65,616	66,691	658,107	25,174,411	25,832,518	134		322	2,044	. 0, 202	80,225	747,163	27,698,789	28,445,95		180	262	2,852	105,721	108,57
	Total	2,022,309	43,660,266	-,,-	990		1,762	1,148	24,779	25,927	1,156,531	48,166,319	49,322,850	972		1,664	695	-,	29,641	4,247,667	50,015,883	54,263,55		711	1,830	2,321	27,331	29,65
	Aerospace Engineering	3,469,773 1.859.001	31,453,032 21.180.457	34,922,805 23,039,458	763 717	542 209	1305	2,659	24,102 22.873	26,761	1,494,319 10.508.618	23,873,912 25,451,389	25,368,231 35.960.007	751 789		1,331	1,123 10,456	17,937 25,325	19,060	1,754,909	23,278,94	25,033,85		539 225	1,408	1,246 4.340	16,533 23,883	17,78 28,22
-	Chemical And Biomolecular Engineering Civil And Environmental Engineering	456.006	23,913,768	24,369,774	838	334	1172	389	20,404	24,881 20.793	719.358	24,608,522	25,327,880	825		1,005	10,456	20,802	35,781 21,410	4,721,494 494,840	25,984,259	30,705,75		373	1,088	4,340	21,530	28,22
-	Electrical And Computer Engineering	1.294.864	56.156.583	57.451.447	1207	1170	2377	545	23,625	20,793	2.863.418	57.052.943	59,916,362	1.310		2,467	1.161	20,802	21,410	1.728.802	54,652,324	56.381.12		1.128	2.524	685	21,530	22,3
ŀ	GT/Emory Biomedical Engineering	1,306,469	24.393.307	25,699,777	1041	158	1199	1,090	20,345	21,434	3,707,924	29.832.930	33,540,854	1,155		1.311	2,828	22,756	25,584	1,650,600	30,164,89	31.815.49	, , , , , , ,	185	1.476	1,118	20,437	21,55
College of	Industrial And Systems Engineering	74.332	18.966.728	19.041.060	1184		1589	1,090	11.936	11.983	192.275	20.370.320	20.562.595	1,153		1,511	114		12,174	182.659	18,725,192	18.907.85		458	1,476	1,118	10.127	10,22
Engineering	Materials Science And Engineering	3,694,188	18,770,218	22,464,406	131	112	244	15.140	76.927	92.067	2.231.024	20,511,825	22,742,850	1,203		290	7,968		81,224	1.687.603	19,938,85	21.626.46	/	135	351	4,808	56.806	61,61
ŀ	Mechanical Engineering	1.377.958	41.090.255	42.468.213	1856	820	2676	515	15.355	15.870	2,251,024	42,215,390	44.479.490	1.913		2.742	826	15,396	16.222	4,548,198	42,705,46	47.253.66		808	2.906	1.565	14.696	16.26
	Polymer, Textile And Fiber Engineering	60.195	133.876	194.072	165	61	226	174	23	197	0	511	511	106		148	0.20	3	3	4,540,150	-1,67	-1,67	-,	28	83	1,505	-20	
	Dept & Majors Not Uniquely Associated	370,526	14.322.259	14,692,785	174	23	197	174	23	197	1.645.129	22.686.496	24.331.624	132		179	9.191	126,740	135.931	933,715	24,999,286	25,933,00		61	169	5,525	147.925	153,45
	Total	13.963.314	250,380,483		8.076	3.835	11,911	1,172	21,021	22,193	25,626,166	266,604,238	292,230,404	8,403		12,335	2.078	21,614	23,691	17.702.819	265,314,54			3,940	13,009	1,361	20.395	21,75
	Applied Physiology	90,335	3,376,470	3,466,805	-,,-	42	42	2,151	80,392	82,543	14,613	3,420,565	3,435,178	-,	40	40	365	85,514	85,879	43,847	3,653,938	3,697,78	5	44	44	997	83.044	84.04
	Biology	1,035,058	16,531,840	17,566,897	470	137	607	1,705	27,235	28,941	986,212	17,119,162	18,105,374	460	127	587	1,680	29,164	30,844	1,119,149	16,750,37	17,869,52	5 453	134	587	1,907	28,536	30,44
ĺ	Chemistry And Biochemistry	2,643,600	27,651,079	30,294,679	320	212	532	4,969	51,976	56,945	2,815,190	33,097,289	35,912,479	345	207	552	5,100	59,959	65,059	3,192,414	34,910,090	38,102,50	4 324	242	566	5,640	61,679	67,31
College of	Earth And Atmospheric Sciences	464,821	9,351,544	9,816,366	55	92	147	3,162	63,616	66,778	372,877	9,807,318	10,180,196	44	83	127	2,936	77,223	80,159	118,347	10,428,669	10,547,01	6 39	83	122	970	85,481	86,45
Sciences*	Mathematics	74,923	12,936,481	13,011,404	178	105	283	265	45,712	45,977	186,446	13,809,035	13,995,481	173	115	288	647	47,948	48,595	77,949	14,346,190	14,424,13	9 155	106	261	299	54,966	55,26
Sciences	Physics	533,036	12,730,492	13,263,528	140		256	2,082	49,728	51,811	982,265	13,618,095	14,600,361	154		266	3,693	51,196	54,889	503,920	16,008,70	16,512,62	8 144	133	277	1,819	57,793	59,63
	Psychology	194,190	7,838,013	8,032,203	122	90	212	916	36,972	37,888	65,375	8,181,008	8,246,383	135		229	285		36,010	273,936	8,445,113	8,719,04		86	230	1,191	36,718	37,90
	Dept & Majors Not Uniquely Associated	810,410	5,646,000	-,,	38		38	21,327	148,579	169,906	1,672,228	7,225,803	8,898,030	32		32	52,257	225,806	278,063	1,893,556	7,857,62:	9,751,17			12	157,796	654,802	812,59
	Total	5,846,373	96,061,920	101,908,292	1,323	794	2,117	2,762	45,376	48,138	7,095,206	106,278,276	113,373,482	1,343		2,121	3,345		53,453	7,223,118	112,400,70	119,623,82		828	2,099	3,441	53,550	56,99
	IAC-History Technology & Society	0	2,582,123	2,582,123	81	24	105	0	24,592	24,592	0	2,552,580	2,552,580	66		98	0	26,047	26,047	903	2,638,610	2,639,51		25	94	10	28,070	28,08
	IAC-International Affairs	0	4,796,245	4,796,245	269	67	336	0	14,275	14,275	0	4,623,555	4,623,555	230		288	0	16,054	16,054	0	5,055,77	5,055,77		60	265	0	19,078	19,07
	IAC-Literature, Media and Communicati	20,152	7,155,614	7,175,767	297	63	360	56	19,877	19,933	17,348	8,145,935	8,163,283	265		322	54	25,298	25,352	7,816	8,756,675	8,764,49		50	312	25	28,066	28,09
	IAC-Modern Languages	0	4,591,092	4,591,092							2,169	4,732,031	4,734,199	11		11	197	,	430,382	8,053	4,999,246	-,,-			19	424	263,118	263,54
College*	IAC-School of Economics	12,930	2,871,203 5,800,007	2,884,133 5,800,007	140		196	66	14,649	14,715	0	3,127,938	3,127,938 5,562,543	130		182	0	17,186	17,186	9,949	3,385,75	3,395,70		109	172 172	58	19,685	19,7
-	IAC-School of Public Policy	20.047	0,000,000	0,000,000	17	101	169	4 522	34,320	34,320	5 242	5,562,543	0,000,000	13		1/1	401	32,529	32,529	10.200	5,638,372	5,638,37		109	1/2	2.145	32,781	32,7
	Dept & Majors Not Uniquely Associated Total	26,047 59.129	3,695,000	3,721,047	1,	244	17	1,532	217,353	218,885	5,213 24,730	4,115,922	4,121,134	1.0	1	13	401	316,609	317,010	19,308 46.028	4,128,795	4,148,10		200	9	2,145	458,755 33.177	460,9
Sale a Ula a Calla	Total		31,491,284	31,550,413	872	311 735	1183	50	26,620	26,670	,	32,860,502	32,885,232	779		1,085	23	30,286	30,309	-,	34,603,220	34,649,25		286 802	1,043	44	33,177 17.663	33,2
of Business	Scheller College of Business Total	17,030 17.030	32,098,720 32,098,720	32,115,750 32,115,750	1325 1.325	735 735	2060	8	15,582 15,582	15,590 15,590	12,171 12,171	33,978,741 33,978,741	33,990,912 33,990,912	1,295		2,077	6	16,360 16.360	16,365 16.365	15,075 15,075	37,585,904 37,585,904	37,600,97		802	2,128	7	17,663 17,663	17,6 17,6
or Business		17,030	32,098,720	32,115,750	1,325 590	/35	2,060	8	15,582	15,590	12,1/1	53,978,741	33,990,912	1,295		2,0//	ь	16,360	10,365	15,075	37,585,90	37,000,97	9 1,326 573	802	2,128 573	/	17,063	1/,6
otal	Undeclared Majors/JEPHS Total	22.216.827	47E 11E 6E2	497.332.478		6.970	20,720	1.072	22,930	24,003	34.313.628	510.332.061	544,645,689	13.948	1	20.941	1.639	24.370	26.009	29.961.562	525,993,877	555,955,43		7.054	21.581	1.388	24.373	25.7
Otal	TOLAI	22,210,827	4/5,115,052	437,332,478	13,750	6,970	20,720	1,0/2	22,930	24,003	54,313,028	310,332,061	544,645,689	13,948	0,993	20,941	1,639	24,370	26,009	29,901,562	525,993,87	200,955,43	14,52/	7,054	21,581	1,388	24,3/3	25,7

#### **Institutional Financial Issues**

#### Enrollment.

Enrollment for the Master of Architecture program has remained steady since the last NAAB Visit while undergraduate enrollment has fallen, following a similar trend to other schools. While the M.Arch. Program has implemented a differential tuition funding arrangement that ensures the maintenance of proper support in the face of other contingent factors, the undergraduate enrollment decline has precipitated the re-assignment of one open faculty position in the School of Architecture to a sister School in the College. Likewise, hiring replacements to fill other open positions on the Architecture Faculty have been frozen in light of the overall enrollment decline in the School. Looking forward, we project the stabilization and partial rebound of undergraduate enrollment and the possibility of slightly increasing graduate enrollment based upon currently funded staffing capacities. All such adjustments must be made in consideration of priorities of continually improving quality of admitted graduate students, increasing faculty diversity, and enhancing faculty research productivity.

# Funding

State funding for higher education, after several years of decline, appears to have stabilized. While no State-allocated salary increases have been available since FY 2008, Georgia Tech has recently managed to provide support for retention, compressed salaries, merit-based and market equity adjustment increases through its internal budgeting discipline.

# Funding Models

We are advised that the Board of Regents of the University System of Georgia is considering changing its funding model to focus more on graduation numbers and rates than on credit hours delivered. No specific proposal in final form is currently available, and no specific implementation plans have been made public. Given the strong rates of graduation, it is unlikely that possible future changes in this regard will adversely affect the Master of Architecture Program.

#### I.2.5 Information Resources

# The Library and Its Administration

The Georgia Tech Library is a creative partner in the learning community and Georgia Tech's instructional, learning and research programs. The Library plans, develops and implements programs to provide information and learning resources to students, faculty, and staff and selected services to off campus clients. Using appropriate technology, the Library delivers resources to satisfy information needs, promotes lifelong learning, and creates productive connections for the scholarly community. (Georgia Tech Library 2011 Strategic Plan: <a href="http://www.library.gatech.edu/about/strategic plan.php">http://www.library.gatech.edu/about/strategic plan.php</a>)

The Architecture Library is housed in the College of Architecture and is the only official branch library on campus. The central library is located across the street, providing students and faculty convenient access to both collections. The Architecture Library supports teaching, learning, and research activities of faculty and students by offering services, collections, instruction, and outreach that are targeted to the five schools within the College of Architecture. The Architecture Library also provides many of these functions for constituencies across the university and the larger community.

The Vice-Provost of Learning Excellence and the Dean of Libraries reports to the University Provost. The Head of the Architecture Library (Architecture Librarian) reports to the Associate Dean of Research & Learning who directly reports to the Dean of Libraries. The Head of the Architecture Library position is divided between the management responsibilities of a department head, and liaison responsibilities for the College of Architecture. Librarians and archivists have faculty status (non-tenured) at Georgia Tech. Library faculty must meet criteria for reappointment and promotion, and are required to pursue professional development activities including scholarship, creative activity and professional service.

## **Current Collections**

The Architecture Library strives to meet the increasing demand for access to information. The Library provides ever-expanding access to electronic information resources that are available at the library, in the design studio, dormitory, or in the home. At the same time the Library continues to grow its print collection, and maintains a commitment to providing information resources in whatever media are necessary and appropriate.

Instruction and research in architecture at Georgia Tech is interdisciplinary, reflecting trends in the profession at large. Library support must respond to changing emphases in teaching and research. As a result, collection development has broadened beyond basic coverage of the most fundamental subjects (e.g. architectural history, theory, and practice) to include more emphasis on related fields (e.g. construction, urban and regional planning, landscape architecture, etc.), as well as newer areas of study (digital design & fabrication, new urbanism, health & design, high performance buildings, accessibility). The Library also attempts to acquire significant foreign-language publications to support global and multicultural studies in architecture.

Overall, the architecture collection is adequate for support of basic undergraduate and graduate coursework. It is inadequate, however, for more advanced study, particularly at the doctoral level. Thus, according to the ALA definition, depth of coverage is at the general "study" level for most subjects. The collection is noteworthy in a few highly specialized areas: art nouveau, and the arts and crafts movement. This is primarily due to a collection of rare European and American journals from the late nineteenth and early twentieth centuries.

#### Books

The Architecture Library's collection of 49,192 volumes falls into the range of 30,000 to 60,000 recommended for a "medium" branch library by the Art Libraries Society of North America in their Standards for Art Libraries and Fine Arts Slide Collections. These standards also apply to architecture libraries. A majority of the monographs are purchased using the YPB acquisitions and collections online system. Books are sometimes purchased from William Stout Architectural Books. The collection includes an increasing number of e-books, especially reference works. The Library offers superior interlibrary loan of books and document delivery service, greatly expanding the scope of available resources on an as – needed basis. Georgia Tech students have borrowing privileges at all 35 Georgia Colleges and University Libraries as well as Emory University Library.

# • Journal Subscriptions

The Architecture Library currently subscribes to over 100 active architecture related journals and other serials. The Architecture Library subscribes to 90% (49 out of 54) of the journals recommended in the Association of Architecture School Librarians' (AASL) Core List of Periodical Titles. Journals are increasingly available electronically as e-journals, as independent subscriptions, or through aggregator databases. The Library subscribes to hundreds of additional titles in related fields, and maintains extensive back-runs of numerous additional titles.

#### Databases

The Library provides access to the Avery Index to Architectural Periodicals, Art & Architecture Complete, JSTOR, Arts & Humanities Citation Index, Applied Science & Technology Abstracts, Urban Studies Abstracts and many more web-based databases that are of use to architecture faculty and students. Subscriptions to specialized electronic tools include CuminCAD and BuildingGreen.com. These were purchased from the Architecture Library endowment that is also used to purchase books. Increasingly, such databases and products provide online access to full-text articles, case studies and other documents.

#### Visual Resources

Currently, there is very little demand for the Library to provide visual resources, primarily due to advances in digital technology. Students can easily locate architectural images on the Internet, and scan images from books and journals. Instructors create and maintain their own visual collections. A campus site license for ArtStor would be prohibitively expensive, and is unnecessary since the College does not have a fine art or art history program. However, the Library does subscribe to a few affordable image databases such as *CAMIO* (Catalog of Art Museum Images Online) and *Oxford Art Online*.

The Architecture Library has a collection of 220 videocassettes and DVDs in architecture and related fields. Most videos are recommended for purchase by faculty, who show them in class, or assign students to view them in the library. The Library also subscribes to the database *Films on Demand* that is popular with faculty to use in their courses.

## • Architecture Archive

The Georgia Tech Design Archive is located in the Georgia Tech Archives department, which is a short walk from the Architecture Library. The Archive is maintained by a professional materials archivist. The Design Archive collects, preserves, and provides access to materials related to architectural design in the Southeast. The foundation of the collection is the architectural work and personal documents of P.M.

Heffernan, former director of the College of Architecture from 1956-1976. The collection also includes a substantial body of faculty, student, and alumni work. http://www.library.gatech.edu/archives/design\_archives.php

# **Support for Program Mission**

The Architecture Library supports all aspects of the School of Architecture's academic program including the Bachelors pre-professional program as well as the graduate Masters and Ph.D. programs. The Architecture Librarian is designated as liaison to the School of Architecture and welcomes participation in collection development from faculty and students. Teaching library users research skills that will encourage and support critical thinking and lifelong learning is at the forefront of the Library's educational mission.

Incoming students are given orientations to the Architecture Library resources and services. Instruction sessions tied to specific courses and assignments orient students to the Library and introduce them to a suite of important Web-based information resources including the Library home page, the catalog, and the electronic databases. The librarian creates research guides for the School that serves as an additional resource for students to learn about the Library and how to improve their research skills <a href="http://libguides.gatech.edu/architecture">http://libguides.gatech.edu/architecture</a>. The Librarian also consults with individual architecture students, primarily graduate students on a walk-in basis or upon advance request. The Librarian meets with each new School of Architecture faculty member and offers them instruction in using the Library resources and services.

The Architecture Library also serves as a community learning center and has partnered with the College of Architecture administration to host the COA Research Forum. The Forum began in 2008, and is a monthly presentation by a faculty member or research scientist to talk about his/her research. By sharing their research with the College of Architecture community, ideas are explored and opportunities for collaboration can be identified. There have been thirty-three lectures during the past five years and anyone can attend the lectures, including the public and practitioners in the Atlanta community.

# **Library Funding**

Funding for Library operations takes place within a centralized library context. The Architecture Librarian participates in the allocation process for materials funding and has full responsibility for expending funds that are allocated to the architecture accounts. Funding allocated from the central library for architecture collections was \$9,200. The Preston Stevens Endowment provides additional funding for library materials. Endowment funds dedicated to the Architecture collection were approximately \$41,000 for 2013.

# **Challenges Regarding Library Operations**

Georgia Tech recognizes an inherent conflict between the libraries' undergraduate funding level and the Institute's ambitious research mission. Unfortunately, when Georgia Tech's library holdings in architecture and related fields are compared to its peer institutions nationally and regionally, our ranking is consistently low in terms of size and growth. Significant future growth is dependent on strong and consistent support from the Institute, which is unpredictable. The situation is not expected to change given the university's overall budget picture.

Fortunately, funds from the Preston Stevens endowment are also available each year for the purchase of books, journals, databases and other library materials; however, the endowment is intended to supplement, not replace direct funding from the Institute.

# PART ONE (I): SECTION 3 – INSTITUTIONAL AND PROGRAM CHARACTERISTICS

# **I.3.1 Statistical Reports**

**TABLE 17: Program Student Demographics** 

	M.Arch Enrollment 2008	M.Arch Enrollment 2009	M.Arch Enrollment 2010	M.Arch Enrollment 2011	M.Arch Enrollment 2012	% of M.Arch Enrollment 2012	Tech Gradaute Enrollment 2012	% of Tech Gradaute Enrollment 2012
Total								
Enrollment	110	111	105	136	134		7030	
Female	53	59	53	75	71	53	1789	25
Male	57	52	52	61	63	47	5241	75
White	83	88	76	97	100	75	2915	41
Black, non-								
hispanic	11	6	11	16	11	8	271	3
Hispanic	2	4	4	3	3	2	233	3
Asian/Pacific								
Islander	12	6	14	14	18	13	562	8
Amer Ind/Alaksa Natv	0	0	0	1	1	1	7	1
	U	U	0	1	1	1	,	1
Two or more races	1	6	0	3	1	1	116	2
Ethnicity unknown	1	1	0	2	0	0	2926	42

**TABLE 18: Qualifications of Students Admitted** 

M.ARCH Admission	2007	2011	2012
25% percentile GPA		3.19	3.36
Avg Admission GPA	3.3	3.39	3.51
75% percentile GPA		3.64	3.72
25% percentile GRE verbal		440	460
Avg GRE verbal	556	517	506
75% percentile GRE verbal		570	550
25% percentile GRE quant.		587.5	610
Avg GRE quantitative	668	653	654
75% percentile GRE quant.		720	690
25% percentile GRE anal.		3.5	3.5
Avg GRE analytical		3.97	3.84
75% percentile GRE anal.		4.5	4
25% percentile GRE (V&Q)		1077.5	1095
Avg GRE Score (V&Q)	1224	1169.66	1159.07
75% percentile GRE (V&Q)		1252.5	1210

**TABLE 19: Time to Graduation** 

M.Arch Time to				
Completion	2009	2010	2011	2012
Stdts graduate in				
"normal time"	97%	96%	97%	97%
Within 150% of norm	99%	98%	99%	99%
M.Arch Time to				
Completion	2009	2010	2011	2012

**TABLE 20: Program Faculty Demographics** 

Full-time Instructional Faculty	SoA 2008	SoA 2009	SoA 2010	SoA 2011	SoA 2012	Georgia Tech 2012
Total	42	33	31	29	26	937
Female	7	4	5	4	3	205
Male	35	29	26	25	23	732
White	38	30	25	26	24	670
Black, non- hispanic	0	0	0	0	0	29
Hispanic	0	0	0	0	0	31
Asian/Pacific Islander	3	3	6	3	2	201
Amer Ind/Alaksa Natv	0	0	0	0	0	0
Two or more races	0	0	0	0	0	0
Ethnicity unknown	1	0	0	0	0	6

**TABLE 21: Faculty Promotion and Tenure** 

Full-time Instructional Faculty	SoA 2008	SoA 2009	SoA 2010	SoA 2011	SoA 2012	Georgia Tech 2012
Faculty						
Promoted	0	0	1	2	0	54
Tenured						
Faculty	25	20	22	21	19	635
# Registered						
in U.S.						
Jurisdiction	11	10	10	8	6	n/a

**TABLE 22: Faculty Professional Licenses** 

NAME	2008	2009	2010	2011	2012	2013
	Kentucky, RLA 222;	Kentucky, RLA 222;	Kentucky, RLA 222;	Kentucky, RLA 222;	Kentucky, RLA 222;	Kentucky, RLA 222;
Allen, Douglas	Georgia, RLA 620	Georgia , RLA 620	Georgia , RLA 620	Georgia , RLA 620	Georgia , RLA 620	Georgia , RLA 620
Bell, Brian	Georgia RA011255	Georgia RA011255	Georgia RA011255	Georgia RA011255	Georgia RA011255	Georgia RA011255
Branum, Casie				AICP	AICP	AICP
	Georgia RA005811,	Georgia RA005811,	Georgia RA005811,	Georgia RA005811,	Georgia RA005811,	Georgia RA005811,
Dagenhart, Richard	Florida AR93316	Florida AR93316	Florida AR93316	Florida AR93316	Florida AR93316	Florida AR93316
	Professional Engineer,	Professional Engineer,	Professional Engineer,	Professional Engineer,	Professional Engineer,	Professional Engineer,
Debo, Thomas	Georgia # PE015018	Georgia # PE015018	Georgia # PE015018	Georgia # PE015018	Georgia # PE015018	Georgia # PE015018
Dunham Jones, Ellen	n Jones, Ellen New York 7343961 New York 7343961		New York 7343961	New York 7343961	New York 7343961	New York 7343961
	Alabama RA1815,	Alabama RA1815,	Alabama RA1815,	Alabama RA1815,	Alabama RA1815,	Alabama RA1815,
Farrow, Bob	Georgia RA008109	Georgia RA008109	Georgia RA008109	Georgia RA008109	Georgia RA008109	Georgia RA008109
	Georgia RA8186,	Georgia RA8186,	Georgia RA8186,	Georgia RA8186,	Georgia RA8186,	Georgia RA8186,
	Florida AR92603,	Florida AR92603,	Florida AR92603,	Florida AR92603,	Florida AR92603,	Florida AR92603,
	NCARB 46896,	NCARB 46896,	NCARB 46896,	NCARB 46896,	NCARB 46896,	NCARB 46896,
	Georgia Contractor	Georgia Contractor	Georgia Contractor	Georgia Contractor	Georgia Contractor	Georgia Contractor
Gamble, Michael	RLC 1001404	RLC 1001404	RLC 1001404	RLC 1001404	RLC 1001404	RLC 1001404
	Prof. Engineer	Prof. Engineer	Prof. Engineer	Prof. Engineer	Prof. Engineer	Prof. Engineer
Gentry, Russell	Georgia, # 25886	Georgia, # 25886	Georgia, # 25886	Georgia, # 25886	Georgia, # 25886	Georgia, # 25886
	PA RA017163, GA	PA RA017163, GA	PA RA017163, GA	PA RA017163, GA	PA RA017163, GA	PA RA017163, GA
	RA010318, NY	RA010318, NY	RA010318, NY	RA010318, NY	RA010318, NY	RA010318, NY
Gordon, Judy	021580	021580	021580	021580	021580	021580
	Georgia RA008188,					
	South Carolina 5875,	Georgia RA008188,	Georgia RA008188,	Georgia RA008188,		
	New York 27502,	South Carolina 5875,	South Carolina 5875,	South Carolina 5875,		
	Michigan	New York 27502,	New York 27502,	New York 27502,		
Contain, sac,	1301055890,	Michigan	Michigan	Michigan		
	Maryland 11030,	1301055890,	1301055890,	1301055890,	Georgia RA008188,	
	Florida AR 91530,	Maryland 11030,	Maryland 11030,	Maryland 11030,	South Carolina 5875,	Georgia RA008188,
	Alabama 4742, Texas	Florida AR 91530,	Florida AR 91530,	Florida AR 91530,	Maryland 11030,	South Carolina 5875,
Green, David	16150	Texas 16150	Texas 16150	Texas 16150	Florida AR 91530,	Florida AR 91530,
Harrison, Timothy	Georgia RA009744	Georgia RA009744	Georgia RA009744	Georgia RA009744	Georgia RA009744	Georgia RA009744
Haymaker, John	California #3124178	California #3124178	California #3124178	California #3124178	California #3124178	California #3124178
	Georgia RA008032,	Georgia RA008032,	Georgia RA008032,	Georgia RA008032,	Georgia RA008032,	Georgia RA008032,
Johnston, George	Mississippi 1833	Mississippi 1833	Mississippi 1833	Mississippi 1833	Mississippi 1833	Mississippi 1833
	Expired,	Expired,	Expired,	Expired,	Expired,	Expired,
Khan, Sabir	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts	Massachusetts
Lackey, Robin	GA 032657	GA 032657	GA 032657	GA 032657	GA 032657	GA 032657
LeBlanc, Jude	Ga RA010343	Ga RA010343	Ga RA010343	Ga RA010343		Under Renewal

	NCARB certified -	NCARB certified -	NCARB certified -	NCARB certified -	NCARB certified -	NCARB certified -		
	#15,233, GA	#15,233, GA	#15,233, GA	#15,233, GA	#15,233, GA	#15,233, GA		
	RA002042, SC AR2396,	RA002042, SC AR2396,	RA002042, SC AR2396,	RA002042, SC AR2396,	RA002042, SC AR2396,	RA002042, SC AR2396,		
	United Kingdom (ARB)	United Kingdom (ARB)	United Kingdom (ARB)	United Kingdom (ARB)	United Kingdom (ARB)	United Kingdom (ARB)		
Parker, Ennis	047744C	047744C	047744C	047744C	047744C	047744C		
	Georgia RA003452	Georgia RA003452	Georgia RA003452	Georgia RA003452	Georgia RA003452	Georgia RA003452		
	California C32946,	California C32946,	California C32946,	California C32946,	California C32946,	California C32946,		
	Florida 16545, Illinois	545, Illinois Florida 16545, Illinois Flor		Florida 16545, Illinois	Florida 16545, Illinois	Florida 16545, Illinois		
	001018610, New	001018610, New	001018610, New	001018610, New	001018610, New	001018610, New		
	Jersey 21AI01888600,	Jersey 21AI01888600,	Jersey 21AI01888600,	Jersey 21AI01888600,	Jersey 21AI01888600,	Jersey 21Al01888600,		
	Tennessee, Texas	Tennessee, Texas	Tennessee, Texas	Tennessee, Texas	Tennessee, Texas	Tennessee, Texas		
Romm, Stuart	#21555	#21555	#21555	#21555	#21555	#21555		
Rudolph, Charles						New York, #6271		
Yocum, David	Georgia RA011013	Georgia RA011013	Georgia RA011013	Georgia RA011013	Georgia RA011013	Georgia RA011013		

# **I.3.2 Annual Reports**

# 2009 NAAB Annual Report

http://www.arch.gatech.edu/sites/files/arch/2009 NAAB Annual Report Narrative.pdf

# **2010 NAAB Special Focused Evaluation Report**

http://www.arch.gatech.edu/sites/files/arch/2010 NAAB SPECIAL PROGRAM FE REPORT.pdf

http://www.arch.gatech.edu/sites/files/arch/files/2010 NAAB SPECIAL PROGRAM FE REPORT DECISION.pdf

# **2010 NAAB Annual Report**

http://www.arch.gatech.edu/sites/files/arch/naab annual report 2010.pdf

# 2011 NAAB Annual Report

http://www.arch.gatech.edu/sites/files/arch/files/NAAB%20Annual%20Report%202011 final.pdf

# 2012 NAAB Annual Report

http://www.arch.gatech.edu/sites/files/arch/files/NAAB%20Annual%20Report%202012%20final.pdf

Georgia Tech Office of Institutional Research & Planning verification letter is provided below:



September 2, 2013

National Architecture Accrediting Board 1101 Connecticut Avenue, NW; Suite 410 Washington, D.C. 20036

Re: Certification of Statistical Data for the Architecture Program Report for the Georgia Institute of Technology

To whom it may concern:

I hereby certify that the statistical data prepared for this report by the Office of Institutional Research and Planning at the Georgia Institute of Technology have been verified and are consistent with institutional reports to national and regional agencies including the Integrated Postsecondary Data System of the National Center for Education Statistics.

Sincerely,

Sandi Bramblett, Executive Director

Institutional Research and Planning/Decision Support Services

C: Cassandra Spiller Belton

**Georgia Institute of Technology** Atlanta, Georgia 30332-0530 U.S.A. Phone 404-894-3311 Fax 404-894-0032

# I.3.3 Faculty Credentials

Faculty credentials are summarized in the matrix of faculty teaching provided in section I.2.1 and Appendix 2.

# PART TWO (II): SECTION 1 –STUDENT PERFORMANCE- EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA

#### II.1.1 Student Performance Criteria

Overview of Curricular Goals and Content

The program of study leading to the Master of Architecture degree at Georgia Tech is structured around the goal of introducing students to fundamental principles and precedents of architecture as a discipline and as a profession, to provide both a preparation for practice and a basis for innovation in the field. The degree program comprised of preparatory, professional, and free elective requirements provides flexibility both for students who have an undergraduate degree with a major in architecture and for those who have a prior degree in a field other than architecture.

- Preparatory Requirements are completed within the first three semesters of the 3+ year M.Arch. curriculum, and the credentials of those admitted to the two-year track are evaluated with regard to the learning outcomes associated with this category of requirements as a basis for the grant of advanced placement (see Part II.3 Evaluation of Preparatory/Pre-Professional Education below.) Students complete three semesters of "core" studios focused upon introductory instruction in architectural design with staged exercises focused upon issues of order, space, form, program, context, construction, and accessibility. These exercises culminate in the third semester in the design of a modestly scaled community building with a hierarchy of spatial requirements on a sloping site. The instruction of each core studio is closely integrated with the instruction of three companion courses in architectural media and modeling supporting the development of manual and digital skills in representation, modeling, and rendering. Likewise, the two-course sequence in architectural history and the three introductory courses in building physics and systems (structural, constructional, environmental) are cross-referenced and interwoven as topics of overlapping concern for the practices and propositions of design studio.
- Professional Requirements are completed over the final four semesters of the 3+ year M.Arch. curriculum corresponding to the four semester curriculum of the two-year track. Two cycles of architectural design, options studios in the middle year and design + research studios in the final year, structure a spectrum of experiences focused upon developing the requisite design skills, judgment, and acumen for professional performance; and the critical, investigative skills necessary for informing more in-depth design decision-making. The cycle of options studios is sequenced with more advanced technical coursework in structures, construction, and environmental systems and culminates in a comprehensive design studio the instruction of which is closely integrated with the allied courses in building technology. Three courses in urban history and architectural theory foreground discourses and their related manifestations in practice thematically focused on issues of program and function, sites and contexts, tectonics and form, and rhetorics of representation. The recently expanded two-course sequence in the practice of architecture likewise provides a context for understanding the architect's vocation in terms of: the historical, social, legal, and ethical contexts of the profession, considered globally; office procedures and project management; professional leadership and entrepreneurship in an expanding marketplace for services; and architectural research and emerging trends in practice. In the final year of the curriculum, Architectural Design + Research Studios bring into the foreground the School's serious commitment to research- and performance-driven design practice and to the reciprocity of practice and research. Each semester, third-year Master of Architecture students are presented studio platforms

formulated around strong research questions and agendas related to areas of faculty expertise and active inquiry, formulated in relation to defined knowledge bases such as Urban Design, High-Performance Building, Digital Design & Fabrication, or Healthcare Design. Collaborative effort is organized, and self-organized, external consultants are engaged, in order to magnify students' depth of consideration of design strategies and to inform the negotiation of choices. Students exhibiting individual or joint initiative and gaining faculty support may pursue an Independent Thesis Option in order to develop research questions and agendas more specifically aligned with individual interests and goals.

• Elective Requirements. The M.Arch. curriculum provides ample opportunity for students to both explore a breadth of interests and to focus in-depth through 18 semester hours of free, professional electives. A rich array of elective offerings is available: 1) within the College of Architecture in allied disciplines, especially in the School of Building Construction and the School of City and Regional Planning; 2) within the School of Architecture in topical areas supported by faculty expertise and overlapping with areas of concentration in the post-professional Master of Science program (urban design, health and design, high performance buildings, digital design and fabrication) and Doctor of Philosophy programs (urban design, evidence-based design, building technology, computation, spatial and cognitive performance, history and culture). Students are encouraged through advising to focus their choices through three-course elective concentrations. These choices, often aligned with focal themes of design + research studios, provide rich opportunities for informed inquiry and design research.

The figure below illustrates the seven-semester course sequence of the Master of Architecture curriculum.

	Summer 1	Fall 1	Spring 1	Fall 2	Spring 2	Fall 3	Spring 3
DESIGN	CORE I	CORE II	CORE III	OPTIONS I	OPTIONS II	DESIGN+RESEARCH I	DESIGN+RESEARCH II
MEDIA+MODELING	MEDIA+MODELING I	MEDIA+MODELING II	MEDIA+MODELING III				
HISTORY		HISTORY I	HISTORY II	URBAN FORM			
THEORY				THEORY	THEORY II		
PRACTICE					PRACTICE I	PRACTICE II	
CONSTRUCTION		CONSTRUCTION I			CONSTRUCTION II		
STRUCTURES			FUNDAMENTALS	STRUCTURES I	STRUCTURES II		
ENV SYSTEMS			ENV SYSTEMS I	ENV SYSTEMS II			
ELECTIVES		ELECTIVE				ELECTIVE	ELECTIVE
						ELECTIVE	ELECTIVE
							ELECTIVE
	8	17	17	18	18	15	15

Required Coursework and Satisfaction of Student Performance Criteria

This section provides a list of Primary and Secondary courses which point to the greatest evidence of Student Achievement fulfilling the Student Performance Criteria within the Curriculum of the Master of Architecture Program.

The 3+ year M.Arch. curriculum serves as the framework for assessing and accommodating the prior experience of those students requesting advanced standing into the two-year track. There is some intentional redundancy in the curriculum as a safeguard, however. In all cases where primary evidence is situated in the first year of the 3+ year sequence, further demonstrations of satisfaction of those criteria are presented within the two-year track.

Note: The course matrix with NAAB criteria can be found at the end of this section.

# 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.

**Student Performance Criterion – A.1.** Criterion Description: Communication Skills: *Ability* Primary course in which this criterion is fulfilled: *ARCH 6105 History of Architecture I* Secondary course in which this criterion is fulfilled: *ARCH 6350 Architectural Theory II* 

**Student Performance Criterion – A.2.** Criterion Description: Design Thinking Skills: *Ability* Primary course in which this criterion is fulfilled: *ARCH 6071 Design + Research Studio I* Secondary course in which this criterion is fulfilled: *ARCH 6051 Options I Studio* 

**Student Performance Criterion – A.3.** Criterion Description: Visual Communication Skills: *Ability* Primary course in which this criterion is fulfilled: *ARCH 6472 Architecture, Media and Modeling 2* Secondary course in which this criterion is fulfilled: *ARCH 6051 Options I Studio* 

**Student Performance Criterion – A.4.** Criterion Description: Technical Documentation: *Ability* Primary course in which this criterion is fulfilled: *ARCH 6230 Construction Technology 2* Secondary course in which this criterion is fulfilled: *ARCH 052 Options 2 Studio Building Workshop* 

**Student Performance Criterion – A.5.** Criterion Description: Investigative Skills: *Ability* Primary course in which this criterion is fulfilled: *ARCH 6071 Design + Research Studio 1* Secondary course in which this criterion is fulfilled: *ARCH 6051 Options 1 Studio* 

Student Performance Criterion – A.6. Criterion Description: Fundamental Design Skills: Ability

Primary course in which this criterion is fulfilled: ARCH 6026 Core 2

Secondary course in which this criterion is fulfilled: ARCH 6051 Options I Studio

Student Performance Criterion - A.7. Criterion Description: Use of Precedents: Ability

Primary course in which this criterion is fulfilled: ARCH 6026 Core 2

Secondary course in which this criterion is fulfilled: ARCH 6151 History of Urban Form

#### Student Performance Criterion - A.8.

Criterion Description: Ordering Systems Skills: Understanding

Primary course in which this criterion is fulfilled: ARCH 6470 Architecture, Media and Modeling 1

Secondary course in which this criterion is fulfilled: ARCH 6051 Options I Studio

#### Student Performance Criterion – A.9.

Criterion Description: Historical Traditions and Global Culture: *Understanding*Primary course in which this criterion is fulfilled: *ARCH 6105 History of Architecture 1*Secondary course in which this criterion is fulfilled: *ARCH 6151 History of Urban Form* 

#### **Student Performance Criterion – A.10.**

Criterion Description: Cultural Diversity: Understanding

Primary course in which this criterion is fulfilled: ARCH 6106 History of Architecture 2 Secondary course in which this criterion is fulfilled: ARCH 6350 Architectural Theory 1

# **Student Performance Criterion – A.11.**

Criterion Description: Applied Research: Understanding

Primary course in which this criterion is fulfilled: ARCH 6071 Design + Research Studio 1 Secondary course in which this criterion is fulfilled: ARCH 6072 Design + Research Studio 2

#### **REALM B: Integrated Building Practice**

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 the 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.

# Student Performance Criterion - B.1.

Criterion Description: Pre-Design: Ability

Primary course in which this criterion is fulfilled: ARCH 6350 Architectural Theory 1 Secondary course in which this criterion is fulfilled: ARCH 6051 Options Studio 1

#### Student Performance Criterion - B.2.

PART TWO (II) SECTION 1— STUDENT PERFORMANCE - EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA — II.1.1 Student Performance Criteria

Criterion Description: Accessibility: Ability

Primary course in which this criterion is fulfilled: ARCH 6026 Core 2

Secondary course in which this criterion is fulfilled: ARCH 6052 Options 2 Studio Building Workshop

#### Student Performance Criterion - B.3.

Criterion Description: Sustainability: *Ability*Primary course in which this criterion is fulfilled: *ARCH 3231 Environmental Systems + Design Integration1*Secondary course in which this criterion is fulfilled: *ARCH 4231 Environmental Systems + Design Integration2* 

#### Student Performance Criterion - B.4.

Criterion Description: Site Design: Ability

Primary course in which this criterion is fulfilled: ARCH 6051 Options 1 Studio

Secondary course in which this criterion is fulfilled: ARCH 6052 Options 2 Studio Building Workshop

#### Student Performance Criterion - B.5.

Criterion Description: Life Safety: Ability

Primary course in which this criterion is fulfilled: ARCH 6051 Options 1 Studio

Secondary course in which this criterion is fulfilled: ARCH 6052 Options 2 Studio Building Workshop

#### Student Performance Criterion - B.6.

Criterion Description: Comprehensive Design: *Ability,* integrating the following SPC: A.2., A.4., A.5., A.8., A.9., B.2., B.3., B.4., B.5., B.8., B.9.

Primary course in which this criterion is fulfilled: ARCH 6052 Options 2 Studio Building Workshop

#### Student Performance Criterion - B.7.

Criterion Description: Financial Considerations: Understanding

Primary course in which this criterion is fulfilled: ARCH 6316 Practice of Architecture 2

Secondary course in which this criterion is fulfilled:

ARCH 4231 Environmental Systems + Design Integration 2

#### Student Performance Criterion - B.8.

Criterion Description: Environmental Systems: Understanding

Primary course in which this criterion is fulfilled:

ARCH 3231 Environmental Systems + Design Integration1

Secondary course in which this criterion is fulfilled:

ARCH 4231 Environmental Systems + Design Integration2

# Student Performance Criterion - B.9.

Criterion Description: Structural Systems: Understanding

Primary course in which this criterion is fulfilled: ARCH 3241 Fundamentals of Structures

Secondary course in which this criterion is fulfilled:

ARCH 4251 Architectural Structures + Design Integration 1

## **Student Performance Criterion – B.10.**

Criterion Description: Building Envelope Systems: Understanding

Primary course in which this criterion is fulfilled: ARCH 6229 Construction Technology 1

PART TWO (II) SECTION 1— STUDENT PERFORMANCE - EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA — II.1.1 Student Performance Criteria

Secondary course in which this criterion is fulfilled: ARCH 6230 Construction Technology 2

#### Student Performance Criterion - B.11.

Criterion Description: Building Service Systems: Understanding

Primary course in which this criterion is fulfilled:

ARCH 4231 Environmental Systems + Design Integration 2

Secondary course in which this criterion is fulfilled: ARCH 6230 Construction Technology 2

# **Student Performance Criterion – B.12.**

Criterion Description: Building Materials and Assemblies: Understanding

Primary course in which this criterion is fulfilled:

ARCH 4251 Architectural Structures + Design Integration 1

Secondary course in which this criterion is fulfilled: ARCH 6230 Construction Technology 2

# **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.

#### Student Performance Criterion - C.1.

Criterion Description: Collaboration: Ability

Primary course in which this criterion is fulfilled: ARCH 6027 Core 3

Secondary course in which this criterion is fulfilled: ARCH 6071 Design + Research Studio 1

#### Student Performance Criterion - C.2.

Criterion Description: Human Behavior:

Primary course in which this criterion is fulfilled: ARCH 6105 History of Architecture 1 Secondary course in which this criterion is fulfilled: ARCH 6350 Architectural Theory 1

## **Student Performance Criterion – C.3.**

Criterion Description: Client Role in Architecture: Understanding

Primary course in which this criterion is fulfilled: *ARCH 6315 Practice of Architecture 1* Secondary course in which this criterion is fulfilled: *ARCH 6316 Practice of Architecture 2* 

## Student Performance Criterion - C.4.

Criterion Description: Project Management: Understanding

Primary course in which this criterion is fulfilled: *ARCH 6316 Practice of Architecture 2* Secondary course in which this criterion is fulfilled: *ARCH 6315 Practice of Architecture 1* 

#### Student Performance Criterion - C.5.

Criterion Description: Practice Management: Understanding

PART TWO (II) SECTION 1— STUDENT PERFORMANCE - EDUCATIONAL REALMS & STUDENT PERFORMANCE CRITERIA — II.1.1 Student Performance Criteria

Primary course in which this criterion is fulfilled: *ARCH 6315 Practice of Architecture 1* Secondary course in which this criterion is fulfilled: *ARCH 6316 Practice of Architecture 2* 

#### Student Performance Criterion - C.6.

Criterion Description: Leadership: Understanding

Primary course in which this criterion is fulfilled: *ARCH 6316 Practice of Architecture 2* Secondary course in which this criterion is fulfilled: *ARCH 6315 Practice of Architecture 1* 

# **Student Performance Criterion – C.7.**

Criterion Description: Legal Responsibilities: Understanding

Primary course in which this criterion is fulfilled: ARCH 6316 Practice of Architecture 2 Secondary course in which this criterion is fulfilled: ARCH 6151 History of Urban Form

# Student Performance Criterion - C.8.

Criterion Description: Ethics and Professional Judgment: *Understanding*Primary course in which this criterion is fulfilled: *ARCH 6315 Practice of Architecture 1*Secondary course in which this criterion is fulfilled: *ARCH 6316 Practice of Architecture 2* 

## Student Performance Criterion - C.9.

Criterion Description: Community and Social Responsibility: *Understanding* Primary course in which this criterion is fulfilled: *ARCH 6051 Options 1 Studio* 

Secondary course in which this criterion is fulfilled: ARCH 6151 History of Urban Form

	GEORGIA INSTITUTE OF TECHNOLOGY SCHOOL OF ARCHITECTURE		C	o r	F S	Core	clas	ses	are e	pected to	hav	em	et	PRO	OFF	SSI	ONAL						D	ESIC	5N +	RE:	SEAI	RCH
GRADU																												
	Year		01	NE										TW	/0									THE				
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	Course Type				LP		T L	_		ST L		P LI			1000		P L LP	S		_	_			_	LP		ST	$\perp$
	Semester			Su	Su	F	F	F	F	S S	\$ 5	S	F		F F	F	FF		S 5	S	S	S		F	S		S	$\perp$
	Primary course ①  Secondary course 3				ng 1		6 50			c	r Di		ntegration 1			Locitor	ntegration 2		do		Integration 2							
2008-2014 NAAB Performance Criteria	Semester Summer = Su Fall = F Spting = S  Course Type Lecture = L Lecture/Seminar = LS Lecture/Practicum = LP Studio = ST  NAAB Performance Level Abilty = A Understanding = U	VAAB Performance Levels		ARCH 6024 Core 1	ARCH 6470 Architecture, Media and Modeling		ARCH 6026 COIE Z APCH 4472 Architecture Modia and Modelina	ARCH 4105 History of Architecture 1	ARCH 6229 Construction Tech 1	ARCH 6027 Core 3	ARCH 64/4 Archilecture, Media dria Modelling	ARCH 6106 HISTORY OF ARCHITECTURE Z	An Cri 3231 Environmental Systems + Design Integration 1		ARCH 6051 Options   Studio	RCH 9530 Architectural Illediy I	ARCH 4231 Architectural situations + Design integration 1 COA 6151 History of Urban Form ARCH 4231 Environmental Systems + Design Integration 2		ARCH 6032 Upilons 2 Studio Building Workshop	ARCH 8332 Alchinectual mediy z ARCH 8330 Construction Technology 2		ARCH 6315 Practice of Architecture 1		APCH 4071 Design + Research 1 Studio	ARCH 6316 Practice of Architecture 2		ARCH 60/2 Design + Research 2 Studio	
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A3	Visual Communication Skills	^					Œ						+		S S	+				+	+			U	_	-		
A4	Technical Documentation	A					-	1							_	+		1	1	P	1							
A5	Investigative Skills	A													2	+	1 1				1	++		Œ	1			
Аб	Fundamental Design Skills	Α				G	7								S S	+				+	+			-	1			
A7	Use of Precedents	Λ					4								_	+	S			+	+							
A8	Ordering System Skills	U			®		1								S		-											
A9	Historical Traditions & Global Culture	U					t	Œ								+	S				+							
A9	Cultural Diversity	ŭ II						-	1		(	Ð			1	s	-			+	+							
A11	Applied Research	ŭ										1				-				+	+			Œ	1	_	s	
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C9	Community and Social Responsibility	U												(	D		S											

#### **II.2 CURRICULAR FRAMEWORK**

# **II.2.1 Regional Accreditation**

Georgia Tech is accredited by the Southern Association of Colleges and Schools (SACS)

06 DEC -8 PM 1:58

FFICE OF THE PRESIDENT

# SOUTHERN ASSOCIATION OF COLLEGES AND SCHOOLS COMMISSION ON COLLEGES

1866 Southern Lane • Decatur, Georgia 30033-4097 Telephone 404/679-4500 Fax 404/679-4558 www.sacscoc.org December 6, 2006

Dr. G. Wayne Clough President Georgia Institute of Technology Carnegie Building 223 North Avenue, N.W. Atlanta, GA 30332-0325

Dear Dr. Clough:

This is to certify that Georgia Institute of Technology in Atlanta, Georgia, is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Bachelor's, Master's, and Doctoral degrees.

The institution was initially accredited in 1923 and was last reviewed and reaffirmed in 2005. The 2005 reaffirmation review covered the main campus and all extended sites. The institution's accreditation extends to all programs offered on the institution's main campus as well as those offered at all extended program sites wherever located. The institution is scheduled to receive its next reaffirmation of accreditation review in 2015.

Sincerely,

Belle S. Wheelan, Ph.D.

President

Commission on Colleges

BSW:tll

## **II.2.2 Professional Degrees and Curriculum**

The Georgia Institute of Technology, School of Architecture, offers the following NAAB-accredited degree programs:

- Master of Architecture, Two-year track (pre-professional degree in Architecture + 60 credits required)
- Master of Architecture, Three-year + track (non-pre-professional degree + 108 credits required)

#### Master of Architecture

The Georgia Institute of Technology, through the College of Architecture and the Architecture Program, offers the Master of Architecture as the first professional degree in architecture.

This curriculum is offered in two tracks, a "3+ track" for those with prior undergraduate degrees in disciplines other than architecture or receiving no or partial advanced standing; and a "4+2" track for those with four-year, pre-professional degrees in architecture and receiving full advanced standing. The "3+ track" of the M. Arch. curriculum requires a normal interval of three-and-one-half academic years (seven academic semesters or 108 credit hours). The "4+2 track" of the M. Arch. curriculum requires an interval of two academic years (four academic semesters or 60 credit hours) of study beyond the baccalaureate degree.

The Master of Architecture at Georgia Tech, therefore, is a single degree that accommodates both the "4+2" and the "3+" year Master's degree curriculum types. This structure recognizes the wide variety of undergraduate programs in architecture as well as the high demand and desirability for study in architecture after an undergraduate degree in another discipline. The Program actively recruits and accepts graduate students with a diversity of academic backgrounds, including architecture, art history, engineering, political science, biology, literature, science, for example, from a wide variety of universities throughout the United States. This is a conscious strategy for achieving a student body that is highly qualified and diverse.

The students in the Program are thus comprised of three groups in varying numbers (as described in Section I.1.1):

- Students who have an undergraduate degree in a discipline other than architecture
- Students who have the Bachelor of Science with a major in architecture from Georgia Tech
- Students who have an undergraduate degree with a major in architecture from a school other than Georgia Tech

<b>MASTER OF ARCHITECTURE: 3+ YEAR</b>	TRACK	108 SEMESTER	RHOURS
FIRST YEAR – SUMMER			
ARCH 6024 Core Studio I	5		
ARCH 6470 Modeling + Media I	3		
Semester Total	8		
FIRST YEAR – FALL		FIRST YEAR – SPRING	
ARCH 6026 Core Studio II	5	ARCH 6027 Core Studio III	5
ARCH 6105 History of Architecture I	3	ARCH 6106 History of Architecture II	3
ARCH 6229 Construction Tech I	3	ARCH3231 Environmental Systems I	3
ARCH 6472 Modeling + Media II	3	ARCH 3241 Fundamentals of Structures	3
Professional Elective	3	ARCH 6474 Modeling + Media III	3
Semester Total	17	Semester Total	17
SECOND YEAR – FALL		SECOND YEAR – SPRING	
ARCH 6051 Options I Studio	6	ARCH 6052 Options II Studio	6
COA 6151 History of Urban Form	3	ARCH 6352 Theory of Architecture II	3
ARCH 6350 Theory of Architecture I	3	ARCH 6230 Construction Tech II	3
ARCH 4231 Environmental Systems II	3	ARCH 4252 Architectural Structures II	3
ARCH 4251 Architectural Structures I	3	ARCH 6315 Practice of Architecture I	3
Semester Total	18	Semester Total	18
THIRD YEAR – FALL		THIRD YEAR – SPRING	
ARCH 6071 Design+Research Studio I	6	ARCH 6072 Design+Research Studio II	6
ARCH 6316 Practice of Architecture II	3	Professional Elective	3
Professional Elective	3	Professional Elective	3
Professional Elective	3	Professional Elective	3
Semester Hours Total	15	Semester Total	15

# **General Studies:**

Satisfied by prior baccalaureate degree as verified by school transcript.

# **Professional Studies:**

90 semester hours professional requirements + 18 semester hours professional electives.

MASTER OF ARCHITECTURE: 2-YEAR	ER OF ARCHITECTURE: 2-YEAR TRACK		60 SEMESTER HOURS	
FIRST YEAR – FALL		FIRST YEAR – SPRING		
First year requirements satisfied by		First year requirements satisfied by		
prior pre-professional degree.		prior pre-professional degree.		
SECOND YEAR – FALL		SECOND YEAR – SPRING		
ARCH 6051 Options I Studio	6	ARCH 6052 Options II Studio	6	
COA 6151 History of Urban Form	3	ARCH 6352 Theory of Architecture II	3	
ARCH 6350 Theory of Architecture I	3	ARCH 6230 Construction Tech II	3	
ARCH 4231 Environmental Systems II	3	ARCH 4252 Architectural Structures II	3	
ARCH 4251 Architectural Structures I	3	ARCH 6315 Practice of Architecture I	3	
Semester Hours Total	18	Semester Hours Total	18	
THIRD YEAR – FALL		THIRD YEAR – SPRING		
ARCH 6071 Design+Research Studio I	6	ARCH 6072 Design+Research Studio II	6	
ARCH 6316 Practice of Architecture II	3	Professional Elective	3	
Professional Elective	3	Professional Elective	3	
Semester Hours Total	12	Semester Hours Total	12	

## **General Studies:**

Satisfied by prior baccalaureate degree as verified by school transcript.

## **Professional Studies:**

51 semester hours professional requirements + 9 semester hours professional electives.

(Note: Advanced placement for additional professional requirements results in a reciprocal increase in the total professional electives.)

BACHELOR OF SCIENCE IN ARCHITECT	URE (GEO	ORGIA TECH) 131 SEMESTEI	RHOURS
FIRST YEAR – FALL		FIRST YEAR – SPRING	
COA 1011 Fundamentals of Design I	3	COA 1012 Fundamentals of Design II	4
COA 1060 Introduction to Design	3	ENGL 1102 English Composition II	3
Computing Requirement: CS 1301 or	3	Social Science Elective: HIST 2111,	3
higher level		2112, POL 1101, PUBP 3000, or INTA	
		1200 required	
ENGL 1101 English Composition I	3	MATH 1502 Calculus II	4
MATH 1501 Calculus I	4	Social Science Elective	3
Semester Hours Total	16	Semester Hours Total	17
SECOND YEAR – FALL		SECOND YEAR – SPRING	
ARCH 2011 Design Studio I	4	ARCH 2012 Design Studio II	4
ARCH 2111 History of Arch I	3	ARCH 2112 History of Arch II	3
ARCH 2211 Construction Tech	3	Approved Science Elective	4
PHYS 2211 Physics I required	4	Humanities Elective	3
Architecture Media & Modeling II	3	Architecture Media & Modeling III	3
Semester Hours Total	17	Semester Hours Total	17
THIRD YEAR – FALL		THIRD YEAR – SPRING	
ARCH 3011 Design Studio III	5	ARCH 3012 Design Studio IV	5
ARCH 3241 Fund of Structures	3	ARCH 3231 Environmental Systems I	3
Social Science Elective: HTS 3011 or	3	Humanities Elective	3
ARCH 4151 required			
Social Science Elective	3	HPS 1040 Wellness	2
College of Architecture Elective	3	Free Elective	3
Semester Hours Total	17	Semester Hours Total	16
FOURTH YEAR – FALL		FOURTH YEAR – SPRING	
ARCH 4011, Design Studio V or Cluster	5	ARCH 4012, Design Studio VI or	5
Electives		Cluster Electives	
College of Architecture Elective	3	College of Architecture Elective	3
Free Elective	3	Free Elective	3
Free Elective	3	Free Elective	3
Free Elective	3		
Semester Hours Total	17	Semester Hours Total	14

# **General Studies** (45 semester hours):

Includes 12 semester hours Humanities, 12 semester hours Social Sciences, 8 semester hours Mathematics, 8 semester hours Science, 3 semester hours Computer Science, 2 semester hours Wellness.

## **Pre-Professional Studies:**

May satisfy up to 48 semester hours of professional studies in the M.Arch. degree program with a grade of C or better in each course.

## **Dual Masters Degree Program in Architecture and City & Regional Planning**

This program requires admission by faculty from both programs. The program typically requires a total of three years for those students having full advanced placement in the Architecture Program. Several students complete this program each year.

The Dual M. Arch & MCRP Degree with concentration in urban design is oriented to students who plan to seek professional registrations in both fields and practice urban design professionally either upon graduation or in future career options in either field. The Dual Degree has been offered since 1969, with past graduates in a variety of careers advancing the design of cities across the United States and the world.

The Dual Degree program is rigorous, requiring students to complete all requirements of both masters degrees and to complete a set of urban design courses and studios. Although oriented to future professional practices, the Dual Degree can have a research focus that can prepare graduates for study and research in PhD programs in architecture or planning.

The program offers a richly interdisciplinary experience. This results from courses in both architecture and city and regional planning, each with their academic and professional traditions.

The Dual Degree program requires a minimum of three academic years in residence at Georgia Tech, which is a reduction in time from the eight semesters to complete the two degrees separately. Applicants must apply and be accepted independently to both programs. The total time for the award of the two degrees, however, depends on the advanced standing in coursework and studios granted within the Master of Architecture curriculum, as well as the City Planning specialization selected by the student.

All applicants for the Dual Degree must submit a portfolio with their applications to both the School of Architecture and the School of City and Regional Planning. The portfolio must demonstrate superior ability in architectural design studios and other creative work. It must be submitted in digital format. For application requirements and instructions visit the Master of Architecture and Master of City and Regional Planning information pages, including the Dual M. Arch & MCRP Degree eligibility restrictions, application instructions, and degree requirements.

The dual M.Arch/MCRP Program requires a minimum of 99 credits hours. However, students are frequently required to complete a higher number of credit hours, depending upon the amount of advanced standing credit granted upon admission to the M.Arch program and the City Planning specialization selected by the student. For this reason, students should contact an academic advisor in one of the Schools to schedule a joint meeting with both School advisors and develop an individualized curriculum plan.

DUAL DEGREE: M.ARCH.+M.C.R.P.		105 SEMESTER HOURS (99 M	inimum)
FIRST YEAR – FALL		FIRST YEAR – SPRING	
ARCH 6051 Options I Studio	6	ARCH 6052 Options II Studio	6
COA 6151 History of Urban Form	3	ARCH 6352 Theory of Architecture II	3
ARCH 6350 Theory of Architecture I	3	ARCH 6230 Construction Tech II	3
ARCH 4231 Environmental Systems II	3	ARCH 4252 Architectural Structures II	3
ARCH 4251 Architectural Structures I	3	ARCH 6315 Practice of Architecture I	3
Semester Hours Total	18	Semester Hours Total	18
SECOND YEAR – FALL		SECOND YEAR – SPRING	
CP 6012 History and Theory and Planning	4	CP 6006 Introduction to GIS	3
CP 6025+Lab Advanced Planning Methods	4	CP 6016 Growth Management Law	3
CP 6031 Economic Analysis in Planning	3	CP 6024+Lab Computer and Quantitative Methods	4
Electives:	6	CP 6052 Applied Planning Studio	4
		Electives:	3
Semester Hours Total	17	Semester Hours Total	17
THIRD YEAR – FALL		THIRD YEAR – SPRING	
ARCH 6071 Design+Research Studio I	6	ARCH 6072 Design+Research Studio II	6
ARCH 6316 Practice of Architecture II	3	CP 8990 Applied Research Paper: Urban Design	
CP 8990 Applied Research Paper: Urban Design	2	Professional Elective	10
Professional Elective	6		
Semester Hours Total	17	Semester Hours Total	18

#### **Graduate Elective Concentrations**

Graduate students, with the counsel of their advisor, are encouraged to focus at least 9 credit hours of the total 21 credits of electives in a particular field supported by the Architecture Faculty. These fields include:

## High Performance Buildings

The foundation of the high performance buildings program is a sequence of physics-based courses in modeling, simulation, HVAC systems and controls, building enclosure, risk analysis, and renewable energy technologies. Students are encouraged to take cross-disciplinary, studio-based courses that include architecture, mechanical engineering, building construction, and business students.

#### Digital Design and Fabrication

The Digital Design and Fabrication concentration focuses on generative design systems and parametric modeling to develop new building forms and close the gap between conception and realization. The curriculum addresses material properties and selection; product performance; machining processes; numerical control production processes; and design-for-fabrication criteria.

## • Health and Design

The concentration is designed for students who wish to gain additional expertise in healthcare design. Whatever their career path, graduates will be prepared to serve as consultants or project managers on healthcare design projects in consulting firms, healthcare organizations, and manufacturers; help conduct quality improvement and other healthcare projects; and other leadership role.

#### Urban Design

Taking advantage of the rich course offerings and studios associated with the Master of Science in Urban Design program as well as the adjacency of coursework in the School of City & Regional Planning, students may focus their electives in the area of urban design and planning in preparation for careers that require knowledge and design skills relating architecture to the physical and legal frameworks of the city.

## History and Culture

A rich array of electives in overlapping areas of history, theory, and culture are drawn from faculty members' expertise in American, European, and Asian architectural history and in critical discourses related to significant developments in contemporary architectural practice.

#### Practice of Architecture

Coursework available in the School of Building Construction in areas of integrated project delivery, program management, construction management, and facility management provides a spectrum of focus areas across the architecture-engineering-construction disciplines.

#### **II.2.3 Curriculum Review and Development**

The impetus for curriculum changes comes from:

- The evolving ideas of the faculty informed by their scholarship, research, teaching and tracking of the development of the profession, technology, society and culture. The School governance recognizes multiple networks of faculty discussions, defined by common interests and common responsibilities for part of the curriculum. These discussions can result in new course content, or in proposals for new courses or the elimination of old courses.
- Monitoring students' assessments of courses through the Institute-wide on-line opinion survey (http://www.cetl.gatech.edu/cios/) and discussions with students.
- Formal assessment of learning outcomes as part of the Institute wide bi-annual OATS process (https://www.assessment.gatech.edu/oats/).
- Strategic planning taking into account developments in the profession and the building industry as assessed based on interactions with alumni and the leaders of major firms with offices in Atlanta and also by reports such as AIA Foresight Report (AIA, 2013), The Future for Architects (RIBA, 2011), The Architecture Profession in Europe, 2012 (Architects' Council of Europe, 2012), and those regularly published in Design Intelligence.
- Trends at Institute level, including the identification of major areas of emphasis and potential synergies in the work across units for example the growing emphases on healthcare design.
- Evolving NAAB accreditation requirements and accreditation criteria.
- Formal or informal benchmarking against peer institutions, based on faculty networks or publicly available data. This is often part of the strategic planning process.
- Feed-back received during the five-year cycles of Academic Program Review or similar cycles of NAAB accreditation visits, depending on the degree program.

## Innovation and experimentation in individual courses:

New ideas are often tried through a special topics course which requires no formal approval other than an agreement between the faculty proposing the course, program coordinators and the School leadership. However, Institute rules suggest that no course should be taught more than two years without formal review, approval and placing in the catalogue.

#### Process for the formal approval of individual new courses:

- New courses, described by course title, short description of contents, full detailed syllabus, pedagogical aims, expected learning outcomes and methods of delivery and assessment, are proposed by individual faculty or ad-hoc groups of faculty working together according to the provisions of School Governance. With the oversight of the School Chair, they are brought to review by the full faculty.
- The proposals are reviewed by the School faculty as a whole and if necessary modified in the light of the discussion. When formally approved by in a *School Faculty Meeting* with quorum, they are forwarded to the College Curriculum Committee.

- The *College Curriculum Committee*, whose duties and structure are described in the COA governance document, reviews proposals and sometimes requests clarifications, further development or modifications. When the proposals meet with the Committee's approval, they are presented to the College faculty meeting for approval.
- The *College Faculty Meeting* may table a proposal pending clarifications or modifications. A proposal approved by the College faculty meeting is then sent for review by the appropriate Institute Curriculum Committee, graduate of undergraduate, with a cover letter signed by the College Dean as well as the School Chair see <a href="http://www.icc.gatech.edu/">http://www.icc.gatech.edu/</a>.
- The *Institute Curriculum Committee* reviews proposals with representatives from the School where proposals originate in attendance. It sometimes tables those pending clarifications or modifications. If the Institute committee approves a proposal, the new course is placed in the Georgia Tech Catalog (<a href="http://www.catalog.gatech.edu/">http://www.catalog.gatech.edu/</a>), and the process of approval is complete.

## Process for degree modifications:

Minor degree modifications, such as a change in a required course, or a small change in the balance between required courses and free electives, go through the same process of approval as individual courses with the addition of an extra step.

After approval by the Institute, the proposed degree modification is sent for review and approval by the Board of Regents of the University System of Georgia (<a href="http://www.usg.edu/">http://www.usg.edu/</a>) subject to the requirements regarding program and curriculum changes (<a href="http://www.usg.edu/academic\_programs/changes">http://www.usg.edu/academic\_programs/changes</a>).

## Process of new degrees or substantial degree modifications:

The process for new degrees and substantive degree modifications (for example a change in the number of hours required for a degree) is the same as above with one difference: the School notifies the Board of Regents for the intent to propose a new degree, ahead of the submission of a full proposal. There are, of course, additional demands: new degree or substantial degree modification proposals must establish a demand for the new degree using statistical data, the results of focused groups, information from industry and support from key stakeholders; identify budgetary implications and propose ways to meet new budget needs; identify implications for space and other needed infrastructure and present a plan to meet them; offer a comparison to related degrees by peer institutions Nationally, and/or the University System of Georgia more particularly. The Board of Regents expectations for New Program Review are described here: <a href="http://www.usg.edu/academic\_programs/new\_programs">http://www.usg.edu/academic\_programs/new\_programs</a>. The Southern Association of Colleges and Schools (SACS) is notified of all substantive degree changes, and all new degrees.

## PART TWO II: SECTION 3 - EVALUATION OF PREPARATORY/PRE-PROFESSIONAL EDUCATION

## Evaluation of Preparatory and Pre-professional education

Verification of credentials and certification of compliance with Institute policies is the responsibility of the Office of Graduate Admissions. Policies and procedures that are approved by the Office of the President, Board of Regents of the University System of Georgia, and the Academic Senate of the Institute shall be applied in determining eligibility for consideration for graduate study. From those eligible candidates, recommendations for final admission decisions shall be the responsibility of the admitting department, while admission is decided by the Institute Graduate Admissions. Georgia Tech requires students in all undergraduate degree programs to complete the University System of Georgia Core Curriculum Requirements. Therefore, the academic transcripts of students holding an undergraduate degree in Architecture from Georgia Tech provide evidence of 45 credits of general education courses. The criteria used in determining the eligibility of applicant's with external undergraduate degrees includes evidence of award of a bachelor's degree. http://www.gradadmiss.gatech.edu/admission\_standards.php

## **Advanced Placement**

Upon admission to the M.Arch Program, an in depth evaluation of each student's transcripts is conducted to determine if advanced placement can be awarded for pre-professional and professional courses taken at a prior institution. The granting of advanced placement does not reduce the student's course of study below the minimum required 60 credit hours for the M.Arch degree (except in cases where transfer credits of up to six hours are approved and accepted by the School of Architecture and the Office of the Registrar, according to Institute policy). The Advanced Placement policy is stated in the M.Arch Handbook at the School of Architecture website

(<a href="http://www.arch.gatech.edu/academics/masters/march">http://www.arch.gatech.edu/academics/masters/march</a>). Students are asked to submit course syllabi for courses that may qualify for advanced placement. The course syllabi are reviewed by the appropriate faculty to determine if the student performance criteria identified in the NAAB SPC Matrix have been met. Typically the instructor of record for that subject matter at the Georgia Tech School of Architecture is considered the appropriate authority to evaluate and approve courses for advanced placement. This process is documented on Advanced Placement Approval Form and placed in the student's academic file. This information is then used to develop an individualized curriculum plan for the student, to be used as a guide during the registration process each semester.

# Master of Architecture 3.5 Year Curriculum Plan

Georgia School of Architecture

Master of Architecture (M.Arch – no advanced placement)

18 semester hours of professional electives required; 21 semester hours at the 6000 or higher level required

NAME:			GT ID#		
FIRST YEAR – SUMMER	Credit	Grade	1		
ARCH 6024 Core Studio I	5	Grade			
ARCH 6470 Modeling + Media I	3				
Total Semester Hours	8				
FIRST YEAR – FALL	Credit	Grade	FIRST YEAR - SPRING	Credit	Grade
ARCH 6026 Core Studio II	5		ARCH 6027 Core Studio III	5	
ARCH 6105 History of Architecture I	3		ARCH 6106 History of Architecture II	3	
ARCH 6229 Construction Tech I	3		ARCH 3231 Environmental Systems I	3	
ARCH 6472 Modeling + Media II	3		ARCH 3241 Fundamentals of Structures	3	
Professional Elective:	3		Arch 6474 Modeling + Media III	3	
Total Semester Hours	17		Total Semester Hours	17	
SECOND YEAR – FALL	Credit	Grade	SECOND YEAR - SPRING	Credit	Grade
ARCH 6051 Options Studio I	6		ARCH 6052 Options Studio II	6	
COA 6151 History of Urban Form	3		ARCH 6352 Theory of Architecture II	3	
ARCH 6350 Theory of Architecture I	3		ARCH 6230 Construction Tech II	3	
ARCH 4231 Environmental Systems II	3		ARCH 4252 Architectural Structures II	3	
ARCH 4251 Architectural Structures I	3		ARCH 6315 Practice of Architecture I	3	
Total Semester Hours	18		Total Semester Hours	18	
THIRD YEAR – FALL	Credit	Grade	THIRD YEAR – SPRING	Credit	Grade
ARCH 6071 Architecture Design & Research Studio I	6		ARCH 6072 Architecture Design & Research Studio II	6	
ARCH 6316 Practice of Architecture II	3		Professional Elective:	3	
Professional Elective:	3		Professional Elective:	3	,
Professional Elective:	3		Professional Elective:	3	
Total Semester Hours	15		Total Semester Hours	15	

<sup>\*\*\*</sup>Suggested for Fall

# Master of Architecture - Advanced Placement Approval Form

School of Architecture Chair Approval:

# Advanced Placement Form | Student | Course | Course | Course | Course | Title | Completed | Completed | Completed | Course | Cou

#### **II.4 PUBLIC INFORMATION**

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

The required "Statement on "NAAB-Accredited Degrees" is available on the School's website, at

http://www.arch.gatech.edu/school/accreditation

It is also available in the College of Architecture online catalog at,

http://www.catalog.gatech.edu/colleges/coa/arch/geninfo/accred.php

As well as in the Master of Architecture Handbook on Page 14 at,

http://www.arch.gatech.edu/academics/masters/march

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

The required "Access to NAAB Conditions and Procedure" is available on the School's website, at

http://www.arch.gatech.edu/school/accreditation

As well as in the Master of Architecture Handbook on Page 14 at,

http://www.arch.gatech.edu/academics/masters/march

## **II.4.3** Access to Career Development Information:

http://www.arch.gatech.edu/academics/career

http://www.arch.gatech.edu/academics/masters/march, in Master of Architecture Handbook, page 12

#### **II.4.4 Public Access to APRs and VTRs**

The required documents for "Public Access to APR's and VTR's" are available on the School's website, at

http://www.arch.gatech.edu/school/accreditation

#### **II.4.5** ARE Pass Rates:

The required "ARE Pass Rates" section is available on the School's website, at

http://www.arch.gatech.edu/school/accreditation

As well as in the Master of Architecture Handbook on Page 14 at,

http://www.arch.gatech.edu/academics/masters/march

TABLE 23							
Georgia Tech ARE P	ass Rates	S					
Year	Programming, Planning & Practice	Site Planning & Design	Building Design & Construction Systems	Schematic Design	Structural Systems	Building Systems	Construction Documents & Services
2008#	2	3	1	2	1	1	12
GT Pass Rate	100	100	0	50	100	100	33
Division Pass Rates	49	59	47	65	57	59	56
2009#	36	41	29	33	27	23	37
GT Pass Rate	67	80	76	70	74	83	62
Division Pass Rates	56	69	57	71	64	66	59
2010#	49	31	29	50	43	36	41
GT Pass Rate	69	77	76	58	70	67	71
Division Pass Rates	62	76	63	74	66	65	63
2011#	41	34	34	46	40	36	39
GT Pass Rate	90	<b>7</b> 9	76	74	73	81	<b>7</b> 9
Division Pass Rates	62	73	62	77	71	68	64

## PART THREE (III) - PROGRESS SINCE THE LAST VISIT

## **III.1 Summary of Responses to the Team Findings**

#### **III.1.1 Responses to Conditions Not Met**

## **Special Focused Evaluation Outcomes: Human Resources and Financial Resources**

Georgia Tech was required to submit a Special Focused Evaluation Report in June 2010 to address deficiencies and causes for concern cited in two areas: Human Resources and Financial Resources.

In the area of Human Resources, concerns were raised that unmanaged enrollment growth in the undergraduate program had led to a diminution of teaching quality in the professional program through the employ of less-experienced part-time instructors. In response to the 2008 VTR concerns, Georgia Tech moved to stabilize undergraduate enrollment at a more sustainable level and to fill vacant positions in the full-time corps of instruction with highly qualified tenure-track and visiting faculty members.

In the area of Financial Resources, concern was raised with regard to static and diminishing budgetary resources inadequate to meeting the needs of increasing enrollment. In response, the Master of Architecture Program implemented a differential tuition increase of \$1,995 per M.Arch. student per semester. Ninety-five percent of these revenues are returned directly to the School budget earmarked for the enhancement of the professional degree program.

Based upon these responses, the Special Focused Evaluation Team Report found that the conditions of Human Resources and Financial Resources had been met and that inclusion of those items in future Annual Reports would no longer be required.

Special Focused Evaluation Report may be found here:

http://www.arch.gatech.edu/sites/files/arch/2010 NAAB SPECIAL PROGRAM FE REPORT.pdf

Special Focused Evaluation Team Report may be found here:

http://www.arch.gatech.edu/sites/files/arch/files/2010\_NAAB\_SPECIAL\_PROGRAM\_FE\_REPORT\_DECISION.pdf

## **Condition 8. Physical Resources**

Citation of Deficiency from the 2008 Visiting Team Report:

The Visiting Team notes that relative to physical resources, the issues identified in the 2002 VTR and in 1997 relative to adequate studio space and dedicated faculty offices still exist today without significant remedy and remain a concern. While some new studio space in the Hinman Building was made available to the Program, forming the basis for the cancellation of the 2005 Focused Visit, large recent increases in undergraduate enrollment have eroded or even reversed the impact of these modest spatial gains. Additional space anticipated in the Special Report has been a victim of a line-item veto by the State Legislature. While the Program has been resourceful in space utilization, there is no guarantee that necessary improvements will be realized. The Team is informed that the Governor's current budget includes a \$6.4 million earmark for the Program's physical improvements, and that it is likely to be signed

shortly, but the shortage, if not addressed will sustain lower than acceptable conditions affecting both faculty and student performance. Phasing Plans for future improvements are not clearly articulated.

In addition to studio space, student storage, pin-up areas, and acoustics remain as concerns. Exclusive office space is not available for each full-time tenured or tenure-track member of the faculty. Part-time faculty complain of not having a dedicated space for student conferences. Exhibition space remains largely unsecured.

# Summary of Program Responses

The Hinman Research Building was allocated to the College of Architecture and completely renovated and occupied in January 2011 to provide 18,000 square feet of much needed space accommodating instruction and research. All M.Arch. design studios are now being taught in spaces at Hinman. Studio workspaces for each graduate student include a minimum of 6 lineal feet of desk area, 12 s.f. of pin-up space above the desk, and 6 lineal feet of bookshelf/model storage space. Desks are supplied with ethernet cable, electrical outlets and wireless internet. Additional spaces include: work areas for 30 PhD students; one large computer lab, sub-dividable with workspace for 30 students; office and meeting space the Digital Building Laboratory; research/computer lab space for the Spatial Innovations Group (formerly the Imagine Lab); 6 additional review spaces of various sizes with a total of 520 lineal feet of pin-up space; 9 additional faculty offices – including 1 collective part-time office space; printing and laser cutting facilities; as well as a number of support spaces. The impact of the quantity and quality of the space is still being measured, but in short, everyone's expectations have been exceeded.

The Boston firm of Office d'A teamed with the Atlanta firm of Lord Aeck Sargent for the project, which includes restoration of the circa 1939 building fabric and adaptive reuse of the high-bay workshop as studio space for the Master of Architecture program. The Hinman Building has received several significant awards, including a P/A award citation, and AIA Georgia Honor Award, as well as a number of other citations.

Expansion of the M.Arch. Program studios has allowed reconfiguration of space within the pre-existing facilities. Most significantly, the original gallery in the circa 1950s Architecture Building has been liberated from use as graduate studio space and restored to use as an exhibition gallery. Undergraduate studios in the pre-professional B.S.Arch. Program have been consolidated on the third floor of the east and west wings of the College of Architecture complex. Other academic programs in the College, especially the Schools of Industrial Design and City & Regional Planning, have benefited through the addition and renovation of reconfigured studio spaces. Additionally, the School of Architecture has renovated and improved its administrative and academic advising offices.

#### **Condition 13.25. Construction Cost Control**

Citation of Deficiency from the 2008 Visiting Team Report:

While construction estimating is briefly addressed in the Professional Practice required class, no evidence was found that any student in the Program produced even a superficial cost evaluation or estimate of any project.

Summary of Program Responses

The M.Arch. Program has implemented several strategies for addressing the deficiency cited in this area in 2008 (SPC 25 in the 2004 Conditions / SPC B7 in the 2009 Conditions):

- The co-taught Options Studio II and Construction Technology II courses comprising the comprehensive design studio place more emphasis on Construction Cost Control.
- The Construction Technology II course sets the learning objective to "develop a working knowledge of job site protocols, monetary values associated with site procurement, professional fees and construction costs."
- Students are presented with a number of specific references throughout the Construction Technology II course applicable to their ongoing studio projects, with specific homework problems and exam questions as evidence of this requirement.
- The Practice of Architecture courses continue to include explanations and case study examples
  of life cycle cost considerations as well as project proposal, financial feasibility, and other
  financial planning dimensions of architectural practice.
- Our other technical courses, structures and environmental systems, integrate discussions of comparative construction cost metrics and operational performance trade-offs.

#### Condition 13.26. Technical Documentation

Citation of Deficiency from the 2008 Visiting Team Report:

While specifications are briefly covered in the Professional Practice class, no evidence was found that any student in the Program was required to produce an outline specification.

- Summary of Program Responses
  - The role of Outline Specifications in the phased development of the architectural project continues to be explained and contextualized in the Practice of Architecture 2 course.
  - To directly address this deficiency, School of Architecture faculty determined through curriculum reviews and discussions to include outline specification writing as a specific requirement in our Construction Technology II course. During spring 2011, that course was reformatted to directly interface with our Options Studio II, the two together forming the basis of our key demonstrable efforts in Comprehensive Design (see below). This approach has been continually assessed and refined over subsequent years.

## **Condition 13.28 Comprehensive Design**

Citation of Deficiency from the 2008 Visiting Team Report:

The Program has focused on large scale projects which evaluate macro scale contextual impacts, programming issues, and responsiveness to sustainable design concerns, and students have exhibited an ability to produce plans, sections, and elevations. But this commendable work has been at the expense of clearly integrating the various building systems required under this specific Criterion. Structural and

environmental systems are only superficially indicated in the comprehensive design studio work, and building envelope systems, assemblies, and some aspects of life-safety are not well demonstrated at an Ability level.

# Summary of Program Responses

We continue to refine our efforts in relation to Comprehensive Design via the creation of the Options II Building Workshop – a studio based, comprehensive design studio with three additional concurrently taught courses intertwined into the studio agenda – Construction Technology II, and Structures II. Prerequisite studios, Core Studio III and Options Studio II, likewise partially address issues related to comprehensive design: life safety, site design, structure, and building envelope. Ongoing effort is applied to optimizing the delivery of course content to achieve assessable outcomes through the following means:

- Students work on reasonably constrained urban sites, along Peachtree Street or on the edge of our urban campus, with building programs in the 30,000 square foot range. Students are required to conclude schematic design by the midterm threshold review and then begin developing detailed drawings of building envelope, site layout, and structure.
- Students are introduced to the International Building Code as well as local zoning documents in the Construction Tech II course, and are tested in the first and second exam on issues related to codes, zoning and life safety.
- Student's final problem in Structures II is to calculate all of the loads associated with one section of their studio project, and size all of the columns and beams accordingly. A structures tutor (an individual trained as both an architect and engineer and involved in delivery of our structures coursework) has been involved as part of the design studio instructional team in our Core III and Options II studio levels.
- Students review the impact of mechanical system choices on their studio projects in Environmental Systems II. We are at this moment continuing to work through stronger connections between this course and the studio course in 2013.
- Finally, students focus on preparing Construction Document quality drawings and outline specifications of their studio projects in the Construction Technology II course.
- As an extra incentive "to encourage student accomplishment and excellence in the integration of technical considerations as a key constituent of the design process," the Portman Prize has been associated with the Comprehensive Design Studio effort since 2011. Designated Portman Visiting Critics visit the campus several times over the semester to share their work and engage in design reviews, and the finally preside over a judging to award prizes. The Portman Visiting Critics over the last three years were Karl Backus of Bohlin Cywinski Jackson, Maryann Thompson, FAIA of Cambridge, MA, and Jane Wernick, structural engineer from London.

## III.1.2 Responses to Causes for Concern

Causes for Concern from 2008 Visiting Team Report

The Team is concerned that, beyond the studio and faculty office space deficiencies, the significant relative loss of funding to the Program from the Institution with a concurrent increase in enrollment has caused the Program administration to hire less qualified part-time studio instructors than a professional degree program of the quality at Georgia Tech should provide to students. With an increasing number of current hires being either relatively recent graduates or unlicensed professionals, the lack of technical experience and expertise is evidenced in student work in the Comprehensive Design studios. The Program needs to redress this deficiency immediately. (VTR p. 4).

Summary of Program Responses

As described above, the Causes for Concern stated in the 2008 Visiting Team Report, combining issues of Human, Financial, and Physical Resources, were among the items addressed in the 2010 Special Focused Evaluation Report and in subsequent Annual Reports. These matters have been substantively addressed through:

- The allocation to the College and renovation of the Hinman Research Building, addressing what had been chronic shortcomings in physical facilities.
- The assessment of a differential tuition charge for Master of Architecture students resulting in a direct budgetary increase that exceeded budgetary rescissions and allowed the program to enhance the quality of support for the professional program.
- The hiring of new tenure track faculty as well as experienced practicing architects as Professors
  of the Practice, Senior Lecturers, and Lecturers to maintain the vibrancy and relevance of
  professional program instruction.

## III.2 Summary of Responses to Changes in the NAAB Conditions

In an ongoing effort to refine the vision and mission of the professional Master of Architecture curriculum: in response to the evolving contexts and technologies of architectural practice, in order to take fuller advantage of the School's setting within a major research- and technologically-oriented institution, in order to crystallize a unique identity out of the conjunction of once insular degree programs (the previously separate Architecture and Doctoral Programs), and in response to the changes from 2004 to 2009 in the NAAB Conditions for Accreditation—the School of Architecture has implemented a number of strategic and tactical revisions to the Master of Architecture curriculum while remaining within the established framework of the 108 semester hour plan of study. These curricular moves include:

- Architecture Media & Modeling I, II, III. This newly formatted three-course sequence substitutes for the previously required Introduction to Visual Arts and Introduction to Design Computing courses and in addition captures one previously free professional elective as part of the required suite of courses. The purpose of this change was to bring clarity to the introduction of manual and digital media and modeling techniques to lay the requisite foundation of concepts and skills necessary for parametric modeling and rendering and more advanced applications in simulation and fabrication. (NAAB Conditions correlated to these changes: Realm A, especially A.3 Visual Communication, A.4 Technical Documentation, A.8 Ordering Systems Skills).
- Theory of Architecture I, II. These courses are revised and renamed versions of the previously required Architectural Theory and Criticism I, II sequence. The two courses have been reformatted into two half-course modules each addressing: 1) program and function, 2) sites and contexts, 3) rhetorics of representation, and 4) tectonics and form. The aim here is to create an intellectual framework that takes advantage of areas of faculty expertise while organizing recurrent themes of architectural theory to reinforce and align with design discourses and practices being developed in adjacent architectural design studios, Options Studio I, II. (NAAB Conditions correlated to these changes: Realm A, especially A.2 Design Thinking Skills, A.5 Investigative Skills, A.9 Historical Traditions and Global Culture as well as B.1 Pre-Design with regard to programming).
- Practice of Architecture I, II. The previously required Professional Practice of Architecture course has been expanded into two courses, repurposing the credits from the previously required Critical Positions in Architecture course. In order to respond to the changing complexities of practice and to new emphases in the NAAB Conditions, the Practice of Architecture sequence, co-taught by two highly experienced architects holding faculty appointments as Professors of the Practice (one of Architecture and one of Building Construction) is organized into four modules in a similar manner to the Theory courses. The four Practice modules include: 1) historical, social, and ethical dimensions practice, 2) leadership and entrepreneurship in architecture, 3) office procedures and project processes, and 4) emergent models of design and research practice. (NAAB Conditions correlated to these changes: Realm C, especially C.3 Client Role in Architecture, C.4 Project Management, C.5 Practice Management, C.6 Leadership, C.7, Legal Responsibilities, C.8 Ethics and Professional Judgment, and C.9 Community and Social Responsibility. Also related are A.11 Applied Research and B.7 Financial Considerations.).
- Instructional Integration of Options Studio II, Construction Technology II, and Structures II. No
  changes have been made in curricular requirements per se; rather, significant effort has been made
  to coordinate and integrate instruction and assignments across the three courses in order to address

PART THREE (III) SECTION 1— SUMMARY OF RESPONSES TO TEAM FINDINGS — III.2 Responses to Changes in the NAAB Conditions

deficiencies cited in 2008 (as described above) and to respond to the need for a robust and rigorous Comprehensive Design Studio experience with demonstrable outcomes. (NAAB Conditions correlated to this change: B.6 Comprehensive Design and all nested Student Performance Criteria).

Architectural Design + Research Studio I, II. These newly conceived and renamed advanced-level design studios substitute for the previously required Options Studio III and Masters Project Studio (with its pre-requisite Critical Positions in Architectural Design). Taking advantage of conjoint areas of faculty expertise, these third year design studios are meant to effect a reciprocating dialog and exchange between defined research domains and design practice; to expose students to emergent modalities of research informing practice and practice driving inquiry. The relationships that School faculty have forged with industry and other external experts informs this exchange, typically in areas such as urban design, health and design, high performance buildings, and digital design and fabrication – knowledge domains roughly corresponding to areas of concentration in the Master of Science and Ph.D. Programs. Faculty initiative is incentivized through calls for proposals and internal funding allocations, in some cases to augment externally sponsored funds supporting student travel, material costs, and external consultants. Both faculty and students are encouraged to factor into their planning venues and strategies for disseminating the work through publications, conference presentations, and exhibitions. (NAAB Conditions correlated to these changes: (A.11 Applied Research, B.6 Comprehensive Design (in varying modalities of project scope), and C.1 Collaboration). Broadly speaking, the D+R Studios and their associated knowledge domains embrace all three Realms of Student Performance Criteria and are expected to expand upon students' grasp of "comprehensive design" as demonstration to encompass in-depth investigation.

**APPENDIX ONE: REQUIRED COURSES SYLLABI** 

## ARCH 3231: Environmental Systems I, 3 credits

## **Course Description:**

Human physiology, the occupation of space, and principles of sustainability. Micro-climate, energy consumption, thermal loading, passive solar strategies, daylighting, optics, and acoustics.

## **Course Goals and Objectives:**

The scope of ARCH 3231 is 'passive' energy flows between the environment, buildings, and their occupants; these flows are in the form of light, sound, and thermal energy. Course objectives include:

- 1. Developing an understanding of these energy flows, their impact on building occupants, and their influence on design decisions.
- 2. The use of this understanding in support of design decisions that impact building energy use and issues pertaining to sustainability.

Also within this scope, the learning outcomes (goals) are:

- 1. The ability to model and analyze basic technical problems concerning lighting, acoustics, and thermal science applied to buildings.
- 2. The ability to apply (physics/mathematical) models of these energy flows to interrogate the relationships between component-level building design parameters and component-level performance.
- 3. The formation and use of a systems level model or view to facilitate understanding of the interrelations of many building design parameters and overall building performance.

## **Student Performance Criterion/a Addressed:**

B3. Sustainability (A) B8. Environmental Systems

(U)

B10. Building Envelope Systems (U) B12. Building Materials and Assembly (U)

## **Topical Outline:**

Light (20%)

- Physics of light & associated units of measure
- Natural illumination: daylighting and some solar geometry

Acoustics in buildings (12%)

Thermal sciences (68%)

- Basic thermodynamics and heat transfer
- Psychrometrics and thermal comfort
- Climate, solar geometry and the control of direct solar radiation through shading devices
- Thermal load estimation

Prerequisites: ARCH 2211, Construction Tech I

## **Textbooks/Learning Resources:**

[reqd.] Grondzik, et al., <u>Mechanical and Electrical Equipment for Buildings</u>, 11<sup>th</sup> ed. (2010), J. Wiley, [supplementary] Steven V. Szokolay, <u>Introduction to Architectural Science: The Basis of Sustainable</u> Design, 2<sup>nd</sup> ed. (2008), Architectural Press/Elsevier, Burlington, MA

Semester Offered: Spring; annually

Faculty Assigned: Jason Brown

## ARCH 3241: Fundamental of Structures, 3 credits

## **Course Description:**

Physics of structures: principles of statics, strengths of materials, and the dynamic forces acting upon them.

## Course Goals & Objectives:

- to introduce principles of structural behavior in building components and materials
- to develop beginning skills in identifying structural problems and solutions
- to learn numerical methods for describing structural characteristics of components and materials
- to become familiar with factors needed to integrate structural systems into an architectural project
- to examine projects that illustrate structural principles and their application to architectural design

# Student Performance Criteria addressed (list number & title of criteria, if applicable):

B.9. Structural Systems (U)

B.12.Building Materials and Assembly (U)

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

Statical Analysis: 20%

Load Tracing, vertical and horizontal: 20%

Strength of materials: 20%

Component Design (beams/columns): 20%

Design and testing of physical structural models: 20%

## **Prerequisites:**

PHYS 2211, Intro Physics I

## **Textbooks/Learning Resources:**

Onouye, Barry with Kevin Kane. *Statics and Strength of Materials for Architecture and Building Construction*. Fourth Edition. Prentice Hall. March 5, 2011. [ISBN-10: 013507925X] [ISBN-13: 978-0135079256]

## **Semester & Frequency Offered:**

Fall and Spring; annually

# Faculty assigned (list all faculty assigned during the two academic years prior to the visit):

**Timothy Harrison** 

## ARCH 4231: Environmental Systems II, 3 credits

## **Course Description:**

Active building systems design: artificial lighting, mechanical, electrical, communication, transportation systems. Case studies of integrated and sustainable building assemblies.

## **Course Goals and Objectives:**

The scope of ARCH 4231 is:

- 1. The 'active' control of a building's environment for thermal comfort, occupant health, and visual performance.
- 2. Basics of building service systems such as plumbing (including fire sprinklers), electricity, and intra-building transportation.

Within this scope, course objective is to equip students with an understanding of these active systems sufficient for an architect to design a building in concert with building systems and to communicate meaningfully with design engineers.

Also within this scope, the learning outcomes (goals) are:

- 1. The ability to identify, comprehend the operation and energy consumption of, and conceptually specify HVAC equipment in concert with a building design.
- 2. The ability to design basic artificial lighting systems.
- 3. Comprehend and specify building service systems.

## Student Performance Criterion/a Addressed:

B3. Sustainability (A) B8. Environmental Systems B12. Bldg Materials&Asmbly

B5. Life Safety (A) (U) (U)

B7. Financial Considerations B11. Bldg Service Systems (U)

(U)

#### **Topical Outline:**

Heating, ventilation, and air conditioning [HVAC] (50%)

- Basic thermodynamics and psychrometrics
- Central equipment operating on "uphill" and "downhill" energy transfer
- HVAC architectures: distribution and control systems

Artifical lighting (23%)

- Characteristics of various artificial light sources and fixtures
- Design, distribution, and control

Plumbing, vertical transportation, fire safety (15%)

Electrical distribution systems (12%)

## **Prerequisites:**

ARCH 3231, Environmental Systems I

## **Textbooks/Learning Resources:**

Grondzik, et al., Mechanical and Electrical Equipment for Buildings, 11<sup>th</sup> ed. (2010), J. Wiley

Semester Offered: Fall; annually

Faculty Assigned: Jason Brown, Vikram Sami

#### ARCH 4251: Architectural Structures 1, 3 credits

## **Course Description:**

Gravity loads on building structures. Introduction to structural planning. Design of wood and steel structures. Properties of wood and architectural metals. Computer-based analysis of structures.

# **Course Goals and Objectives:**

This course and its follow-on course (ARCH 4252) are requirements for the professional degree in architecture and as such focus on the core knowledge of building structures as contained in the Architectural Registration Exam (ARE). In addition, the course content complements architectural studio by focusing on the form-giving and construction-technology aspects of building structures. Architectural Structures 1 covers the design of building structures in wood and structural steel.

The specific objectives of Structures 1 are as follows:

- To introduce you to the structural design process: geometric synthesis  $\rightarrow$  structural idealization  $\rightarrow$  gravity load identification  $\rightarrow$  load rundown  $\rightarrow$  structural analysis  $\rightarrow$  structural design;
- To familiarize you with reading and creating typical structural framing plans in steel and wood structures;
- To review and expand your knowledge of solid structural materials; to define what constitutes a "structural" material and to quantify the architectural, mechanical, thermal, and environmental properties of these materials;
- To introduce structural steel and other metals important to architecture and the building trades;
- To introduce you to the wood products used in residential and commercial buildings both common dimensional lumber and the so called engineered wood products and wood composites;
- To review the form that residential construction in wood commonly takes, the platform frame, along with alternatives like heavy timber construction;
- To review common modes of steel framing using hot-rolled sections, open-web steel joists, steel deck and concrete fill;
- To introduce connection methodologies used in wood and steel structures: nailing, screwing, bolting, welding; and
- To introduce structural design in steel and wood using allowable stress design for tension members, compression members, and flexural members;

## **Student Performance Criterion/Addressed:**

B. 9 Structural Systems (U) B. 12 Building Materials and Assembly (U)

## **Topical Outline:**

Building Materials 10% Case Studies 10% Steel Member Design 15% Framing Plans 10% Structural Analysis 30% Wood Member Design 15%

Structural Detailing 10%

**Prerequisites:** ARCH 3241, Fundamentals of Structures

Textbooks/Learning Resources: Reference, not required: Building Structures, James Ambrose.

Semester Offered: Fall; annually

Faculty Assigned: Russell Gentry

## ARCH 4252: Architectural Structures II, 3 credits

## **Course Description:**

Lateral loads and lateral load resisting systems for building structures. Design and application of Portland cement concrete mixtures. Design of reinforced concrete structures. Building foundations.

## **Course Goals and Objectives:**

- To introduce the physical concepts of lateral load events (wind, earthquake, blast), to understand the physical principles of how these events are quantified in terms of loadings, and to introduce design concepts for lateral force resisting systems in buildings;
- To introduce cementitious materials: Portland cement, mortar, sand concrete, and normal concrete through descriptions of how Portland cement is manufactured, how it hydrates, and how it is combined with fine and coarse aggregates to make concrete;
- To describe the mechanical, thermal, and weathering properties of plain concrete and reinforced concrete in terms of both "engineering" units and in non-quantitative terms;
- To review the practical aspects of concrete construction: concrete mix design, formwork, shoring, rebar placement, concrete placement, finishing, and curing;
- To present the design of common reinforced concrete floor systems: concrete joist systems, one-way slabs, waffle-slabs, flat plates and flat slabs and on methods for integrating these systems with architectural design;
- To review design of typical structural members of reinforced concrete: beams, columns, slabs, foundations;
- To introduce the design and behavior of other concrete structural systems: pre-cast concrete, prestressed and post-tensioned concrete and load-bearing concrete masonry; and
- To investigate the forms that design in reinforced concrete lends itself to methods of manufacture, formwork, assembly and concrete placement.
- To continue the discussion of structural planning (from ARCH 4251) and extend this discussion to concrete and masonry materials

#### **Student Performance Criterion/Addressed:**

B.9 Structural Systems (U)

B.10 Building Envelope Systems (U)

B. 12 Building Materials and Assembly (U)

#### **Topical Outline:**

Building Materials 10% Case Studies 10% Structure/Architecture Integration 20%

Framing Plans 10% Lateral Forces 30% Concrete Member Design 20%

# **Prerequisites:**

ARCH 4251, Structures I

## **Textbooks/Learning Resources:**

Reference, not required: **Building Structures**, James Ambrose.

# Semester Offered:

Spring; annually

Faculty Assigned: Russell Gentry

## ARCH 6024, Architecture Core I Studio, 5 credit hours

**Course Description:** Intermediate studies in architectural design emphasizing integrative design strategies that engage the programmatic, contextual, and constructed dimensions of architecture and its representations.

## **Course Goals & Objectives:**

Introduce the discipline and the culture of architecture through exercises and critical discussion. Build skills in both analog and digital drawing and making that are fundamental for architectural design. Develop ability to combine and apply analytical and representational skills in a speculative design context.

#### **Student Performance Criteria Addressed:**

- A. 1. Communication Skills (A)
- A. 3. Visual Communication Skills (A)
- A.6. Fundamental Design Skills (A)
- C.1. Collaboration (A)
- C. 2. Human Behavior (U)
- C.9. Community and Social Responsibility (U)

## **Topical Outline:**

Site Analysis 5%

Program Analysis 5%

Precedent / Typological Analysis 10%

**Building Space Planning 15%** 

Sectional and Interior Spatial Design 15%

Contextual Design / Formal Meaning 10%

**Building Systems Integration 10%** 

Drawing and other representational techniques 20%

Presentation skills 10%

## **Prerequisites:**

None

## **Textbooks/Learning Resources:**

Assigned readings

# **Semester & Frequency Offered:**

Summer; annually

# **Faculty Assigned:**

Charles Rudolph

## ARCH 6026, Architecture Core II Studio, 5 credit hours

**Course Description:** Intermediate studies in architectural design emphasizing integrative design strategies that engage the programmatic, contextual, and constructed dimensions of architecture and its representations.

## **Course Goals & Objectives:**

The development of each student's core competency in relation to all aspects of architectural conventions – the ways in which architects communicate ideas through both two and three-dimensional analog and digital drawing, model making, diagramming, as well as written and verbal communication.

## **Student Performance Criteria Addressed:**

- A. 1. Communication Skills (A)
- A. 3. Visual Communication Skills (A)
- A.5. Investigative Skills (A)
- A.6. Fundamental Design Skills (A)
- A. 7. Use of Precedents (A)
- A. 8. Ordering Systems Skills (U)
- B. 2. Accessibility (A)
- B. 4. Site Design (A)
- C. 2. Human Behavior (U)
- C.9. Community and Social Responsibility (U)

## **Topical Outline:**

Site Analysis 5%

Program Analysis 5%

Precedent / Typological Analysis 10%

**Building Space Planning 15%** 

Sectional and Interior Spatial Design 15%

Contextual Design / Formal Meaning 10%

Building Systems Integration 10%

Drawing and other representational techniques 20%

Presentation skills 10%

#### **Prerequisites:**

ARCH 6024, Architecture Core I Studio

#### **Textbooks/Learning Resources:**

(primary) R. Clarke, and M. Pause, <u>Precedents In Architecture</u>, 2<sup>nd</sup> ed. (1996), Van Nostrand Reinhold/co Wiley, Hoboken, NJ. – ADA Standards - (secondary) Library research for precedent studies.

## **Semester & Frequency Offered:**

Fall only; annually

## **Faculty Assigned:**

Harris Dimitropoulos

## ARCH 6051: Architecture Options Studio I, 6 credits

## **Course Description:**

Advanced studio problems in Architecture emphasizing research and application in the areas of history and theory, urban and environmental design, culture and practice, electronic media, and construction technology.

## **Course Goals & Objectives:**

- Ability to analyze with greater skill urban sites and contexts and design projects which respond to the surrounding urban framework and to understand urban form and its constituent parts.
- Ability to prepare a comprehensive program for an architectural project as a means to exploring site and building in robust ways.
- Ability to develop drawing and modeling strategies which not only relate to a set of common requirements across all studios, but belong to a larger search for precise modalities related to expressing an architectural idea.
- Ability to create a language of architecture through a deeper understanding into the role that spatial sequence, materiality, light Spatial Sequence, Materials, Light, Architectural Language.

#### Student Performance Criteria addressed:

A.3. Visual Communication Skills (A)

A.5. Investigative Skills (A)

A.6. Fundamental Design Skills (A)

A.7. Use of Precedents (A)

A.8. Ordering System Skill (U)

B.1. Pre-Design (A)

B.2. Accessibility (A)

B.4. Site Design (A)

B.5. Life Safety (A)

C.2. Human Behavior (U)

C.9. Community and Social Responsibility (U)

#### **Topical Outline:**

Programming (10%) Site Analysis (10%) Applied Research and Design (60%) Representation (20%)

Prerequisites: None

## **Textbooks/Learning Resources:**

Crimmins, Timothy. "The Atlanta Palimpsest" (*Atlanta Historical Journal*, Vol. XXVI, No. 2-3, 1982) Corner, James. "The Agency of Mapping" (Reaktion Books, 1999)

Mostafavi, Moshen. "Why Ecological Urbanism? Why Now?" *Ecological Urbanism* (Lars Muller, 2010) Dramstad, Wenche/Olson, James/Forman, Richard. "Landscape Ecology Principles" (Island, 1996) Peña, William. *Problem Seeking* (Wiley, 2001)

Vidler, Anthony. "Toward a Theory of the Architectural Program" (October 106, Fall 2003)

Semester & Frequency Offered: Fall; annually

Faculty assigned: Brian Bell, Mark Cottle, Frederick Pearsall

## ARCH 6052: Architecture Options Studio II, 6 credits

## **Course Description:**

Advanced studio problems in architecture emphasizing research and application in the areas of history and theory, urban and environmental design, culture and practice, electronic media, and construction technology.

## **Course Goals and Objectives:**

Students learning aspirations include: Creating building designs with well-integrated systems; comprehending constructability; incorporating life safety systems; integrating accessibility; applying principles of sustainable design

- -Ability to produce an architecture project informed by a comprehensive site and building program, from schematic design through the detailed development of programmatic spaces, life-safety provisions, structural and environmental systems, wall sections and building assemblies
- -Ability to assess, select, configure and detail as an integral part of the design appropriate combinations of building materials, components and assemblies to satisfy the requirements of the program.
- -Ability to respond to site characteristics such as topography and watershed in the development of a project design as well as the ability to respond intelligently to a set of urban circumstances.
- -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.

## Student Performance Criterion/a Addressed:

A.1. Communication (A)	B.1. Pre-Design (A)	B.9. Structural Systems (U)
A.2. Design Thinking (A)	B.2. Accessibility (A)	B.10. Bldg Envelop Systms
A.3. Visual Communication	B.3. Sustainability (A)	(U)
(A)	B.4. Site Design (A)	B.11. Bldg Service Systms (U)
A.4. Techn Documentation	B.5. Life Safety (A)	B.12. Bldg Materials &
(A)	B.6.Comprehensive Design	Asmbly (U)
A.5. Investigative Skills (A)	(A)	C.1. Collaboration (A)
A.6.Fundamental Design (A)	B.8. Environmental Systems	C.2.Human Behavior (U)
A.7. Precedents (A)	(U)	
A.8. Ordering Systems (U)		

#### **Topical Outline:**

Programming 10%	Design Development 30%	Construction Detailing 10%
Site Design 10%	Systems Integration 10%	
Schematic Design 20%	Representation 10%	

Prerequisites: ARCH 6051, Architecture Options Studio I

# **Textbooks/Learning Resources:**

Ramsey and Sleeper, et. al. <u>Architectural Graphic Standards</u>, New York, John Wiley & Sons Ed Allen, Architectural Detailing: Function/Constructibility/Aesthetics, John Wiley and Sons, NY, 1993

**Semester Offered:** Spring; annually

Faculty Assigned: Mark Cottle, Michael Gamble, David Green, Jude LeBlanc, David Yocum

## ARCH 6071: Architecture Design + Research Studio I, 6 credits

## **Course Description**

Advanced architectural design emphasizing innovation through applied research. Emerging methods of design generation/evaluation. Changing topics: healthcare, fabrication, urbanism, ecology, building performance, cultural institutions.

## **Course Goals and Objectives**

- Ability to produce an architecture project informed by and in response to a research topic, based on disciplinary principals, from concept to schematic design through the detailed development of programmatic spaces.
- Ability to assess, select, configure and detail as an integral part of the design appropriate combinations of building materials, components and assemblies to satisfy the requirements of the building and site program.
- Ability to respond to site characteristics such as urban morphology, material specificity and environmental conditions: topography and infrastructure.
- Ability to synthesize information necessary to speculate on the design of building assemblies via
  drawings and models at various scales, including half and/or full-size mockups, 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.

#### **Student Performance Criteria addressed**

A.1. Communication (A)	A.5. Investigative Skills (A)	A.11 Applied Research (U)
A.2. Design Thinking (A)	A.6.Fundamental Design (A)	C.1. Collaboration (A)
A.3. Visual Communication	A.7. Precedents (A)	C.2.Human Behavior (U)
(A)	A.8. Ordering Systems (U)	
A.4. Techn Documentation	A.09 Historical Traditions (U)	
(A)	A.10 Cultural Diversity (U)	

## **Topical Outline**

Research and Program Development 25%	Final Presentation 30%,
Project Definition and Project Development	Project Description + Documentation 10%
35%	

#### **Prerequisites**

ARCH 6052, Options Studio II

#### **Textbooks/Learning Resources**

Varies

#### **Semester Offered**

Fall: annually

#### **Faculty Assigned**

Libero Andreotti, Jennifer Bonner, Michael Gamble, Marc Simmons, Lars Spuybroek

## ARCH 6072: Architecture Design + Research Studio II, 6 credits

## **Course Description:**

Advanced architectural design emphasizing innovation through applied research. Emerging methods of design generation/evaluation. Changing topics: healthcare, fabrication, urbanism, ecology, building performance, cultural institutions.

## **Course Goals & Objectives:**

- Ability to produce an architecture project informed by and in response to a research topic, based on disciplinary principals, from concept to schematic design through the detailed development of programmatic spaces.
- Ability to assess, select, configure and detail as an integral part of the design appropriate
  combinations of building materials, components and assemblies to satisfy the requirements of
  the building and site program.
- Ability to respond to site characteristics such as urban morphology, material specificity and environmental conditions: topography and infrastructure.
- Ability to synthesize information necessary to speculate on the design of building assemblies via drawings and models at various scales, including half and/or full-size mockups, 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.

## **Student Performance Criterion/a Addressed:**

A.1. Communication (A)	A.2. Design Thinking (A)	A.3. Visual Communication (A)
A.4. Techn Documentation (A)	A.5. Investigative Skills (A)	A.6.Fundamental Design (A)
A.7. Precedents (A)	A.8. Ordering Systems (U)	A.09 Historical Traditions (U)
A.10 Cultural Diversity (U)	A.11 Applied Research (U)	C.1. Collaboration (A)

C.2. Human Behavior (U)

## **Topical Outline:**

Research and Program Development 25% Final Presentation 30%,
Project Definition and Project Development 35% Project Description + Documentation 10%

## **Prerequisites:**

ARCH 6071, Design and Research Studio I

#### **Textbooks/Learning Resources:**

Varies

#### **Semester & Frequency Offered:**

Spring; annually

## Faculty assigned:

Marc Simmons, Charles Rudolph, Volkan Alkanoglu, Daniel Baerlecken, Tristan Al-Haddad

#### ARCH 6105: Architecture History I, 3 credits

## **Course Description:**

Architectural history from antiquity through the eighteenth century emphasizing buildings in their cultural context as informed by social, technological, and constructive factors and theoretical positions

## **Course Goals and Objectives:**

This course is designed to help students accomplish the following learning objectives:

- To recognize, describe, and discuss the major works of architecture from antiquity through the eighteenth century.
- To draw connections between changes in architectural design and changes in socio-political, cultural, and technological contexts.
- To articulate their ideas about architecture by using appropriate vocabulary and by adducing supporting evidence appropriate to a building's period, culture, and technology. Students will come to understand that complex works demand and support nuanced interpretation.
- To mount effective written arguments in support of particular interpretations.
- To think critically about the aspirations, constraints, tools, and choices involved in all architectural design, past and present.

The course seeks to highlight the difference of unfamiliar periods and cultures, so that students are able to take the critical distance necessary to identify and explore relevant issues. At the same time, it aims to make those periods accessible, so that the cultural productions of the past become comprehensible and meaningful, and the historical narrative about them may inform our understanding of ongoing patterns of change in today's architectural design.

## Student Performance Criterion/a Addressed:

A.1. Communication (A)	A.7. Precedents (A)	A.10 Cultural Diversity (U)
A.5. Investigative Skills (A)	A.09 Historical Traditions (U)	C.1. Collaboration (A)

## **Topical Outline:**

Activity	
Pre-Classical Architecture	20%
Classical Architecture of Antiquity	20%
Non-Western Architecture	15%
Medieval Architecture	20%
Renaissance Architecture	15%
Early Modern Architecture	10%

Prerequisites: None

#### **Textbooks/Learning Resources:**

Michael Fazio, Marian Moffett, and Lawrence Wodehouse, *A World History of Architecture*, second ed., McGraw-Hill, Boston, 2008

Richard Weston, 100 Ideas That Changed Architecture, Laurence King, London, 2011

Semester Offered: Fall; annually

Faculty Assigned: Laura Hollengreen

## ARCH 6106, Architecture History II, 3 credits

## Course Description (limit 25 words):

Architectural history during the 19th and 20th centuries emphasizing buildings in their cultural context as informed by social, technological, and constructive factors and theoretical positions.

## Course Goals & Objectives (list):

- Investigate the formal characteristics of different architectural eras
- Learn the intellectual and historical currents that animated architectural production
- Develop an understanding of the role of precedents in architectural production

## Student Performance Criteria addressed (list number & title of criteria, if applicable):

- A.1. Communication Skills (A)
- A.5. Investigative Skills (A)
- A.7. Use of Precedents (A)
- A.9. Historical Traditions & Global Culture (U)
- A.10. Cultural Diversity (U)

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

Early Industrial Architecture (5%)

Early History of the Tall Building (10%)

Art Nouveau and the Avant-Garde (10%)

Structural Rationalism (5%)

Gropius and the Bauhaus (15%)

The Setback Skyscraper (10%)

Mies and the Postwar Tall Building (10%)

Postmodernism (10%)

Late Le Corbusier and Brutalism (10%)

World Trade Center and After (5%)

Recent Projects in the East and Middle East (10%)

## **Prerequisites:**

None

#### **Textbooks/Learning Resources:**

William J. R. Curtis, *Modern Architecture Since 1900* (London: Phaidon, 1997)

Michael Fazio, Marian Moffett, Lawrence Wodehouse, *A World History of Architecture* (New York: McGraw Hill, 2008)

Benjamin Flowers, *Skyscraper: The Politics and Power of Building New York City in the 20<sup>th</sup> Century* (Philadelphia: University of Pennsylvania Press, 2009)

#### **Semester & Frequency Offered:**

Spring only; annually

## Faculty assigned (list all faculty assigned during the two academic years prior to the visit):

**Benjamin Flowers** 

# ARCH 6229: Construction Technology and Design Integration I, 3 credits

**Course Description:** Introduction to materials and methods of construction, history of architectural technologies, project delivery types, sustainability impact, and conventions of architectural drawing for construction.

# **Course Goals & Objectives:**

- Students will learn how materials for buildings are produced, assembled and evaluated.
- Students will learn how the selection of materials is driven by project design realities: costs, sustainability, building codes, environmental factors, labor, etc.
- Students will be exposed to the terminology and nomenclature of construction technology.
- Students will explore how architects integrate building materials and technologies in their designs.
- Students will demonstrate knowledge of basic representations of construction (orthographic drawings prepared in sketch problem format).

#### Student Performance Criteria Addressed:

A.3. Visual Communication Skills (A)

B.9. Structural Systems (U)

B.10. Building Envelope Systems (U)

B.12. Building Materials and Assembly (U)

# **Topical Outline:**

Project delivery/management (5%), Building Codes/Zoning (5%), Foundations (10%), Concrete (15%), Masonry (10%), Steel (10%), Light wood frame (10%), Heavy Timber (10%), Glazing/Cladding Systems (10%), Roofing Systems (5%), Sustainable Principles (5%), Design Integration Precedents (5%)

### **Prerequisites:**

None

# **Textbooks/Learning Resources:**

Ed Allen, Joseph Iano, Fundamentals of Building Construction: Materials and Methods, J. Wiley & Sons, NY, 5<sup>th</sup> edition, 2008

# **Semester & Frequency Offered:**

Fall only; annually

# Faculty assigned (list all faculty assigned during the two academic years prior to the visit):

Charles Rudolph, Associate Professor (Full-time Faculty) Jude LeBlanc, Associate Professor (Full-time Faculty)

### ARCH 6230: Construction Tech II, 3 credits

**Course Description:** Integration, representation, and constructability of building assemblies and structural systems. Grading, drainage, foundations, structure, and enclosure in relation to building codes and principles of sustainability.

# **Course Goals & Objectives:**

- Students will demonstrate knowledge of constructability in relation to site and building assemblies, building codes, solar orientation, and principles of sustainability.
- Students will develop the language of building systems and assemblies such that representations of construction can supplement and expand both experiential and conceptual dimensions of studio design projects.
- Students will develop and demonstrate a working knowledge of job site protocols, monetary values associated with site design: grading, drainage, professional fees, and construction costs.

#### **Student Performance Criteria Addressed:**

- A.4. Technical Documentation (A)
- B.4. Site Design (A)
- B.7. Financial Considerations (U)
- B.9. Structural Systems (U)
- B.10. Building Envelope Systems (U)
- B.11. Building Service Systems (U)
- B.12. Building Materials and Assembly (U)

#### **Topical Outline:**

Grading, Paving and Drainage (10%); Layout, Roads, and Parking (10%); Wall, Steps and Drains (10%); Site Costs (10%); Service, Basements, and Foundations (10%); Structural Systems and Framing Plans (10%); Moisture and Heat Transfer (15%); Glazing and Curtain Walls (15%); Roof Plans and Drainage (10%).

Prerequisite: ARCH 6229, Construction Tech I

# **Textbooks/Learning Resources:**

Landphair and Klatt, *Landscape Architecture Construction*, Elsevier, New York, 1988, 2<sup>nd</sup> edition. Ramsey and Sleeper, *Architectural Graphic Standards*, John Wiley & Sons, New York, 1994, 8<sup>th</sup> edition. Ramsey and Sleeper, et. al. Architectural Graphic Standards, New York, John Wiley & Sons, 2000, 10<sup>th</sup> edition.

Ed Allen, *Fundamentals of Building Construction: Materials and Methods*, John Wiley and Sons, New York, 1999, 3<sup>rd</sup> edition.

### **Semester & Frequency Offered:**

Spring only; annually

# **Faculty Assigned:**

Douglas C. Allen Charles Rudolph

### ARCH 6315: Practice of Architecture I, 3 credits

### **Course Description:**

Architectural practice from historical, sociological, and ethical perspectives with focus on professional leadership, practice management, and entrepreneurship.

# **Course Goals and Objectives:**

- To construct provisional scaffolds exemplifying these ideological and socio-economic frameworks, to aid in the difficult bridging from "espoused theory" to "theory-in-use".
- To explore subsequent leadership roles in the architectural firm, incorporating approaches to firm organization and legal/financial structures.

# Student Performance Criterion/a Addressed:

A.1. Communication Skills C.6. Leadership
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C.3. Client Role in Architecture C.7. Legal Responsibilities

C.4. Project Management
C.5. Practice Management
C.6. Ethics and Professional Judgment
C.7. Community and Social Responsibility

### **Topical Outline:**

Profession's history and sociology	20%
Ethical and legal responsibilities	20%

Individual's early career path, from IDP through licensure 20%

Leadership roles and building one's own practice 20% Acquisition of projects through marketing 10%

Alternative, cross-disciplinary career possibilities 10%

# **Prerequisites:**

Graduate Standing or senior with 3.5

### **Textbooks/Learning Resources:**

Andrew Pressman, FAIA, <u>Professional Practice 101</u>, John Wiley & Sons, Inc., Hoboken, NJ, Second Edition, 2006.

Grace Kim, <u>The Survival Guide to Architectural Internship and Career Development</u>, John Wiley & Sons, Inc., Hoboken, NJ, 2005.

### **Semester Offered:**

Spring; annually

### **Faculty Assigned:**

Stuart Romm

**Ennis Parker** 

### ARCH 6316: Practice of Architecture II, 3 credits

### **Course Description:**

Methods of architectural project delivery and project management; fundamentals of building economics; emergent models of research-driven architectural practice.

# **Course Goals and Objectives:**

To further deepen students understanding of the processes associated with the various types of architectural practice.

### **Student Performance Criterion/a Addressed:**

A.5. Investigative Skills (A) C.5. Practice Management (U)

A.11. Applied Research (U) C.6. Leadership (U)

B.7. Financial Considerations (U) C.7. Legal Responsibilities (U)

C.3. Client Role in Architecture (U) C.8. Ethics and Professional Judgment (U)

C.4. Project Management (U)

# **Topical Outline:**

Contract negotiations, fee determinations and project budgeting		10%
Project cost control and building code frameworks	10%	
Construction documents and specification processes	15%	
Project bidding and construction phase	15%	
Alternative project delivery methods	10%	
Overview of emerging research methodologies in practice	15%	
Research through prototyping	10%	
Research principles ascertained through exemplary projects	15%	

# **Prerequisites:**

**Graduate Standing** 

# **Textbooks/Learning Resources:**

American Institute of Architects, <u>The Architecture Student's Handbook of Professional Practice</u>, John Wiley & Sons, Inc., Hoboken, NJ, Fourteenth Edition, 2009.

Linda Groat & David Wang, <u>Architectural Research Methods</u>, John Wiley & Sons, Inc., Hoboken, NJ, Second Edition, 2013.

### **Semester Offered:**

Fall; annually

# **Faculty Assigned:**

Stuart Romm

**Ennis Parker** 

# ARCH 6350: Architecture Theory I, 3 credits

# **Course Description:**

Architectural program; building types from functional and morphological perspectives; design responses to building programs in the context of culture and politics; architectural responses to site.

# **Course Goals and Objectives:**

- Ability to develop a building program taking into account design standards and design guidance
- Understanding of the evolution of modern building types
- Ability to identify, through research, the fundamental design alternatives that arise as architects respond to the aims, values and patterns of work of occupant organizations
- Understanding of the development of architectural styles in relation to the evolution of culture and social values
- Understanding of architecture in relation to site and historical context
- A working knowledge of issues, concepts and terms necessary to engage scholarly and theoretical writings in the fields of architecture and architectural criticism
- An ability to construct, defend and criticize theoretical arguments in the short-essay form

### **Student Performance Criterion/a Addressed:**

A.1. Communication Skills (A)
A.5. Investigative Skills (A)
A.9. Historical Traditions & Global Culture (U)
A.10. Cultural Diversity (U)
B.1. Pre-Design (A)
C.2. Human Behavior (U)

#### **Topical Outline:**

Building program development, design guidance and design standards 16% Building types and the evolution of fundamental design alternatives 17% Building design as an expression of society, organizations and institutions 17% Trends in post 1960s architecture in Europe 17% Trends in post 1960s architecture in the US 17% Architecture, places, social values and culture 16%

### Prerequisites: None

#### **Textbooks/Learning Resources:**

A variety of articles and book chapters from texts such as: Duffy F, 1992, *The Changing Workplace* (London: Phaidon Press); Evans R, 1997, *Translations From Drawing to Building and Other Essays* (Cambridge, MA: MIT Press); Koolhaas R, 1994, *Delirious New York*, (New York: The Monacelli Press); Markus, T, 1993, *Buildings and Power* (London: Routledge); Rossi A, 1982 *The architecture of the city* (MIT Press, Cambridge, MA);Rowe, C., Koetter, F. (1978): *Collage City*, MIT Press, Cambridge Mass, London; Tschumi B, 1996, *Architecture and Disjunction* (Cambridge, MA: MIT Press); Venturi R, Scott-Brown D, 1986 *Learning from Las Vegas* (MIT Press, Cambridge, MA)

#### **Semester Offered:**

Fall; annually

# **Faculty Assigned:**

Libero Andreotti, John Peponis

# ARCH 6352: Architecture Theory II, 3 credits

### **Course Description:**

Approaches to architectural form, style, and tectonics from aesthetic, social, and technological perspectives. Instrumental and symbolic uses of architectural media in design and building production.

# **Course Goals and Objectives:**

To ensure that students can:

- Understand how architectural intensions and values are expressed in the detailing of buildings.
- Understand the relationship between the construction of buildings and the affect of architecture on imagination, feeling and emotion.
- Understand the relationship between style and technology.
- Understanding of how drawings reflect models and conventions of professional practice.
- Understand the use of sketches, drawings, computational models, physical models, labels and
  captions not only to describe a building so that it can be constructed, but also to convey design
  intention, to notate critical aspects of intended building performance and function, or to represent
  the anticipated perceptual, cognitive, affective or emotive effects of a design.

# **Student Performance Criterion/a Addressed:**

A.1. Communication Skills (A)

A.2. Design Thinking Skills (A)

A.3. Visual Communication Skills (A)

# **Topical Outline:**

Types of drawings and drawing conventions 20%
Drawings and the practice of architecture 20%
Drawings, specifications and constructions in architecture 10%
Principles of architectural tectonics 16%
Architectural details as an expression of values 17%
Case studies in architectural tectonics 17%

**Prerequisites:** None

# **Textbooks/Learning Resources:**

A variety of articles and book chapters from texts such as: Carpo M, Lemerle F, 2008 Perspective, projections and design (Routledge, London); Evans R, 1995 The projective cast: architecture and its three geometries (MIT Press, Cambridge, Mass.); Frampton K, 1995 Studies in tectonic culture: the poetics of construction in nineteenth and twentieth century architecture (MIT Press, Cambridge, MA); Johnston G, 2008 Drafting culture (Cambridge, MA, Cambridge); Spuybroek L, 2011 The sympathy of things; Ruskin and the ecology of design (V2 - NAi Publishers, Rotterdam); Vidler A, 1992 The architectural uncanny: essays in the modern unhomely (MIT Press, Cambridge, Mass.)

### **Semester Offered:**

Spring; annually

### **Faculty Assigned:**

George Johnston, Mark Cottle, Lars Spuybroek

# ARCH 6470: Architecture, Media and Modeling 1, 3 credits

# **Course Description:**

Introductory approaches to two and three dimensional modeling and representation in architecture using both manual and digital media and techniques.

# **Course Goals and Objectives:**

The goal of the studio is to build visual acuity, compositional rigor and spatial sensibility that will support the later command of the most sophisticated digital media.

Students are introduced to the discipline and the culture, of drawing through exercises and critical discussion.

Through a series of highly articulated exercises, students build skills in both analog and digital drawing and making that are fundamental for architectural design.

# Student Performance Criterion/a Addressed:

A.1. Communication Skills (A) A.6. Fundamentl Design Skills A.8. Ordering Systems Skills

A.2. Design Thinking Skills (A) (A) (U)

A.3. Visual Communication Skills (A)

# **Topical Outline:**

Research: 5% Analysis: 10% Modeling: 35% Organization: 5% Representation: 35% Criticality: 10%

# **Prerequisites:**

None

# **Textbooks/Learning Resources:**

**Assigned Readings** 

#### **Semester Offered:**

Summer; annually

### **Faculty Assigned:**

Charles Rudolph

# ARCH 6472: Architecture, Media and Modeling 2, 3 credits

# **Course Description:**

Intermediate approaches to two and three-dimensional modeling and representation in architecture using both manual and digital media and techniques.

# **Course Goals and Objectives:**

- foster the development of cognitive and design practices that use manual and digital media in a constructive and substantive way, so that the student may begin to think architecturally in the digital/electronic realm.
- highlight the common elements between software that the students will use, and will become more proficient users, or experts in the future.

# Student Performance Criterion/a Addressed:

A.1. Communication Skills (A)	A.5. Investigative Skills (A)	A.8. Ordering Systems Skills
A.2. Design Thinking Skills (A)		(U)

A.3. Visual Communication Skills (A)

### **Topical Outline:**

Research: 5% Analysis: 10% Modeling: 35% Organization: 5% Representation: 35% Criticality: 10%

# **Prerequisites:**

ARCH 6470, Architecture, Media and Modeling 1

# **Textbooks/Learning Resources:**

(primary) Instructor authored step by step PDF files with screen captures of the software used that cover each assignment. Software Manuals

### **Semester Offered:**

Fall; annually

### **Faculty Assigned:**

Harris Dimitropoulos

# ARCH 6474: Architecture, Media and Modeling 3, 3 credits

# **Course Description:**

This course is centered on advanced digital drawing and 3Dmodeling techniques for the construction and evaluation of spatial conditions including modeling, mapping, lighting, and rendering.

# **Course Goals and Objectives:**

Students learning aspirations include:

Introduction of complex 3D modeling through digital development; 3D analytical techniques and 2D representation; developing an architectural understanding of assemblies and a criticality between drawing, design, and representation; digital analytical process of dis-assembly and re-assembly; intermediate resolution of generation and description and emphasis on process and final production techniques

- -Ability to present a project to a larger audience and represent the final project with highest standard
- -Ability to research given topic and introduce design thinking skills within the evaluation process
- -Ability to use appropriate representational digital technology skills, to convey essential formal elements at each stage of the programming and design process.
- -Ability to effectively use basic architectural and environmental principles in design within an environment
- -Understanding of the fundamentals of both natural and formal ordering systems and the capacity of each to inform two- and three-dimensional design.

#### **Student Performance Criterion/a Addressed:**

A.1. Communication Skills (A) A. 2. Design Thinking Skills A.3. Visual Comm Skills (A)

(A) A. 6. Fund Design Skills (A)

A. 8. Ordering Systems Skills (U)

**Topical Outline:** 

Research 10% Analysis 10% Modeling 20% Organization 20% Representation 30% Criticality 10%

#### **Prerequisites:**

ARCH 6472, Architecture, Media and Modeling 2

#### **Textbooks/Learning Resources:**

Daniel Simon, <u>Cosmic Motors</u>, <u>Spaceships of Another Galaxy</u> (Culver City, CA Design Studio Press, 2007) Syd Mead, <u>Sentury II</u> (Culver City, CA Design Studio Press, 2010)

Scott Robinson, BLAST: spaceship sketches and renderings (Culver City, CA Design Studio Press, 2012)

Edward R. Tufte, The Visual Display of Quantitative Information (Graphics Press USA, 2001)

Edward R. Tufte, Envisioning Information (Graphics Press USA, 1990)

Peter Cook, Drawing: The Motive Force of Architecture (London, UK, John Wiley & Sons Ltd, 2008)

Semester Offered: Spring; annually

Faculty Assigned: Volkan Alkanoglu

# COA 6151: History of Urban Form, 3 credits

# **Course Description:**

History of the city as a collective work of architecture with an emphasis on the city's physical form and space.

# **Course Goals and Objectives:**

This course provides an introduction to the city as a collective work of architecture. The city is considered to be the architectural manifestation of a political association, distinct from aggregate domestic or pre-political settlements. To that end, this course seeks to

- 1. Build an awareness understanding of the relationship between diverse cultures and the collective architectural representations of institutions, including the implications of political and economic policies on the development of the city over time, and
- 2. Develop a fundamental understanding of the theories and principles involved in the design and planning of cities.

This course is organized chronologically from the point of view of the American city at the beginning of the twentieth twenty-first century. As such, emphasis is placed upon those ideas and artifacts having the greatest influence on current architectural thought and practice, with a critical view to the open question of the role of architecture in the future of the city.

# **Student Performance Criterion/a Addressed:**

A.1. Communication Skills (A)
A.7. Precedents (A)
A.10. Cultural Diversity (U)
C.7. Legal Responsibilities (U)

A.9. Historical Traditions and Global Culture (U) C.9. Community and Social Responsibility (U)

#### **Topical Outline:**

The City in the Ancient World 25% A New World from the Old 25% The City in the Industrial Age 25% The City in the Modern Age 25%

# **Prerequisites:**

None

#### **Textbooks/Learning Resources:**

A.E.J. Morris, <u>The History of Urban Form Before the Industrial Revolution</u>, Addison-Wesley, New York, 3rd edition, 1994. (Required); Edmund N. Bacon, <u>Design of Cities</u>, Viking/Penguin Press, revised edition. (Recommended)

#### **Semester Offered:**

Fall; annually

# **Faculty Assigned:**

Douglas C. Allen

**APPENDIX TWO: FACULTY RESUMES** 

Last Name	First Name	Rank
Andreotti	Libero	Professor
Augenbroe	Fried	Professor
Dunham-Jones	Ellen	Professor
Eastman	Chuck	Professor
Johnston	George	Professor
Spuybroek	Lars	Professor
Peponis	John	Professor
Zimring	Craig	Professor
Bafna	Sonit	Associate Professor
Cottle	Mark	Associate Professor
Dimitropoulos	Harris	Associate Professor
Economou	Thanos	Associate Professor
Flowers	Benjamin	Associate Professor
Gamble	Michael	Associate Professor
Gentry	Russell	Associate Professor
Hollengreen	Laura	Associate Professor
Khan	Sabir	Associate Professor
LeBlanc	Jude	Associate Professor
Rudolph	Charles	Associate Professor
Al-Haddad	Tristan	Assistant Professor
Alkanoglu	Volkan	Assistant Professor
Baerlecken	Daniel	Assistant Professor
Bonner	Jennifer	Assistant Professor
Brown	Jason	Assistant Professor
Haymaker	John	Assistant Professor
Riether	Gernot	Assistant Professor
Allen	Doug	Professor Emeritus
Debo	Thomas	Professor Emeritus
Bell	Brian	Professor of the Practice
Green	David	Professor of the Practice
Parker	Ennis	Professor of the Practice
Romm	Stuart	Professor of the Practice
Yocum	David	Professor of the Practice
Dagenhart	Richard	Retired
Gordon	Judy	Senior Lecturer
Pearsall	Fred	Senior Lecturer
Branum	Cassie	Lecturer
Farrow	Bob	Lecturer
Harrison	Tim	Lecturer
Hickman	Lauren	Lecturer
Howard	Herman	Lecturer
Lackey	Robin	Lecturer
Sami	Vikram	Lecturer
Gerondelis	Ann	Academic Professional
Sharp	Leslie	Assistant Vice Provost
Sherman	Jihan	Associate Academic Professional
Dubose	Jennifer	Research Associate II
Denham	Megan	Research Associate I
Shaw	Jonathan	Research Scientist I
Swarts	Matthew	Research Scientist II

Name: Tristan Al-Haddad

### Courses Taught (Two academic years prior to current visit):

ARCH 3012 Design Studio IV (undergrad)

ARCH 6051 Design Studio: Options I (grad)

ARCH 6053 Design Studio: Options III (grad)

ARCH 6504 Digital Design and Fabrication Workshop

ARCH 6505/4803 Geometric Constructs in Digital Space

**ARCH 7060 Critical Positions** 

ARCH 7090 Master's Project Studio

ARCH 8803 Advanced CNC Fabrication Seminar and Mold Making Workshop

#### **Educational Credentials:**

B.S., Georgia Institute of Technology, 2001 M.ARCH, Georgia Institute of Technology, 2006

# **Teaching Experience:**

Lecturer, Georgia Institute of Technology, 2005-2006 Visiting Assistant Professor, Georgia Institute of Technology, 2006-2010 Assistant Professor, Georgia Institute of Technology, 2010-Present

#### **Professional Experience:**

Intern Architect, Cooper Carry Architects, Atlanta 2000
Intern Architect, Jakob & MacFarlane SARL D'Architecture, Paris, France 2001
Intern Architect, Atelier Architects, Tampa Bay, Florida, 2001-2002
Intern Architect, Plexus R+D, Atlanta, 2004
Collaborator, G+G Architects, Atlanta, 2005
Owner, Formations Studio, Atlanta, 2005-Present

#### **Selected Publications and Recent Research:**

### Research:

Simple Balance of Systems (BoS) for Photovoltaic Systems. Development of next generation Building Integrated and Building Applied Photovoltaic systems working towards a reduction of cost, improved performance and improved constructability for Solar Balance of Systems design, installation, and service. Funded by the US Department of Energy. Co-PI with many other associated faculty.

# **Publications:**

- Al-Haddad, Tristan. (2012). From Modeling to Making: Parametric Design and Digital Fabrication. In F. Trubiano (Ed.), *The Design and Construction of High Performance Homes: Building Envelopes, Renewable Energies and Integrated Practice.* Oxfordshire, Routledge.
- Cavieres, Andres, R. Gentry, T. Al-Haddad. (2011). Knowledge-Based Parametric Tools for Concrete Masonry Walls: Conceptual Design and Preliminary Structural Analysis. *Journal of Automation and Construction* 20(6), 716-728.

Name: Volkan Alkanoglu, AKNW LEED AP

# Courses Taught (Two academic years prior to current visit):

ARCH 6026 Core II Studio
ARCH 8803 Seminar 'Infamous Lines'
ARCH 6473 Architecture, Media and Modeling 3
ARCH 6072 Design + Research 2 Studio

#### **Educational Credentials:**

Diploma in Architecture, Peter Behrens School of Architecture, FH Düsseldorf, Germany, 2001 Master of Architectural Design, The Bartlett, University College London, United Kingdom, 2003

#### **Teaching Experience:**

Tutor, Architectural Association, London, United Kingdom, 2007
Teaching Associate, Harvard University, Graduate School of Design, 2008
Teaching Associate, Princeton University, School of Architecture, 2008
Instructor, Southern California Institute of Architecture, Los Angeles, 2009-2012
TVS DESIGN Distinguished Critic, Georgia Institute of Technology, COA, Atlanta, 2012-2013

# **Professional Experience:**

Design Architect, Foster and Partners, London, UK, 2003-2005
Project Architect, Future Systems, London, UK, 2005-2007
Project Architect, Asymptote Architecture, New York, 2007-2009
Principal and Founder, Volkan Alkanoglu | DESIGN LLC, Atlanta, 2009-present

#### **Licenses/Registration:**

Germany, AKNW

#### **Selected Publications and Recent Research:**

100th ACSA Annual Conference Catalogue 'Digital Aptitudes', Boston USA

# **Professional Memberships:**

Architektenkammer Nordrhein Westfalen, Germany LEED AP, USA

Name: Libero Andreotti, Ph.D.

### Courses Taught (Two academic years prior to current visit):

ARCH 6072 Design and Research Studio
ARCH 8102 Historiography and Epistemology
ARCH 8823 Architectural Theory and Criticism I
ARC 8823 Architecture and Spectacle
ARCH 8806 Design and Research Studio

#### **Educational Credentials:**

Ph.D., Massachusetts Institute of Technology, 1989 M.Arch., Georgia Institute of Technology, 1982

### **Teaching Experience:**

Professor of Architecture, Georgia Institute of Technology 2004-2013 Resident Director, Georgia Tech Paris Program 1995-2011 Lecturer, Ecole d'Architecture de Paris La Villette 2009-2011 Visiting Professor, Rhode Island School of Design, 1989-1990

# **Professional Experience:**

Partner, Virginie Sougy Architect, Paris France 1995-2011

### **Licenses/Registration:**

None

#### **Selected Publications and Recent Research:**

Libero Andreotti, ed. *Spielraum: Benjamin et l'Architecture* (Paris, Editions la Villette 2011) Libero Andreotti, "The Techno-aeshtetics of Shock: Mario Sironi and Italian Fascism" in *Grey Room* 38 (Winter 2010)

Libero Andreotti, *Le Grand Jeu a venir: textes situationistes sur la ville* (Paris, Editions la Villette 2007) Libero Andreotti, "Play tactics of the *Internationale Situationniste*" in *October* 2001 Libero Andreotti, Pratiche ludiche dell'Internazionale Situazionista in *Lotus International* 108 (2001) Libero Andreotti, ed. *Theory of the Derive and other Situationist Writings on the City* (Barcelona ACTAR 1997) (with Xavier Costa)

### **Professional Memberships:**

None

Name: Godfried L. Augenbroe, IBPSA fellow

# Courses Taught (Two academic years prior to current visit):

ARCH 6241 Building Simulation in Design Practice ARCH 6731 Zero Energy House ARCH 7252 Computational Building Simulation COA 8685 Building Simulation seminar ARCH 8100 Intro to Architectural Research

#### **Educational Credentials:**

MS CE, Delft University of Technology, 1975

### Teaching Experience:

Assistant Professor, TU Delft, Netherlands, 1976-1986 Associate Professor, TU Delft, Netherlands, 1986-1996 Associate Professor, College of Architecture, Georgia Tech, Atlanta, 1997-2010 Professor, School of Architecture, CoA, Georgia Tech, Atlanta, 2010-present

#### **Professional Experience:**

Owner and founder COBF, start-up energy consultant firm, Netherlands, 1984-1996

Licenses/Registration: None

#### **Selected Publications:**

Augenbroe, Godfried (2011). The role of simulation in performance based design. In: J. Hensen and R. Lamberts (eds), Building Performance Simulation for Design and Operation. Spon.

Augenbroe, Godfried and Hans Verheij (2010). Collaborative Planning of AEC Projects and Partnerships. In: eWork and eBusiness in Architecture, Engineering and Construction – Menzel & Scherer (Eds) © 2010 Taylor&Francis Group, London, ISBN 978-0-415-60507-6

Ali Malkawi and Godfried Augenbroe (editors), Advanced Building Simulation. SPON Press, Taylor and Francis group, 2004. ISBN 0-415-32122-0

Augenbroe, Godfried and Jan Hensen (editors). Building Simulation 2003, IBPSA Conference Proceedings, Eindhoven August 11-14, 2003.

Augenbroe, Godfried (2009) Applying process rigor to the use of BIM in building design teams: a review of three technologies. In: Collaborative Construction Information Management, edited by Geoffrey Qiping Chen, Peter Brandon and Andrew Baldwin (eds). Spon Press, 2009.

#### **Recent Research:**

Projects deal with large scale energy retrofits of the built environment, multi-scale energy modeling, uncertainty and financial risk analysis of renewable technologies and the next generation of building sustainability assessment methods.

Most recently PI of NSF EFRI-SEED award for the 4 year research project "Risk conscious design and retrofit of buildings for low energy", \$2.0 Million, 2010-2014.

# **Professional Memberships:**

ASHRAE, IBPSA

Name: Daniel Baerlecken, BDA, AKNW

# **Courses Taught 2011-2012:**

ARCH 2011 Design 1, Aggregates, Section MB

ARCH 2011 Design 1, Aggregates, Section JS

ARCH 8903 Section DB Special Problems, Junk

ARCH 8903 Section DB Special Problems, Origami

ARCH 2011 Design 1, Matter Matters, Section AV

ARCH 2011 Design 1, Matter Matters, Section DB

ARCH 8903 GR

ARCH 8803 GR, Media and Modeling 3

ARCH 4823-A ARCH-6426-A, 3d modeling - Introduction to Autodesk Revit

**ARCH 8803-DB Bioconstructs** 

ARCH 2011 Design 1, Matter Matters, section JS

ARCH 2011 Design 1, Matter Matters, section AV

ARCH 2011 Design 1, Matter Matters, section KJ

ARCH 2011 Design 1, Matter Matters, section LH

#### **Educational Credentials:**

Pre-diploma in Engineering, RWTH Aachen University, Department of Architecture, 1997-1999 Diploma in Engineering (Dipl.- Ing.), RWTH Aachen University, Department of Architecture, 1999-2003

# **Teaching Experience:**

Research Associate, RWTH Aachen University, Department of Architecture, 2006-2007 Research Associate, TU Braunschweig, Department of Architecture, 2006-2007 Lecturer, RWTH Aachen University, Department of Architecture, 2007-2010 Visiting Assistant Professor, Georgia Institute of Technology, 2008-2010 Assistant Professor, Georgia Institute of Technology, 2010-present

#### **Professional Experience:**

Zaha Hadid Architects, 2003-2007, London, UK BFR Lab, 2006-present, Cologne, Germany

### **Licenses/Registration:**

**AKNW Germany** 

### **Selected Publications and Recent Research:**

Baerlecken, D.+Riether, G. (2012) Aggregates: Digital design for design 1, Proceedings Cadria 2012, pp.607-616

Baerlecken, Daniel;Swarts, Matthew;Gentry, Russell; Wonoto, Nixon(2012) Bio-Origami: Form Finding and Evaluation of Origami Structures, -Proceedings of the 30<sup>th</sup> eCAADe Conference 2012, pp.497-504 Baerlecken, Daniel;Reitz, Judith;Duncan, David(2012) Junk: Reuse of Waste Materials, Proceedings eCAADe Conference 2012, pp.143-150

Riether, G.; Baerlecken, D.(2009) Open Pattern, Proceedings Caadria 2009, pp.615-624

### **Professional Memberships:**

Association of German Master Builders [Bund Deutscher Baumeister], BDA, since 2011 Chamber of Architects, NRW, Germany, since 2005

Name: Sonit Bafna

# Courses Taught (Two academic years prior to current visit):

ARC 3011 Junior Studio
COA 8863 Formulation of Architectural Intention
ARC 8803/4803 Diagrams: Tools for Conceptual Analysis
ARC 4335/8843 Social Practice of Architecture
COA 8625 Theories of Inquiry
COA 8000 Introduction to Architectural Research

#### **Educational Credentials:**

PhD Georgia Institute of Technology, 2001 SMArchS Massachusetts Institute of Technology, 1993 GrDiplArch Center for Environmental Planning and Technology, 1991

# **Teaching Experience:**

Associate Professor, Georgia Institute of Technology, 2008-present Assistant Professor, Georgia Institute of Technology, 2002-2008 Lecturer, University of Michigan, 2001

#### **Professional Experience:**

Assistant Architect, Anant Raje and Associates, 1990-1991 Intern, Kiran Pandya and Associates, 1987

#### **Registrations / Licenses:**

India

# **Selected Publications and Recent Research:**

Bafna, S. 2013. "Attention and Imaginative Engagement in Marcel Breuer's Atlanta Public Library." In *Rethinking Aesthetics: The Role of Body in Design*, pp. 51-84. Edited by Ritu Bhatt, New York: Routledge. Bafna, S. 2012. "Rethinking Genotype: Comments on the sources of type in architecture." *Journal of Space Syntax* 3 (1): 69-80.

Bafna, S. 2012. "The Imaginative Function of Architecture: a clarification of some conceptual issues." In *Proceedings of the Eighth International Space Syntax Symposium*, pp. 8117.1-8117.19. Edited by M. Greene, J. Reyes and A. Castro. Santiago de Chile: PUC.

Bafna, S., Losonczi, A., and Peponis, J. 2012. "Perceptual Tuning of a Simple Box." In *Proceedings of the Eighth International Space Syntax Symposium*, pp. 8024.1-8024.28. Edited by M. Greene, J. Reyes and A. Castro. Santiago de Chile: PUC.

Zook, J., and Bafna, S. 2012. "Imaginative Content and Building Form in the Seattle Public Library." In *Proceedings of the Eighth International Space Syntax Symposium*, pp. 8087.1-8087.24. Edited by M. Greene, J. Reyes and A. Castro. Santiago de Chile: PUC.

#### **Professional Memberships:**

Society of Architectural Historians Council of Architecture, India Name: Brian Bell, AIA

# Courses Taught (Two academic years prior to current visit):

ARCH 6053 Options III ARCH 6053 Options III ARCH 4011 Vertical Studio

#### **Educational Credentials:**

M.ARCH, Harvard University, Graduate School of Design, 1997 B.ART in Architecture, University of Washington, Seattle, 1990

# **Teaching Experience:**

Professor of the Practice of Architecture, Georgia Institute of Technology, 2012-2013
Paul Rudolph Fellow, Auburn University College of Architecture, Spring 2012
Millkey Visiting Professor of Architectural Practice, Georgia Institute of Technology, 2010-2011
Visiting Faculty, Georgia Institute of Technology, 2008-2009
Instructor, Career Discovery Program, Harvard University Graduate School of Design, 1997
Studio and Academic Teaching Assistant, Harvard University Graduate School of Design, 1994-1997
Research and Teaching Assistant, University of Washington Rome Center, 1990-1992

# **Professional Experience:**

Director, BLDGS, Atlanta GA, 2006-present Senior Project Architect, Mack Scogin Merrill Elam Architects, Inc., Atlanta, GA, 1999-2005 Intern Architect, Thompson and Rose Architects, Cambridge, MA, 1997-1999

#### **Licenses/Registration:**

Georgia

#### **Selected Publications and Recent Research:**

The Pressures of Paradox: Michelangelo and the Sforza Chapel, in <u>Conventions of Architectural Drawings:</u> <u>Representations and Misrepresentations</u>, Edited by James Ackerman and Wolfgang Jung (published by James S. Ackerman, 2000).

# **Professional Memberships:**

American Institute of Architects (AIA)
National Council of Architectural Registration Boards (NCARB)

Name: Jennifer Bonner, Assoc. AIA, LEED AP

### Courses Taught (Two academic years prior to current visit):

ARCH 3012/4012 Studio - The Nashvegas "Old School" School of Architecture

ARCH 8803 Seminar – The Role of the Guidebook

ARCH 6071 D&R Studio I - ATL: Dirty South

ARCH 6051 Option Studio - Civic Shelter: Anti-Tornado Machines

ARCH 8813-4813 Seminar – Exhibiting Constructions

#### **Educational Credentials:**

BArch, Auburn University, 2002

MArch, Harvard University, Graduate School of Design, 2009

# **Teaching Experience:**

Lecturer, Auburn University, 2002-2003

Tutor, Architectural Association, London, UK, Summer 2007

Lecturer, Georgia Tech, Fall 2009

Visiting Professor, Lund University, Lund, Sweden, May 2010

Visiting Assistant Professor, Woodbury University, 2010-2011

Professor of the Practice, Woodbury University, 2011-2012

TVSDesign Distinguished Studio Critic, Georgia Tech, 2012-2013

### **Professional Experience:**

Architectural Assistant, Foster and Partners, London, UK; Istanbul, Turkey, 2004-2005 Project Architect, David Chipperfield Architects, London, UK, 2005-2006 Studio Bonner, Los Angeles / Atlanta, 2009-present

# Licenses/Registration:

LEED Accredited Professional, 2009

State of New York ARE Licensure, Forthcoming (currently testing)

# **Selected Publications and Recent Research:**

*Upstream Imagination,* with C.Canabou, Architecture in an Age of Uncertainty, ed. Benjamin Flowers (Ashgate, forthcoming)

It Leaked, PLAT Journal 3.5, (Rice University, forthcoming)

*Death of the Star Architect,* Interdisciplinary Design: New Lessons from Architecture and Engineering, ed. Hanif Kara (Actar, 2013)

Inside ALI: Slow Reveals, GIS Trajectories, and Watercourse Urbanism, (ARID Journal, 2012)

*Building a Pavilion*, Proceed and Be Bold: Rural Studio after Samuel Mockbee, (New York: Princeton Architectural Press, 2005)

Obliquity of the Ecliptic, Samuel Mockbee and the Rural Studio: Community Architecture, (Birmingham Museum of Art, 2003)

#### **Professional Membership:**

The American Institute of Architects

Name: Dr. Jason Brown

### Courses Taught (Two academic years prior to current visit):

ARCH 3231 Environmental Systems I ARCH 4231 Environmental Systems II ARCH 6242/8833 Building Physics Modeling

#### **Educational Credentials:**

B.S. in Engineering. Baylor University, 1995M.S. in Mechanical Engineering. Georgia Institute of Technology, 1998Ph.D. in Architecture, Georgia Institute of Technology, 2010

#### **Teaching Experience:**

Instructor, Georgia Institute of Technology, 2008-2010 Assistant Professor, Georgia Institute of Technology, 2010-current

### **Professional Experience:**

GRA, George W. Woodruff School of Mechanical Engineering Georgia Institute of Technology September 1995 – December 1999

Tech Temp, George W. Woodruff School of Mechanical Engineering Georgia Institute of Technology January 2000 – April 2000

Research Technician, School of Biology Georgia Institute of Technology December 2000 - May 2004

#### Licenses/Registration:

N/A

#### **Selected Publications and Recent Research:**

Park, C.S., Augenbroe, G., Makarechi, S., and Brown, J. "Normative Thermal Comfort Assessment" 3rd International Building Physics Conference, Montréal, Québec, Canada, 27–31 August 2006; subsequently published in Research in Building Physics and Building Engineering: Proceedings of the Third International Building Physics Conference, Concordia University, Montréal, Canada, 27–31 August 2006; Fazio, P., et al., eds.

Brown, J., Augenbroe, G., Paredis, C., and Choudhary, R. "Computational Fluid Dynamics in an Equation-Based Modeling Environment" 11th International Building Performance Simulation Association Conference, Glasgow, Scotland, 27-30 July 2009.

Brown, J., Choudhary, R., Slater, R., and Ward, R. (2012) "Algorithmic and Declarative Modeling In Support of Energy Retrofits of a Greenhouse", 2012 International Building Physics Conference, Kyoto, Japan, May 28-31, 2012.

# **Professional Memberships:**

The American Society of Mechanical Engineers (ASME)

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE)

Name: Mark Cottle

### Courses Taught (Two academic years prior to current visit):

ARCH 8806 Design + Research Studio

ARCH 6051 Options Studio I

ARCH 6225/4225 "The Detail from Alberti to Zumthor" -- elective seminar

ARCH 7090 Master's Project Studio

ARCH 6131 Theory I -- required course

ARCH 3011 Options Studio III

ARCH 7060 Critical Positions -- elective seminar

#### **Educational Credentials:**

Master of Design Studies in Contemporary Theory and Criticism, Harvard University, 1989 M. Arch., Rice 1988

B.A., English, Clemson University, 1979.

### Fellowships:

Steedman Fellow in Architecture, Washington University in Saint Louis. First place, biannual international design competition; travel in India and residence at the American Academy in Rome. 1996 to 1997.

American Academy in Rome. Dinkeloo Fellow in Architecture. 1991 to 1992.

### **Teaching Experience:**

Associate Professor, Georgia Institute of Technology College of Architecture, 2007-present.

Assistant Professor, Fall 2001 to Spring 2007. Visiting Assistant Professor: Fall 1999 through Spring 2001.

Visiting Instructor: Fall 1997, Fall 1996, Spring 1996, Winter 1996, Fall 1995, Winter 1994.

Rhode Island School of Design Department of Architecture. Visiting Critic: Spring 1999, Spring 1998.

University of Hawai'i School of Architecture. Visiting Professor: Fall 1998.

Boston Architectural Center. Studio and Course Instructor, Thesis Advisor. Fall 1987 to Spring 1993.

# **Professional Experience:**

Cottle Khan Architects. August 1995 to Present. Principal.

Childs Bertman Tseckares, Architects, Boston. June 1994 to August 1995. Senior designer.

Ellenzweig Associates, Architects, Cambridge, Massachusetts. November 1992 to April 1994. Designer.

Perry Dean Rogers & Partners: Architects, Boston. August 1989 to October 1992. Designer.

Amsler Hagenah MacLean, Architects, Boston. June to December 1987, July to August 1989. Intern.

Tamarkin Techler Group, Architects, Boston. July 1988 to July 1989. Intern.

Dennis & Clark, Architects, Boston. Summer 1986. Intern.

Steven Gendler Design, Houston. Summer 1985. Intern.

### **Selected Publications and Recent Research:**

*CITE 86.* "One Hundred Years of Rice : Contemporary Responses to Tradition". Summer 2011. Co-authored with Sabir Khan.

*gray\_matters*, Georgia Tech School of Architecture online student journal. "Remarks on Colors: Blue". 22 March 2010.

*JAE*. Review of N.J. Habraken's book, *Palladio's Children*: *Essays on Everyday Environment and the Architect*. February 2007.

Name: Richard Dagenhart, RA

# Courses Taught (Two academic years prior to current visit):

COA 6011/ARCH 6053 Urban Design Laboratory/Options III Studio

COA 6151 Urban Design Theory

ARCH 6054/CP6832 Introduction to Urban Design

ARCH 6053 History and Theory of the Modern City (Summer Study Abroad Asia 2012)

ARCH 7045 Urban Design Workshop (Summer Study Abroad Asia 2012)

#### **Educational Credentials:**

Master of City Planning, University of Pennsylvania, 1972 Master of Architecture, University of Pennsylvania, 1972 Bachelor of Architecture (Honors), University of Arkansas, 1970 Bachelor of Arts (Anthropology), University of Arkansas, 1970

# **Teaching Experience:**

Visiting Professor (part time), University of Maryland, 1974 Visiting Professor (part time), Rice University, 1975-76 Assistant Professor, Georgia Tech, 1977-1985 Associate Professor, Georgia Tech, 1985-2011 Senior Lecturer (retired), Georgia Tech, 2012-Present

### **Professional Experience:**

Wallace McHarg Roberts and Todd, Philadelphia. 1970-74 David A. Crane and Partners, Philadelphia and Houstion. 1974-1978 Urban Design Plus, Atlanta. 1978-1982 Wilson Dagenhart Johnson, Atlanta. 1982-1986 Richard Dagenhart, Architect, Atlanta. 1987-Present

### Licenses/Registration:

Registered Architect, Georgia #RA005811,1983-Present Registered Architect, Florida #AR93314, 2006-Present NCARB Certificate #31,268. 1982-Present American Institute of Certified Planners. 1975-1988

# **Selected Publications and Recent Research:**

Current Research: Sustainable Urbanism – Stormwater and Urban Design (with T.Debo)

Current Research: Urban Form and Transformations in East Asia

Dagenhart, Richard (2010) " Thoughts on Sustainable Urbanism: Tschumi and Koolhaas at La Villette" in WA (World Architecture) Beijing.

Dagenhart, Richard (2010) "Rem Koolhaas", John Nolen, ""James Rouse, and "Harland Bartholomew" in t*Encyclopedia of 20<sup>th</sup> Century American Art*, Oxford University Press.

Dagenhart, Richard, (2009) "The Re-Inhabitation of Deira and Bur Dubai" in 2A: ART+ARCHITECTURE. No.8, Spring 2008, pp. 36-49.

Bacon, Dagenhart, Green Leigh, Skach (2008) "The Economic Development – Urban Design Link in Brownfield Redevelopment" *International Economic Development Journal*. Spring 2008, pp. 4-9.

Dagenhart, Richard (2008) "Comment on Garde: Retrofitting Suburbia - Is It About Image or Form?" Journal of the American Planning Association. Vol.74, Summer 2008, pp.342-348.

# Name: Harris Dimitropoulos

### Courses Taught (Two academic years prior to current visit):

ARCH 6026 Core II Design Studio

ARCH 4022 Core II Design Studio

ARCH 4012-3012 Undergraduate Vertical Design Studio

ARCH 3012 Design Studio III

ARCH 6420 Design Computing

ARCH 8803 Introduction to Design Computing

ARCH 4803-8803 Elective Lecture course

ARCH 4803-8803 Elective Lecture course

#### **Educational Credentials:**

Undergraduate Professional Diploma in Architecture and Engineering, School of Architecture, National Technical University, Athens Greece, 1977

M.Arch. Georgia Institute of Technology, 1984

Ph.D. Aristoteleion University, Thessaloniki, Greece, 1983

#### **Teaching Experience:**

Associate Professor, Georgia Institute of Technology, College of Architecture, 1992 - present Assistant Professor, Georgia Institute of Technology, College of Architecture, 1986-1992 Adjunct Professor, Atlanta College of Art, 1990-1994 Instructor, Georgia Institute of Technology, College of Architecture, 1985 Instructor, N.T.U., School of Architecture, Greece, 1981-1983

#### **Professional Experience:**

Heritage Park, Atlanta, Georgia, 1996 North Avenue Bridge improvement, Atlanta, Georgia t1995, 1996 Monument for Bicentennial of French Revolution, Paris, 1989 Municipal Theater, Halandri Athens, Greece, 1982 Agni Pikioni Architects, Athens Greece, 1980-1983 Panos Touliatos Architects, Athens Greece, 1979-1980

### **Licenses/Registration:**

Greece

### **Selected Publications and Recent Research:**

H. Dimitropoulos with John Lauer, Brad Brooks, Claire Downey and Susan Desko, Four Down South, (Nexus Press. 1990)

The Churches of Kea, (Athens, Greece, 1983)

Co-Editor of Places, "Recovering", (Volume 21, Number 1 2009)

# **Professional Memberships:**

**Technical Chamber of Greece** 

Name: Ellen Dunham-Jones, AIA

# Courses Taught (Two academic years prior to current visit):

CoA 7011/CP 6052 MSUD Studio Arch 4011/6053/CP 6052 Options 3 Studio Arch 4803/CoA 6120 Retrofitting Suburbia Seminar Arch 6151 Theories of Urban Design

#### **Educational Credentials:**

A.B., Architecture and Planning, Princeton University, 1980 M.Arch, Princeton University, 1983

#### **Teaching Experience:**

Assistant Professor, University of Virginia, 1986-1993
Assistant Professor, Massachusetts Institute of Technology, 1993-1997
Associate Professor, Massachusetts Institute of Technology, 1997-2000
Associate Professor, Georgia Institute of Technology, 2000-2010
Ax:son Johnson Visiting Professor, Lund University, Sweden, 2006-2007
Professor, Georgia Institute of Technology, 2010-present

# **Professional Experience:**

Intern, Johansen & Bhavnani Architects, NY, NY, 1980-1981 Job Captain, Hambrecht Terrell, NY, NY, 1983-1985 Production Team, Eisenman/Robertson Architects, NY, NY, 1985-1986 Principal, Dunham-Jones & LeBlanc Architects, VA & MA, 1987-1997 Principal, Ellen Dunham-Jones Architect, 1997-present

# **Licenses/Registration:**

New York

### **Selected Publications and Recent Research:**

"Irrational Exuberance: Rem Koolhaas and the Nineties" in Peggy Deamer ed., *Architecture and Capitalism* (Routledge: 2013), also forthcoming in *Places Journal* 

Co-author of chapter, "Retrofitting Suburbs" in Henry Cisneros ed., *Independent for Life: Homes and Neighborhoods for an Aging America* (UT Austin Press: 2012)

Co-author, Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs (Wiley, 2009/2011).

"Free Trade Zones, Downtown Financial Cores, and Sprawl: the Landscapes of Globalization" in Graham Owen ed., *Architecture, Ethics & Globalization* (Taylor & Francis, 2009)

"New Urbanism: A Forum not a Formula" in Tigran Hass, ed., New Urbanism and Beyond: Designing Cities for the Future (Rizzoli, 2008)

# **Professional Memberships:**

The American Institute of Architects
The Congress for the New Urbanism (chair of the board)
International Council of Shopping Centers
Urban Land Institute

Name: Charles (Chuck) Eastman

# Courses Taught (Two academic years prior to current visit):

COA8672 Seminar in Design Computing

COA8999 Pre-doctoral thesis

COA9000 Thesis

**COA8903 Special Problems** 

COA 8690-CE Building Models

ARCH6503-CE BIM Applications

COA8676, Design & Engr Databases

ME6754-A Design & Engr Databases

COA9000 Doctoral thesis

COA 8690-CE Building Models

ARCH6503-CE BIM Applications

#### **Educational Credentials:**

B.Arch., UC Berkeley, 1964 MS Arch., UC., 1966

#### **Teaching Experience:**

Assistant Professor, Associate Prof., Professor, Carnegie-Mellon University, 1967-1985 Professor, University California, Los Angeles, 1987-1995 Professor, Georgia Institute of Technology, Atlanta, 1996-present, Joint appointment with College of Computing (25%)

#### **Professional Experience:**

Intern, Hertzka and Knowles AIA, San Francisco, San Francisco 1964-1966 Private Practice, 1964-1966

#### Licenses/Registration:

# **Selected Publications and Recent Research:**

Eastman, C., Teicholz, P., Sacks, R. and Liston, K. (2011) BIM Handbook: A Guide to Building Information Modeling for Owners, Managers, Designers, Engineers and Contractors, 2nd Edition John Wiley & Sons, Inc., New Jersey. (translated into Mandarin, Korean, Portuguese)

Design Knowing and Learning: Cognition in Design Education, C. Eastman, W. Newstetter, M. McCracken eds. Elsevier Science Press, 2000.

Building Product Models: Computer Environments Supporting Design and Construction, CRC Press, Boca Raton FL, 1999.

Over 100 refereed journal papers

Current research contracts with PCI, AISC, ACi, Charles Pankow Foundation

#### **Professional Memberships:**

Associate, American Institute of Architects

Name: Thanos Economou, PhD

# Courses Taught (Two academic years prior to current visit):

ARC 6051 GR Options Studio I

ARC 6508 Shape Grammars

ARC 8806 D&R Studio

ARC 6501 Analog-Digital

ARC 4127 Greece and Italy Prep

COA 3114 Art and Architecture in Greece

ARC 6053 D&R Studio

ARC 6501 Analog-Digital

ARC 4921 Directed Research

#### **Educational Credentials:**

Diploma Arch (5 yrs), National Technical University of Athens University, 1990 M. Arch, University of Southern California, 1992 Ph.D. Arch, University of California, 1998

#### **Teaching Experience:**

Lecturer, University of California (UCLA), 1996
Assistant Professor, Georgia Institute of Technology, 1997- 2003
Visiting Associate Professor, MIT, 2011
Associate Professor, Georgia Institute of Technology, 2003 - present

# **Professional Experience:**

Project Architect, Stathopoulos Architectural Office, Athens, Greece, 1990 Intern, Urban Innovation Group and Charles Moore Architectural Office, LA, CA, 1993 Intern, Moule and Polyzoides, Architects and Urbanists, LA, CA, 1995

#### Licenses/Registration:

Technical Chamber of Engineers, Greece

#### **Selected Publications and Recent Research:**

Courtsweb: A Research Database on Federal Courthouse Design. PI Thanos Economou, GSA: GS-00P-10-CY-C-0160; 2012 -13; \$160,736.60 (Total: 2007-2013; \$1,110,092.73)

Grasl, T, Economou, A (in print): "GRAPE: Using Graph Grammars to Implement Shape grammars". Environment and Planning: Planning and Design B

Economou Athanassios, and Grasl T (2012)."Spatial Sieves" in Xenakis Matters: Contexts, Processes, Applications, Sharon Kanach (Ed). Xenakis Series IV; Pendragon Press, pp. 1-27

Grasl, T, Economou, A. 2012. "Sort Machines" in J. Halatsch (ed), Digital Urban Modelling and Simulation, Springer-Verlag, Computer Science Editorial, Germany Volume 0242; pp.123-143

Din E., Economou, A., 2011. "Surface Symmetries: The Smith House Revisited" International Journal of Architectural Computing, Issue 04, Vol. 08, pp. 485-506

Economou, A., Tehrani N., 2011. "Scripting Concrete" in Digital Narratives, ed. Javier Isado, Universidad de Puerto Rico Press; (in)forma Vol. 05, pp. 44-61

#### **Professional Memberships:**

International Scientific Review Committees: CAADFutures, eCAADe; ACADIA; SIGRADI, M&D, AUTCON

Name: Robert J Farrow, AIA, FHFI, LEED AP

### Courses Taught (Two academic years prior to current visit):

COA 4813/8813 Borneo Workshop

COA 8813 Borneo Workshop

COA 4803/8813 State of Art in Healthcare Design

COA 4803/8803 Healthcare Dateline 2012

COA 8806 Arch Options Studio III - Community Hospital

COA 6053 Arch Options Studio III - Roswell Community Hospital

#### **Educational Credentials:**

B.Arch., Auburn University, 1974

# **Teaching Experience:**

Lecturer, SCAD, Atlanta, GA and Savannah, GA

Visiting Studio Advisor/Lecturer/Adjunct Professor, Georgia Institute of Technology, 2008-present

# **Professional Experience:**

Intern, Hansen Lind Meyer, Iowa City, Iowa, 1974-75

Intern, Robert & Company, Atlanta, GA, 1975-77

Project Designer, Tippett & Associates, Atlanta, GA, 1977-1980

Project Architect, Thompson Ventulett & Stainback, Atlanta, GA, 1980-1990

Principal, Sherlock, Smith & Adams, Montgomery, AL, 1990-1997

Principal, TRO, Sarasota, FL and Boston, MA, 1997 – 2002

Principal, HKS, Atlanta, GA, 2002 to present

# Licenses/Registration:

Alabama

Georgia

# **Selected Publications and Recent Research:**

Vital Role of CEO in Evidence Based Design – Healthcare Design Evidence Based Design – Emory Neuro CCU Healthcare – Balance of Research and Sustainability Green Hospitals and Healthcare

The Evidence of Collaboration, AIA Georgia
Taking Care of Our Nurses, Atlanta Hospital News
Flexibility in Architecture, Healthcare Design

# **Professional Memberships:**

The American Institute of Architects NCARB Health Facility Institute USGBC Leed Accredited Professional Name: Benjamin Flowers

# Courses Taught (Two academic years prior to current visit):

ARCH 2112/6106 History II

ARCH 4137/6137 Postwar Architecture + Urbanism

ARCH 6132 Theory II

ARCH 6160 Race + Space

COA 4801/8803 gray\_matter(s)

#### **Educational Credentials:**

BA, Wesleyan University, 1996 Ph.D., University of Minnesota, 2003

# **Teaching Experience:**

Assistant Professor, Georgia Tech, 2005-2011 Associate Professor, Georgia Tech, 2011-present

#### **Professional Experience:**

Research specialist, Federal Research Division, Library of Congress, 2004-2005

# **Licenses/Registration:**

### **Selected Publications and Recent Research:**

Skyscraper: The Politics and Power of Building New York City in the Twentieth Century (Philadelphia: University of Pennsylvania Press, 2009)

Architecture in an Age of Uncertainty (London: Ashgate, forthcoming 2013)

"Stadium Architecture, Visual Iconography and the Shaping of Urban and Sporting Identities," in *The Visual in Sport*, Huggins, Mike and Mike O'Mahoney, eds. (Oxford: Routledge, 2011)

"Stadia: Architecture and the Visual Iconography of Football," in The Visual Turn in Sport—A Special Issue of the *International Journal of the History of Sport*. (2011)

"Ada Louise Huxtable," in *The Grove Encyclopedia of American Art*, Joan Marter, ed. (Oxford: OUP, 2011)

"Marxism," in The Grove Encyclopedia of American Art, Joan Marter, ed. (Oxford: OUP, 2011)

"Thom Mayne," in *The Grove Encyclopedia of American Art*, Joan Marter, ed. (Oxford: OUP, 2011)

"New Brutalism," in The Grove Encyclopedia of American Art, Joan Marter, ed. (Oxford: OUP, 2011)

"Illuminating the Invisible: Race + Space in Architectural Pedagogy," in *The Journal of History and Culture* (Summer, 2009)

"Race, Space, and Architecture in Oakland Cemetery," in Scapes 6 (Fall 2007)

"The Architects' Collaborative (TAC)" in *The Encyclopedia of Twentieth Century Architecture*. R. Stephen Sennott, ed. (New York: Routledge, 2004)

"Corporate Office Park Architecture," in *The Encyclopedia of Twentieth Century Architecture*. R. Stephen Sennott, ed. (New York: Routledge, 2004)

"Urban Renewal," in *The Encyclopedia of Twentieth Century Architecture*. R. Stephen Sennott, ed. (New York: Routledge, 2004)

"Historic Preservation" in *The Encyclopedia of American Studies*. Kurian, Orvell, Butler, and Mechling, eds. (Danbury, CT: Grolier, 2001)

#### **Professional Memberships:**

Society of Architectural Historians, College Art Association

Name: Michael Eric Gamble, Architect

# **Courses Taught:**

ARCH 4012 Core II Graduate Design Studio
ARCH 4123 European Modernism: Berlin

ARCH 6052 Options II Graduate Building Workshop Studio

ARCH 4220 Construction Technology II
ARCH 8833 Zero Energy Housing

#### **Educational Credentials:**

B.Arch., Auburn University, 1989M.Arch., Georgia Institute of Technology, May 1991Master of Design Studies, Harvard University, Master of Design Studies, 1996

# **Teaching Experience:**

Associate Chair, Undergraduate and Professional Education, Georgia Institute of Technology, 2010-present

Interim Curriculum Coordinator, Georgia Institute of Technology, 2010 Associate Professor, Georgia Institute of Technology, 2007-present Assistant Professor, Georgia Institute of Technology, 2000-2007

Visiting Assistant Professor, Georgia Institute of Technology, 1998-1999

Graduate Research Assistant, Harvard University, 1995-1996

### **Professional Experience:**

Principal/ Joint Owner, Gamble and Gamble Architects, LLC, Atlanta, GA, 1997-present Partner, Willow Acquisition, LLC, Atlanta, GA, 2002-present

# Licenses/Registration:

Florida

Georgia

#### **Selected Publications and Recent Research:**

First Prize, G+G Architects. Revitalization of the Cleremont Hotel. Atlanta, GA. 2009
Gamble, Michael E. Essay entitled "The Inscription of Public and Civic Realms in the Contemporary City" included in Douglas Kelbaugh and Kit McCollough Writing Urbanism: A Design Reader, New York:
Routledge Press pp. 181-191.

Honor Award. G+G Architects. "63 Gammon Street: Sustainable House Competition" American Institute of Architects, Atlanta Chapter. 2006.

First Prize, G+G Architects. (\$10,000) for the "Sustainable House Competition: 63 Gammon Street". Sponsored by Charis Community Housing, SouthFace Energy Institute and the Kendeda Fund. 2006.

### **Professional Memberships:**

National Council of Architecture Review Boards Certificate No. 46,896 Member, American Institute of Architects

Name: T. Russell Gentry, PE

### Courses Taught (Two academic years prior to current visit):

ARCH 4251 Architectural Structures I and Design Integration

ARCH 4252 Architectural Structures II and Design Integration

ARCH 6226 Green Construction

ARCH 8833 FGT - Zero Energy Housing

ARCH 6506 Construction Materials, Systems, Fabrications

#### **Educational Credentials:**

B.S., Civil Engineering, Georgia Institute of Technology, 1985 M.S., Civil Engineering (Structures), Georgia Institute of Technology, 1986 Ph.D., Civil Engineering (Structures), University of Michigan, 1992

### **Teaching Experience:**

Assistant Professor, Catholic University of America, 1992-1996 Assistant Professor, Georgia Institute of Technology, 1997-2000 Associate Professor, Georgia Institute of Technology, 2001-present

#### **Professional Experience:**

Intern Engineer, Gardner and Howe, PC, Memphis, TN, 1986-1988

T. Russell Gentry, Consulting Structural Engineer, Atlanta, GA, 1990-present

# **Licenses/Registration:**

Georgia

#### **Selected Publications and Recent Research:**

Publication: Gentry, T. Russell "Building Systems, Controls, and Automation" in High Performance Homes, Their Design and Construction: New Materials, Renewable Energies and Integrated Practice, Trubiano, Franca, ed., Routledge Architecture, October, 2012.

Publication: Gentry, R., D. Baerlecken, M. Swarts, and N. Wonoto (2013), "Parametric Design and Non-Linear Analysis of a Large-Scale Deployable Roof Structure based on Action Origami" in ICSA 2013: 2nd International Conference on Structures and Architecture, Guimaraes, Portugal, to appear.

Publication: Sharif, S., T.R. Gentry, J. Yen, and J.N. Goodman (2013) "Kinetic Solar Panels: A Transformative and Expandable Geometric System for Photovoltaic Structures" in SIGraDi 2012 - Proceedings of the 16th Iberoamerican Congress of Digital Graphics, Fortaleza, Brazil.

Project: Building Information Modeling for Masonry, Phase 1 Roadmap, Russell Gentry, PI, \$35,000, 5/2012 – ongoing.

Project: Simple BOS (Balance of System), U.S. Department of Energy, Georgia Tech Research Institute (GTRI), Joseph Goodman, PI; Russell Gentry + multiple others, co-PIs, \$2,800,000 (11/1/2011 – ).

Project: Use of Phase-Change Materials in Small Spaces, with Vikram Sami at Perkins and Will Architects, internally funded by Perkins and Will, 6/2012-ongoing

Project: Italian-American Symposium on Advanced Manufacturing, with Kevin Shankwiler (PI), Tristan Al-Haddad (co-PI) and Andrew Dugenke (co-PI), \$40,000, 1/2013 – ongoing.

### **Professional Memberships:**

American Society of Testing and Materials (ASTM) American Concrete Institute (ACI) Name: Judy O'Buck Gordon

# Courses Taught (Two academic years prior to current visit):

ARCH 6027 Architecture Core Studio III, Community Share: Community Center for "Little Saigon"

ARCH 4219/2211 Construction Technology & Design Integration I, (co-instructor)

ARCH 6051 Architecture Options Studio I, The Urban Patch, Atlanta, Fall

ARCH 4023 Architecture Core Studio III, Friends Meeting House, Atlanta

ARCH 3011 Architecture Design Studio III

ARCH 3012 Architecture Design Studio IV, Altered Motion: Ethereal Constructions

ARCH 6051 Architecture Options Studio I, Ephemeral Bodyscapes: The Terpsichorean Center

#### **Educational Credentials:**

Master of Architecture, Columbia University, New York, New York, 1986
Bachelor of Environmental Design, Miami University, Oxford, Ohio, 1979
Diploma Unit 8 (attended), The Architectural Association, London, England, UK, 1978

# **Teaching Experience:**

Senior Lecturer, Part Time, Georgia Institute of Technology, Atlanta, 1998-present Focus Studio Instructor, Part Time, Southern Polytechnic State University, Marietta, Georgia, Fall 2009 Instructor, Part Time, Lehigh University, Lehigh, Pennsylvania, Fall 1993 Instructor, Part Time, New York Institute of Technology, New York, 1987-1990

### **Professional Experience:**

Principal, O Architects, LLC, Atlanta, Georgia, 2003-Present
Partner, Axio Design, LLC, Atlanta, Georgia, 2002-2003
Partner, The Design Collaborative, kaisen, Atlanta, Georgia, 2000-2002
Associate, Swanke Hayden Connell Architects Inc., New York, New York, 1992-1997
Architect, Kohn, Pedersen, Fox, Conway Associates, Inc., New York, New York, 1991-1992
Designer/Architect dePolo/Dunbar, Inc., New York, New York, 1989-1991
Architectural Designer, Aldo Rossi: Studio di Architettura, New York, New York, 1988-1989

# **Licenses/Registration:**

New York, Georgia, Pennsylvania LEED AP

#### **Selected Publications and Recent Research:**

The Urban Patch: Student Research, Applied Innovative Farm Technology and Spatial Design, INTED2013, Valencia, Spain, March, 2013,

The Making of an Architectural Idea, paper and presentation, ICERI2010, Madrid, Spain, Nov. 2010, Adaptive Reuse: Biomimetic Living Wall, with William Jackson, Architect, selected for Poster Session, Energy Forum on Solar Building Skins, Bressanone, Italy, December, 2010

Understanding Tectonics and Sustainable Tectonics: Sidwell Friends Middle School" and "4 + 1 = 3: Four The Making of an Idea, paper and presentation, MADE: Design Education & the Art of Making, Charlotte, NC, March, 2010, Conference proceedings, published Fall 2010

Kozmo Restaurant, Johns Creek, GA, print and web: Jezebel, pp. 24-26, April 2009

#### **Professional Memberships:**

NCARB, 2001 - present

Name: David Ernest Green, AIA, LEED AP BD+C

# Courses Taught (Two academic years prior to current visit):

ARCH 6051 Design Studio

ARCH 6052 Design Studio

ARCH 8843 Regulatory Frameworks and the Built Environment

ARCH 6051 Design Studio

ARCH 6052 Design Studio

ARCH 8843 Regulatory Frameworks and the Built Environment

### **Educational Credentials:**

B.Science, Georgia Institute of Technology, 1987 M.Arch., Georgia Institute of Technology, 1991

### **Teaching Experience:**

Visiting Instructor, Georgia Institute of Technology, 1992-2008 Professor of the Practice, Georgia Institute of Technology, 2008-present

#### **Professional Experience:**

Intern, Cooper Carry, 1988-1989
Intern, Smith Dalia Architects, 1991-1995
Partner, Brock Green Architects, 1995-2004
Principal, Lord Aeck Sargent, 2004-2008
Principal Perkins+Will, 2008-present
Director, AREA Research, 2011-present

# **Licenses/Registration:**

Georgia, Florida, South Carolina

#### **Selected Publications and Recent Research:**

Projecting Returns on Transit Investment: A research proposal for analyzing and evaluating investments made in and around MARTA stations and projecting the returns. (Perkins+Will Research Journal, 2012)

# **Professional Memberships:**

The American Institute of Architects (State AIA Board-current), The Urban Land Institute (District Council Board-current), The American Planning Association, The Congress for the New Urbanism

Name: Timothy Harrison, Registered Architect

# Courses Taught (Two academic years prior to current visit):

ARCH 2011 Architecture Design Studio I ARCH 3011 Architecture Design studio III ARCH 3241 Fundamentals of Structures ARCH 4022 Core III Design Studio

### **Educational Credentials:**

B.S.E., Structural Engineering, Duke University, 1989 (Minor: Architectural History) M.Arch., Harvard University, 1994

### **Teaching Experience:**

Part-Time Lecturer, Georgia Institute of Technology, 1997, 2005-present Visiting Faculty, Boston Architectural Center, 1993-1994

# **Professional Experience:**

Principal, Timothy Harrison Architect, 2005-present
Senior Project Architect, Mack Scogin Merrill Elam Architects / Scogin Elam and Bray, 1995-2006
Intern Architect, James Kimo Griggs, Architect, 1994-1995

### Licenses/Registration:

Georgia, since 1999 (License No. 9744)

# **Selected Publications and Recent Research:**

Inaugural Exhibit Catalog Essay for Art in Freedom Park. "Speculations: Undiscovered Treasure in Atlanta's Largest Park." October 2005.

Published work with Mack Scogin Merrill Elam Architects:

Architectural Record, "Wang Campus Center, Massachusetts." July 2006

Architecture, "Night and Day." December 2004

Architectural Record, "MSME Mediates Between the Man-made and the Natural." November 2002

Architectural Record, "Drain It Right: Wetlands for Managing Runoff." August 2001

Architecture, "Tight Bookkeeping." February 2000

# **Professional Memberships:**

The American Institute of Architects, 2001-2006

Name: Lauren Hickman

# **Courses Taught:**

ARCH 2011: Architectural Design Studio I ARCH 4420: Intro to Design Computing

# **Educational Credentials:**

B.Arch., B.F.A. Rhode Island School of Design, 2007 M.S.A.A.D., Columbia University, 2012

# **Teaching Experience:**

Lecturer, Georgia Tech College of Architecture, Atlanta, 2012-present

# **Professional Experience:**

Intern, Wayne Troyer Architects, New Orleans, LA 2012 Intern, Spackman, Mossop + Michaels, New Orleans, LA 2010-2011 Intern, Billes Partners, New Orleans, LA 2008-2010 Name: Laura H. Hollengreen

### Courses Taught (Two academic years prior to current visit):

ARCH 2111 History I: History of Architecture, Antiquity to the Eighteenth Century (undergrad) ARCH 4105/6105 History I: History of Architecture, Antiquity to the Eighteenth Century (grad)

ARCH 4114/6114 Medieval Architecture

ARCH 4143/6143 Museums: History, Theory, Design

ARCH 4823 HP: Special Topics Honors Class: The Physics and Metaphysics of Premodern Architecture

ARCH 4823 LH1/8823 LH1: Special Topics: Landscapes of War

ARCH 4823 LH2/8823 LH2: How Do We Dwell? Hists. and Theos. of Env. Behavior and Design

ARCH 4927 Greece and Italy Prep

COA 3116/6116 Art and Architecture in Italy II

#### **Educational Credentials:**

A.B., Princeton University, 1985 M.A., University of California, Berkeley, 1989 Ph.D., University of California, Berkeley, 1998

#### **Teaching Experience:**

Lecturer, University of California, Riverside, 1995 Lecturer, University of Arizona, 1995-1996, 1999-2000 Instructor, University of California, Berkeley, 1997 Instructor, University of Arizona, 1999 Assistant Professor, University of Arizona, 2000-2006 Associate Professor, University of Arizona, 2006-2009 Associate Professor, Georgia Institute of Technology, 2009-present

# **Selected Publications and Recent Research:**

"Royal Intellect, Clerical Judgment, and the Drama of Communication at Chartres Cathedral," submitted to *Speculum*, journal of the Medieval Academy of America

Meet Me at the Fair: A World's Fair Reader, ed. Laura Hollengreen, Celia Pearce, Rebecca Rouse, and Bobby Schweizer (ETC Press, forthcoming in Spring 2013)

Translatio, or the Transmission of Culture, ed. Laura H. Hollengreen, Arizona Studies in the Middle Ages and the Renaissance 13 (Brepols, 2008)

### **Professional Memberships:**

College Art Association and Southeast College Art Conference International Center of Medieval Art Medieval Academy of America Society of Architectural Historians and Southeast Chapter, SAH Name: Herman H. Howard

## Courses Taught (Two academic years prior to current visit):

None

#### **Education Credentials:**

B.Arch., University of Southern California, 1981 M.Arch., Science in Building Design, Columbia University, 1983

## **Teaching Experience:**

Georgia Institute of Technology Southern Polytechnic State University Architecture + Urban Design Studio's / 1997 – 1998

## **Professional Experience:**

CEO/President, STUDIO h Urban, 2011-present
Co-Founding Partner, Laminin Group, 2011-present
HOK, Atlanta, 2005-2011
Vice President / Regional Practice Leader, Aviation + transportation Group
Director of Urban Design, Turner Associates, 2002-2005

## **Licenses / Registration:**

None

### **Selected Publications and Recent Research:**

None

## **Professional Memberships:**

National Organization of Minority Architects & Urban Land Institute

Name: George B. Johnston, PhD, AIA, Professor and Chair

## Courses Taught (Two academic years prior to current visit):

Arch 6352 Theory of Architecture I

#### **Educational Credentials:**

Ph.D., American Studies/Cultural History, Emory University, 2006 M.Arch., Rice University, 1984 B.Arch., Mississippi State University, 1979

### **Administrative Positions at Georgia Tech:**

Chair, School of Architecture 2011-Present
Interim Chair, School of Architecture, 2010 (January-December)
Director, Professional Program in Architecture, 2009 (July-December)
Interim Associate Director, Architecture Program, 2006 (July-December)
Interim Director, Architecture Program, 2000 (July-December)
Associate Director, Architecture Program, 1996-2003
Interim Associate Director, Architecture Program, 1995-1996

#### **Teaching Experience:**

Professor, Georgia Tech College of Architecture, 2010-Present Associate Professor, Georgia Tech College of Architecture, 1991-2010 Assistant Professor, Georgia Tech College of Architecture, 1984-1991 Visiting Instructor, Rice University, 1984 (Spring Semester)

#### **Professional Experience:**

Principal, Johnston+Dumais Architects, 1992-Present
Staff Architect, Parker & Scogin Architects, Atlanta, 1985
Staff Architect, Makover-Levy Architects, Houston, 1984
Intern Architect, Ledbetter Associates Architects, 1979-1982
Historic Sites Surveyor, Mississippi Department of Archives & History, 1979

#### **Licenses/Registration**

Georgia Mississippi NCARB Certificate Holder

#### **Selected Publications and Recent Research**

"Professional Practice: Can Professionalism Be Taught in School?" in *Architecture School: Three Centuries of Educating Architects in North America* edited by Joan Ockman (The MIT Press, 2012).

Drafting Culture: A Social History of Architectural Graphic Standards (The MIT Press, 2008)

"Drafting Manuals and Manual Training: Rouillion and Ramsey's Architectural Details." Journal of Architectural Education 58, no. 4 (May 2005).

Name: Sabir Khan

## Courses Taught (Two academic years prior to current visit):

ARCH 3012 / ARCH 4012 Junior / Senior Elective Studio
ARCH 4128 Barcelona: Architecture, Design, Material Culture
ARCH 8803 Atlanta Beltline Urban Design Workshop
COA 1060 Introduction to the Designed and Built Environment
COA 4803 City Literacy: What Makes a Great City Great
COA 4699 Undergraduate Research: Design Think Design Do
ID 4843 / ME 4803 / LCC 4906 Interdisciplinary Design

## **Educational Credentials:**

M.Arch., Rice University, 1987 BA, Princeton University, 1983

## **Teaching Experience:**

Associate Professor, Georgia Institute of Technology, 2001-present Assistant Professor, Georgia Institute of Technology, 1995-2001 Assistant Professor, Georgia Institute of Technology, 1990-1992

## **Professional Experience:**

Principal, Cottle Khan Architects, Atlanta, 1995-present Project Architect, Leers Weinzapfel Associates, Boston, 1989-1990 Architectural Designer, Woo &Williams, Cambridge, 1987-1989

#### Licenses/Registration:

Massachusetts

#### **Selected Publications and Recent Research:**

GT FIRE Fund for Transformative Research and Education Grant. Proposal: "Societal Engagement, Social Innovation: An Expanded Vision for Service Learning". Pl. \$36,000. Awarded March 2012.

Symposium Chair and Organizer. "Outer City / Inner Suburb: Physical, Social, and Cultural Landscapes of Immigration in Paris and Atlanta". Atlanta, November 2011.

"One Hundred Years of Rice: Contemporary Responses to Tradition". Cite 86. Summer 2011.

"Workshop Tourism". *B-sides Tourism*. Monograph on the 2011 International Summer Workshop. Barcelona, 2011.

GT FIRE Fund for Transformative Research and Education Grant. \$38,000. To develop and test first course in an Institute-wide Interdisciplinary Design Minor. Awarded April 2011. Symposium Chair and Organizer. "Grand Plans / Everyday Lives: Le Grand Paris / Atlanta BeltLine". Atlanta, December 2010.

"Beginnings and Disciplinarity in Design Education". Editor. Selected Papers from the Twentyfourth International Conference on Beginning Design. March 2008.

Robert Wood Johnson Foundation. Model Curriculum for the Design of Healthcare Environments Development Grant. \$95,000. Advisory Committee Member. The grant supported the development of a graduate-level multidisciplinary curriculum through a collaboration between the College of Architecture and the Emory University School of Nursing. Awarded February 2007. "Geographies of Disaster: The Earthquake and the Line of Control in Kashmir". *Log 7*. 2006.

Name: Robin E Lackey

# Courses Taught (Two academic years prior to current visit):

ARCH 3011 Design Studio III, Fall 2012

#### **Educational Credentials:**

B.S. Environmental Design, University of Missouri, 2000 M Arch, University of Pennsylvania, 2003

# **Teaching Experience:**

Part Time Lecturer, Georgia Institute of Technology, 2012-present

## **Professional Experience:**

Architect, Beyer Blinder Belle Architects, New York, NY 2005-2006 Project Architect, PKSB Architects, New York, NY 2004-2005, 2006-2010

# Licenses/Registration:

Licensed Architect, New York LEED Accredited Professional, Building Design and Construction NCARB Certified Name: W. Jude LeBlanc

### Courses Taught (Two academic years prior to current visit):

Arch 3011 Arch Design Studio III, co-coordinator w Charles Rudolph

Arch 2211 Construction Tech I, co-taught with Charles Rudolph

Arch 6052 Arch Options Studio—Health Clinic

Arch 4129 Form and Narrative—Cross Media Analysis

Arch 3011 Arch Design Studio III, co-coordinator

Arch 4219, 4221 Construction Tech I, co-taught with Charles Rudolph

Arch 4023 Arch Core Studio III—co-taught with Gernot Reither

Arch 4129, 6129 Form and Narrative—Cross Media Analysis

Arch 3011 Arch Design Studio III, co-coordinator

Arch 2211 Construction Tech I, co-taught with Charles Rudolph

#### **Educational Credentials:**

B.Arch., University of Houston, 1980 M. Arch., Harvard University, 1982

#### **Teaching Experience:**

Assistant Professor, University of Virginia, 1986-1992 Associate Professor, Harvard University, Graduate School of Design, 1992-1998 Associate Professor, Georgia Institute of Technology, 1998-present

### **Professional Experience:**

Skidmore, Owings and Merrill, New York, New York, 1982-1983 Gwathmey Siegel and Associates, New York, New York, 1983-1984 Robert A. M. Stern Architects, New York, New York, 1984-1986 W. Jude LeBlanc Architect, 1986-present

#### Licenses/Registration:

NCARB, Georgia

#### **Selected Publications and Recent Research:**

- -"Incremental Urbanism: New Models for the Redesign of America's Commercial Strips", *Harvard Design Magazine*, *Fall 2004/Winter2005*, *Number 21*, w Michael Gamble.
- -Progressive Architecture Awards Citation, Scupper Houses, in assoc. w Brian Andrews, Architecture, 1999.
- -"Wall Housing-Highway Type", Japan Architect/Shinkenchiku Residential Design Competition, Place, published in "The Japan Architect", 20, winter, 1995-1994.
- *-Eighteen Houses*, editor and contributor to compilation of single-family house designs by architects affiliated with the University of Virginia. Distributed by Princeton Architectural Press, 1992.
- -Current research projects:
  - -Narrative structure in the films of Alfred Hitchcock
  - -Formal methods in the paintings of Johannes Vermeer

# **Professional Memberships:**

Institute of Classical Architecture

Name: Frederick M. Pearsall

## Courses Taught (Two academic years prior to current visit):

ARCH 6051 Architectural Options Studio I ARCH 3012/4012 Architecture Design Studio III/IV ARCH 4803/8803 Visual Practice ARCH 4227/6227 Ecology and Architecture

#### **Educational Credentials:**

A.B. Art History *cum laude*, University of North Carolina-Chapel Hill, 1973 M.Arch Program, University of Pennsylvania, 1973-76

#### **Teaching Experience:**

Lecturer, School of Architecture, Georgia Institute of Technology, 1993-1998 Lecturer, Department of Art History, Emory University, 2006-2008

## **Professional Experience:**

Intern, Venturi, Rauch and Scott Brown, Architects and Planners, Philadelphia, PA, 1974-1976 Intern, Hayes & Howell, Southern Pines, NC, 1977
Freelance consultant, Frederick Pearsall, New York, NY, 1978-1982
Principal, Romm + Pearsall/Architects and Planners, 1983-present

## **Selected Publications:**

Work from "LAGI Competition" Prize-Winners [ARCH 3012-4012/Spring 2012] coverage:

Thaddeus Pawlowski, Mitchell Joachim, LAGI Ann Rosenthal, Heather Roger, Eloise Hirsh, Andreas Kipar. Regenerative Infrastructures: Freshkills Park NYC, Land Art Generator Initiative, May 2013.

Tafline Laylin, "Piezoelectric Energy-Generating "Scene Sensor" Wins the 2012 Land Art Generator Initiative Competition for Freshkills Park," Inhabitat NYC, Oct 26, 20.

http://inhabitat.com/nyc/piezoelectric-energy-generating-scene-sensor-wins-the-2012-land-art-generator-initiative-competition-for-freshkills-park/

"Winners announced of the 2012 Land Art Generator Initiative Competition for Freshkills Park," <a href="http://www.archdaily.com/tag/land-art-generator-initiative/">http://www.archdaily.com/tag/land-art-generator-initiative/</a>

Damian Holmes, "2012 LAGI competition winners announced," Oct 29, 2012.

http://worldlandscapearchitect.com/2012-lagi-announces-winners/Wind Sensor Proposed for New York

Blaine Brownell. "Two artists' proposed wind sensor would also generate energy." *Architect Magazine*, Nov 1, 2012. <a href="http://www.architectmagazine.com/technology/wind-sensor-proposed-for-new-york.aspx">http://www.architectmagazine.com/technology/wind-sensor-proposed-for-new-york.aspx</a>

Ed Bacon Competition, "Transect" Competition Prize-Winners [ARCH6051/Fall 2011] coverage:

http://hosted.verticalresponse.com/637528/c52b3dd23f/503770909/a1e8f92872/

http://planphilly.com/event/center-architecture-2011-ed-bacon-prize-winners-and-awards-ceremony

http://philadelphiacfa.org/competitions-bacon-student-design.php

http://www.behance.net/gallery/WEAVE-2011-Ed-Bacon-Student-Design-Competition/3511513

Work from "Integrating Habitats" Competition Prize-Winners [ARCH 6051/Fall 2007] coverage:

http://www.oregonmetro.gov/index.cfm/go/by.web/id=28839

http://library.oregonmetro.gov/files/livinggraft\_no11\_web.pdf

http://www.oregonmetro.gov/index.cfm/go/by.web/id/27944/print/true

Name: John Peponis, Ph.D.

## Courses Taught (Two academic years prior to current visit):

ARCH 6131 Theory and Criticism I (Module: Program, Type, Function)

COA 8630 Architecture, Space and Culture

ARCH 6228 Analytical Investigations in Urban Design

ARCH 8102 Introduction to Architectural Research 3 (Module: Theories of Design)

#### **Educational Credentials:**

Ph.D., University College, University of London. Architecture, 1983 M.Sc., University College, University of London. Architecture, 1977 B.Sc., University College, University of London. Architecture, 1976

## **Teaching Experience:**

Professor, Georgia Institute of Technology, 2004-present Associate Professor, Georgia Institute of Technology, 1989-2004

## **Professional Experience:**

Consultant Architect, Kokkinou and Kourkoulas Architects, 1990-present

# **Licenses/Registration:**

Member, Technical Chamber of Greece -registered Architect-Engineer, 1982-present

#### **Selected Publications and Recent Research:**

Peponis J, 2012, "Building layouts as cognitive data: purview and purview interface" *Cognitive Critique* **6** 11-51 <a href="http://www.cogcrit.umn.edu/docs/Peponis">http://www.cogcrit.umn.edu/docs/Peponis</a> v6.pdf

Christova P, Scoppa M, Peponis J, Georgopoulos A, 2012, "Exploring small city maps" *Experimental Brain Research* **223** 207-217( http://www.springerlink.com/content/hg0h497173122502/

Shop and Trade Mixed Use Development. Published in *Space Magazine* **524** July 2011, 48-53 (Seoul, South Korea) http://www.vmspace.com/eng/

Ozbil A, Peponis J, Stone B, 2011, "Understanding the link between street connectivity, land use and pedestrian flows" *Urban Design International* **16** 125-141 <a href="http://www.palgrave-">http://www.palgrave-</a>

journals.com/udi/journal/v16/n2/abs/udi20112a.html

Zamani P, Peponis J, 2010, "Co-visibility and pedagogy: innovation and challenge at the High Museum of Art" *Journal of Architecture* **15** 6 853-879

http://www.informaworld.com/smpp/content~db=all~content=a930313418~frm=abslink?words=pepon is

Peponis J, Bellal T, 2010, "Fallingwater: the interplay between space and shape" *Environment and Planning (B): Planning and Design* **37** 982-1001 <a href="http://www.envplan.com/abstract.cgi?id=b36052">http://www.envplan.com/abstract.cgi?id=b36052</a> Carpenter A, Peponis J, 2010, "Poverty and connectivity: crossing the tracks" *Journal of Space Syntax* **1** 108-120 <a href="http://joss.bartlett.ucl.ac.uk/index.php/joss/article/viewFile/23/pdf">http://joss.bartlett.ucl.ac.uk/index.php/joss/article/viewFile/23/pdf</a> 10

Wineman J, Peponis J, 2010, "Constructing spatial meaning. Spatial affordances in museum design" Environment and Behavior 42 1 86-109 <a href="http://eab.sagepub.com/content/42/1/86.abstract">http://eab.sagepub.com/content/42/1/86.abstract</a> Name: Gernot Riether, Asst. Prof., Dipl. Ing. Arch. M.S.

## **Courses Taught**

Arch 3012 Arch Design IV

Arch 4012 Arch Design VI

Arch 4803 Materials: Plastic, Seminar

Arch 8902 Crystal Palace, Independent Study

Arch 4420, 8803 Intro to Design Computing

Arch 2011 Arch Design II

#### **Educational Credentials:**

Dipl. Ing., University of Innsbruck, 1998 M.S. AAD Columbia University, 2000

### **Teaching Experience:**

Adjunct Assistant Professor, New York Institute of Technology, 2002-2006 Adjunct Assistant Professor, Barnard and Columbia Colleges at Columbia University 2003-2004 Assistant Professor, Georgia Institute of Technology, 2006-present

## **Professional Experience:**

Assistant, Schwärzler Architects, Schwaz, Austria, Summer 1991, part time 1992-1994 Assistant, Brandt & Oldenbourg Architects, Munich, Germany, Summer 1994, 1995 Project Designer, Jesse Reiser and Nanako Umemoto, New York, NY, 2000-2001 Project Designer, Lindy Roy, New York, NY, 2001-2002 Project Designer, EYP, Einhorn Yaffee Prescott, New York, NY, 2002-2005

## Licenses/Registration:

Den Haag, The Netherlands, License Number 1.020615.005

#### **Selected Publications and Recent Research:**

Selected Published Papers in Peer Reviewed Journals (academic year 2011-12)

- 1. Riether G., Baerlecken D., (2012), "Digital Girih," IJAC, Vol. 10, Nr. 1, p. 1-12
- 2. Riether G., (2011), "Towards digitally integrated urban places," Kybernetes, Vol. 40, 7/8, p. 1117-1124
- 3. Riether G., (2011), "AIA Pavilion, System Interactions," Journal of Green Building, Vol. 6, Nr.2, p. 29-35 Selected Published Papers in Peer Reviewed Proceedings (academic year 2011-12)
- 1. Riether G. (2012) "Dynamic material beh. for Lightw. Str.," eCAADe 2012, Prague p.181-190
- 2. Riether G. (2012) "Nuit Blanche Pavilion," AAG 2012, Centre Pompidou, Paris, France, p.199-204
- 3. Riether G. (2011) "Adaptation" ACADIA 2011, University of Calgary Alberta, Canada, p.52-57 Selected Published Projects in Architecture Magazines (academic year 2011-12)
- 1. Schittlich C. (2012) "Pavilion in New Orleans," DETAIL, V. 52, 6 Prefabrication, p. 613, 642-644, 723
- 2. Bruehl T. (2012) "Material World," gb&d (Green Building and Design), Vol. 3, Nr. 15, p.144-145
- 3. Platz D. (2011) "Individuelle Geometrie," ARCHITEKTUR & BAUFORUM, SKIN, Nr. 2, title, p.1-6
- 4. Riether G. (2011) "AIA Pavilion," CONCEPT, Vol. 148, p.50-57

Selected Published Projects in Books (academic year 2011-12)

1. Angelini R. (2011). "Architettura e Information Technlogy," Mancosu Editore, p.228-232

**Professional Memberships:**ACADIA, international network of digital design researchers and professionals

Name: Stuart Romm, AIA

### Courses Taught (Two academic years prior to current visit):

ARCH 4011 Architecture Design Studio V

ARCH 2012 Architecture Design Studio II

ARCH 6051 Architecture Options Studio I

ARCH 7090 Masters Project Studio

ARCH 8843 Special Topics - Practice

ARCH 4315 Professional Practice

#### **Educational Credentials:**

B.Arch., Cornell University, 1974

## **Teaching Experience:**

Studio Instructor, Georgia Institute of Technology, 1982-1991 Senior Lecturer, Georgia Institute of Technology, 1992-2011 Professor of the Practice, Georgia Institute of Technology, 2012-present

#### **Professional Experience:**

Principal, Praxis3 Architecture, Atlanta, GA, 1997-present
Partner, Romm + Pearsall Architects, Atlanta, GA, 1982-present
Principal, Stuart Romm / Architect, Atlanta, GA, 1979-1981
Intern Architect, John Portman & Associates, Atlanta, GA & Los Angeles, CA, 1974-1978

## Licenses/Registration:

Registered Architect: Georgia (initial), California, Florida, Illinois, Kentucky, New Jersey, Tennessee, Texas

#### **Selected Publications and Recent Research:**

- 2011 UNC Charlotte, School of Architecture: Practice Panel "Digital Inquiry + Practice" Presenter/Panelist: "Mediated Public Space" with Peter Wong, moderator, plus Nick Senske and Jordan Williams
- 2010 AIA Georgia, Citation Design Award: Fire Station No. 2, Decatur, GA (LP3 Architecture, Stuart Romm, lead designer)
- 2009 AIA Honor Award, South Atlantic Region: Renaissance Walk at Sweet Auburn, Atlanta (Praxis3, J.W. Robinson & Associates, Romm + Pearsall, Stuart Romm, lead designer)
- 2009 Greenprints 2009 "Sustainable Communities by Design", Atlanta Presenter/Panelist: "City of the Future" with Eric Bishop, David Hamilton, and Todd Hill
- 2008 National Prize Winner, History Channel's "City of the Future Design and Engineering Challenge", team: EDAW, Praxis3, BNIM, Metcalf & Eddy

## **Professional Memberships:**

Certificate: National Council of Architectural Registration Boards

Accredited Professional: LEED (Leadership in Energy and Environmental Design), Member AIA

Name: Charles F. Rudolph

## Courses Taught (Two academic years prior to current visit):

ARCH 2211	Construction Technology and Design Integration I
ARCH 4220	Construction Technology and Design Integration II
ARCH 3011	Third Year Undergraduate Design Studio
ARCH 4021	Core I Design Studio
ARCH 6052	Options II Design Studio
ARCH 6053	Options III Design Studio
Summer 2011	Career Discovery in Architecture Program (2 weeks)

## **Educational Experience:**

M.Sc., Building Design, Columbia University, 1989 B.Arch., Rice University, 1983 B.A., Art/Art History, Rice University, 1981

## **Teaching Experience:**

Associate Professor with Tenure, Architecture Program, February 2000 Assistant Professor, Architecture Program, May 1995 Adjunct Instructor, Architecture Program, August 1992-May 1995

## **Professional Experience**

Pei, Cobb, Freed & Partners, New York, NY, 1989-1992 Peter Wheelwright & Associates, Architects, New York, NY, 1986-1988 Ryall + Bishop Architects, New York, 1986 Michael Underhill A.I.A., Houston, 1983-1986 R.M. Kliment and Frances Halsband, Architects, New York, 1981-1982 Wittenberg, Deloney & Davidson Architects, Arkansas, 1978

## **Licenses/Registration**:

Architect. State of New York. #6271, 1997-2001 (re-activating status)

#### **Selected Publications and Recent Research:**

Rudolph, Charles F., "Critical Regionalism to Critical Realism: Notes on a Transition" International Conference: Regional Architecture and Identity, November 13-15, 2007, Tunis, Tunisia Center for the Study of Architecture in the Arab Region (CSAAR).

Rudolph, Charles F., Co-PI (Castro-Lacouture, Daniel. PI, and Yang, Perry. Co-PI). NSF / EFRI-Seed Proposal.

Emerging Frontiers in Research Innovation "EFRI-SEED: Feasability of Algae-Powered Houses". Funded by NSF July 2012-2015, \$825,000.

Name: Vikram Sami, LEED BD+C

### Courses Taught (Two academic years prior to current visit):

ARCH 4231 Environmental Systems

#### **Educational Credentials:**

GD.Arch., Academy of Architecture, Mumbai, 1997 M.S. Bldg Des., Arizona State University, 2003

#### **Teaching Experience:**

Adjunct Faculty, Georgia Institute of Technology, 2005-2008, 2012

### **Professional Experience:**

Sustainable Design Analyst, Perkins+Will, 2010–present Associate, Senior Building Performance Analyst, Lord Aeck Sargent, 2004–2010 Sustainable Design Consultant, ENSAR Group Inc, 2003–2004.

## **Licenses/Registration:**

#### **Selected Publications and Recent Research:**

Modeling thermal comfort delivered by wind towers using computational fluid dynamics; MS Thesis, Arizona State University (2003)

Applying Computational Fluid Dynamics to Analyze Natural Ventilation and Human Comfort in Buildings; ASES 2003, Austin, TX

Casa Campos - Optimizing Ventilation & Comfort in a Traditional Spanish Residential Courtyard using Computational Fluid Dynamics; PLEA, Santiago, Chile

Calculating an Optimal Sun Angle for Window Shading; ASES 2004, Portland, OR

Photovoltaic Reincarnation; ASES 20005, Orlando, FL

Examining The Role Of Full Field Solutions In Analyzing Passive Solar Architecture; ASES 2006; Denver, CO A Concise Method For Determining Optimal Glazing Specifications; ASES 2006, Denver, CO.

<u>A Simultaneous Modeling Methodology to Analyze Passive Solar Performance of Trombe Walls</u>; PLEA 2006, Geneva, Switzerland.

Optimizing Passive Solar Design Using Cutting Edge Tools; Rethinking Sustainable Construction, 2006; Sarasota, FL.

Laboratories 2030: Implications of the 2030 Challenge for the Research Building Sector; Labs 21, Charleston, SC

Passive Solar on the Blue Ridge Parkway; ED+C Magazine May 1<sup>st</sup> 2008 Cover Article.

Chhaya 2.0 - Using A Dynamic Balance Point To Extend The Passive Season; ASES 2008, San Diego, CA. Laboratories 2030: Implications of the 2030 Challenge for the Research Building Sector; ASES 200 Crystallized Pedagogy: Using the Built Environment to Teach Sustainability; ASES 2008, San Diego, CA. The Blue Ridge parkway visitor centre: correlating building simulation with measured performance in passive solar design; ASES 2008, San Diego, CA.

Chhaya 2.0: Using a Dynamic Balance Point to Extend the Passive Season; PLEA 2009, Quebec, Canada. Building Information Modeling (BIM) & Sustainability - Using Design Technology for Daylight Modeling (Technical Paper); Solar 2010 Conference, Phoenix, AZ

#### **Professional Memberships:**

ASHRAE, USGBC

Name: Leslie N. Sharp, PhD

### **Courses Taught:**

ARCH 4107/6107: Introduction to Historic Preservation

ARCH 4120/6120: Atlanta Architecture

#### **Educational Credentials:**

PhD: History of Technology with a minor in Architectural History, Georgia Institute of Technology, 2004 Master of Science, History of Technology, Georgia Institute of Technology, 2001 Master of Arts in History with emphasis in Historic Preservation, Middle Tennessee State University, 1993

Bachelor of Arts in History, University of Georgia, 1989

## **Teaching Experience:**

Georgia Institute of Technology, 1999-2003; 2007-present Georgia State University, 2007 Middle Tennessee State University, 2004-2006 Kennesaw State University, 2000

#### **Professional Experience:**

Assistant Vice Provost, Graduate Education & Faculty Affairs, Ga Tech, January 2012-present Interim Director of Graduate Studies and Admissions, Ga Tech
Assistant Dean for Academic Affairs & Outreach, 2008-December 2012, COA, Ga Tech
Director of Special Projects, 2006-2008, COA, Ga Tech
Research Associate Professor (promoted to Associate 2005), 2003-2006, Joint Appointment
Center for Historic Preservation & History, Middle Tennessee State University, Murfreesboro, Tennessee
National Register of Historic Places Program Coordinator, 1995-1999
Georgia Women's History Initiative Manager, 1995-2006; NR Specialist, 1993-1995
Historic Preservation Division, Georgia Department of Natural Resources, Atlanta, Georgia
Architectural Historian and Researcher, 1992-1993, The Jaeger Company, Gainesville, Georgia

#### **Selected Publications and Recent Research:**

"Elevator" and "Christine Ladd-Franklin" entries, *The Oxford Encyclopedia of the History of American Science, Medicine, and Technology,* Oxford University Press, forthcoming.

*Dixie Highway in Tennessee: Springfield to Chattanooga*. Charleston, SC: Arcadia Publishing, 2011. Editor, *ARRIS*, Journal of the Southeast Chapter of the Society of Architectural Historians (2010, 2011 issues).

"Louisa Cornelia (Huggins) Tuthill," entry, *Grove Encyclopedia of American Art*, Oxford University Press, 2010.

"Chief Van House," entry, Encyclopedia of Appalachia, University of Tennessee Press, 2006.

"Classic Traditions: Tennessee's Academic Architecture," A History of Tennessee Arts: Creating Traditions, Expanding Horizons, edited by Carroll Van West, University of Tennessee Press, 2004.

"Women and the Built Environment," *Exploring A Common Past: Researching and Interpreting Women's History for Historic Sites*, National Park Service, 2003 (Second edition, 2005).

Name: Jonathan Shaw

## Courses Taught (Two academic years prior to current visit):

ARCH 4420 Introduction to Design Computing ARCH 4833 Architecture Media and Modeling III

#### **Educational Credentials:**

B.A. Art, Kennesaw State University, 1997B.S, Math, Kennesaw State University, 1998M.S. Arch., Georgia Institute of Technology, 2000

### **Teaching Experience:**

Instructor, Georgia Institute of Technology, 2004-present

#### **Professional Experience:**

Intern, Zachary W. Henderson A.I.A., Inc., Roswell, GA 1999 Research Scientist, College of Computing GVU Center 2000-2003 Research Scientist, Imagine Lab/Digital Building Lab 2003-present

#### **Selected Publications and Recent Research:**

Virtual Home Modification Education Assistant, 3 year \$599,192 NIDRR Grant, 2012-2015 "Collaborative City Modeling" Erik Palmquist, Jonathan Shaw, (2008) Education and Research in Computer Aided Architectural Design in Europe Conference, Antwerp, Belgium "Designing Universally: Integration of CAD, Motion Capture and DHM to simulate wheelchair users in a retail checkout station." Jason C. Quick, C.M. Sundaram, Jonathan Shaw, (2005) Digital Human Modeling for Design and Engineering Symposium, Iowa City, Iowa.

#### Name: Jihan Sherman

# Courses Taught (Two academic years prior to current visit):

ARCH 2011 Design I
ARCH 2012 Design II
COA 1011 Fundamentals of Design and the Built Environment I
COA 1012 Fundamentals of Design and the Built Environment II

## **Educational Credentials:**

BS Architecture, Georgia Institute of Technology, 2005 MArch, Georgia Institute of Technology, 2007

### **Teaching Experience:**

Lecturer, Georgia Institute of Technology, Common First Year, 2008-2012 Lecturer, Georgia Institute of Technology, School of Architecture, 2011-2012 Associate Academic Professional, Common First Year Curriculum Coordinator, Georgia Institute of Technology, Atlanta, GA 2012-present

## **Professional Experience:**

Intern Architect III, Lord, Aeck & Sargent, Atlanta, GA, 2007-2011

#### Licenses/Registration:

LEED AP, BD + C, USGBC, 2008

### **Selected Publications and Recent Research:**

N/A

#### **Exhibitions:**

"Perspective", Installation, URBANfronts Storefront Galleries, AIA Atlanta, Atlanta, Georgia, 2013

## **Professional Memberships:**

The American Institute of Architects, Associate Member

## Name: Lars Spuybroek

## Courses Taught (Two academic years prior to current visit):

ARCH 4803/6132/8923 Theory and Criticism II – Matter, Life and Generation

ARCH 6053/4011 Design Studio Options III – Beauty and Agency

ARCH 4012 Design Studio Seniors - Beauty and Agency II

ARCH 4011 Design Studio Seniors - Digital Craft

ARCH 7060 Critical Positions - Digital Craft II

#### **Educational Credentials:**

M.S., cum laude, Technical University, Dept. of Architecture, Delft, 1989

### **Teaching Experience:**

Assistant Professor, Technical University, Delft and Eindhoven, 1990-1995

Visiting Associate Professor, Columbia University, New York, 1998-2005

Visiting Professor, Bartlett School of Architecture, University College London, 2002

Visiting Professor, ESARQ University, Barcelona, 2005

Professor, University of Kassel, Germany, 2002-2006

Thomas W. Ventulett Chair, Georgia Institute of Technology, School of Architecture, Atlanta, 2006-2011

Professor, Georgia Institute of Technology, School of Architecture, Atlanta, 2006-

### **Professional Experience:**

Director, NOX Architects, 1991-2010

## Licenses/Registration:

Architectenregister (Dutch Architects registration) 1.920814.002

#### **Selected Publications and Recent Research:**

The Art of the Accident, co-editor (Rotterdam: V2\_Publishing, 1998)

NOX: Machining Architecture (London: Thames & Hudson, 2004)

The Architecture of Continuity (Rotterdam: V2\_Publishing, 2008)

Research & Design: The Architecture of Variation, editor (London: Thames & Hudson, 2009)

The Politics of the Impure, co-editor (Rotterdam: V2\_NAI Publishers, 2010)

Research & Design: Textile Tectonics, editor (Rotterdam: NAI\_Publishers, 2011)

The Sympathy of Things: Ruskin and the Ecology of Design (Rotterdam: V2 Publishing, 2011)

Vital Beauty: Reclaiming Aesthetics in the Tangle of Technology and Nature, co-editor (Rotterdam: V2 NAI

Publishers, 2012)

Name: David C. Yocum, AIA

## Courses Taught (Two academic years prior to current visit):

COA 6053: Architecture Options Studio III COA 6052: Architecture Options Studio II COA 6051: Architecture Options Studio I

#### **Educational Credentials:**

M.Arch., Harvard University, 1997 B.A., Dartmouth College, 1992

#### **Teaching Experience:**

Professor of the Practice in Architecture, Georgia Tech College of Architecture, 2012-Present Paul Rudolph Fellow, , Auburn University School of Architecture, 2012
Visiting Professor of Practice in Architecture, Georgia Tech College of Architecture, 2010-2011
Lecturer, Georgia Tech College of Architecture, 2006-2010

## **Professional Experience:**

Director, BLDGS, Atlanta GA, 2006-present
Senior Project Architect, Mack Scogin Merrill Elam Architects, Inc., Atlanta, GA, 2003-2005
Project Architect / Manager, Mack Scogin Merrill Elam Architects, Atlanta, GA, 1997-2003
Intern Architect, Payette Associates, Boston, MA, 1997
Intern Architect, Sandro Marpillero Architect, New York, NY, 1996
Intern Architect, Thompson and Wood Architects, Cambridge, MA, 1994
Part-Time Intern, Banwell White Arnold Hemberger and Partners, Architects, Hanover, NH, 1989-1992

# Licenses/Registration:

Georgia

#### **Recent Publications and Awards:**

Atlanta Journal-Constitution, "MetHome Spotlights Atlanta Architects" October 28, 2009
Atlanta Journal-Constitution, "Visual Arts: Up Against a Wall – and Then Beyond" December 2008
The New York Times, Sunday Magazine, "Second Life" March 2, 2008
Atlanta Journal-Constitution, "Dilapidated Atlanta Building Transformed Into Award Winner" June 2008
2010 Georgia AIA Honor Design Award, for Florian-Hart Residence and Ansley Glass House
2008 Atlanta Urban Design Commission Award for Adaptive Re-use, for Villa de Murph
2007 Georgia AIA Award of Merit, for Whitespace Gallery
2007 National AIA Small Project Design Award, for Villa de Murph

## **Professional Memberships:**

The American Institute of Architects

Name: Craig M. Zimring, PhD

### Courses Taught (Two academic years prior to current visit):

COA8000/Arch 8902 Introduction to Doctoral Research

ARCH 7060 Critical Positions

ARCH 8812 Evidence-Based Design

COA8823 Advanced Readings: Research Methods

COA8823/Arch 6271 Healthcare Design of the Future Arch8999 Prep Doctoral Dissertation

#### **Educational Credentials:**

Ph.D., Environmental Psychology, Univ. of Mass at Amherst, 1978 M.S., Psychology, Univ. of Mass at Amherst, 1978 B.S., Psychology, Univ. of Michigan, 1973

## **Teaching Experience:**

Professor of Architecture and of Psychology, Georgia Institute of Technology, 2000-Present Associate Professor of Architecture and of Psychology, Georgia Institute of Technology, 1983-2000 Assistant Professor of Architecture and of Psychology, Georgia Institute of Technology, 1978-1983

## **Selected Publications and Recent Research:**

(note: 78 publications not listed here) C. Zimring et al (in press, 2013). Evidence-based Design of Healthcare Facilities: Opportunities for Research and Practice in Infection Prevention. *Inf Control Hosp Epidem*.

Zimring, C., & Seo, H. B. (2012). Making Acuity-Adaptable Units Work: Lessons From the Field. *Herd-Health Environments Research & Design Journal*, *5*(3), 115-128.

Ryherd, E.E., Okcu, S., Ackerman, J., Zimring, C., Persson, K., & Waye, P.D. (2012). Noise Pollution in Hospitals: Impacts on Staff. *JCOM*, *19*(11).

Zimring, C., & DuBose, J. (2011). Healthy Health Care Settings. In H. F. R. J. In A. Danneberg (Ed.), *Designing and Building for Health, Well-Being and Sustainability* (pp. 203-215). Washington, DC: Island Press.

Lu, Y., & Zimring, C. (2011). Can Intensive Care Staff See Their Patients? An Improved Visibility Analysis Methodology. *Environment and Behavior*.

Callahan, C. W., & Zimring, C. (2011). Finally "Deliberate by Design:" Milestones in the Delivery of Health Care for US Military Family Members. *Military Medicine*, 176(8), 858-864.

Henriksen, K., Isaacson, S., Sadler, B. L., & Zimring, C. M. (2007). The role of the physical environment in crossing the quality chasm *The Joint Commission Journal on Quality and Patient Safety, 33*(11 Supplement), 68-80.

*Healthy Hospital Lighting*. The program of study is focused on evaluating the outcomes for patients and staff from implementing a dynamic lighting system in healthcare spaces.

Understanding the Role of Healthcare Facility Design in the Acquisition and Prevention of HAIs. In collaboration with Emory Healthcare and RTI International, and funded by AHRQ, this project sees to develop a conceptual framework and literature review to describe the role of the physical environment in the acquisition of healthcare acquired infections.

*Creating World Class Healthcare Facilities for America's Military.* This project structures an innovation center, design checklist, community portal and conducts baseline research on falls, noise, nurse injuries.

# **APPENDIX THREE: NAAB VISITING TEAM REPORT 2008**

http://www.arch.gatech.edu/sites/files/arch/2008 NAAB Visiting Team Report.pdf

http://www.arch.gatech.edu/sites/files/arch/2008 NAAB Decision Letter.pdf

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APPENDIX FOUR: GEORGIA INSTITUTE OF TECHNOLOGY COURSE CATALOG

http://www.catalog.gatech.edu/