Lawrence Technological University
College of Architecture and Design

Architecture Program Report for 2014 NAAB Visit for Continuing Accreditation

Master of Architecture- 168 credits

M.Arch DE: A direct entry, 168 credit-hour track for students entering the university as freshmen or as lower-division transfer students from community colleges, articulation agreement partners, and so forth.

M.Arch 36: A 36 credit-hour graduate-level track for students with pre-professional degrees from other institutions. This 36-credit track corresponds to our upper division of the M.Arch DE track.

M.Arch 3+: A 90-credit program for students with baccalaureate degrees in subjects other than architecture.

Year of the Previous Visit: 2007
Current Term of Accreditation: 6 years

Submitted to: The National Architectural Accrediting Board
Date: September 7, 2013 (Revised October 21,2013)

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Part One (I). Institutional Support and Commitment to Continuous Improvement

I.1. Identity & Self Assessment

I.1.1. History Mission

Introduction

This section outlines the history and mission of Lawrence Technological University (LTU), the College of Architecture and Design and the Department of Architecture (CoAD), highlighting how the long-term commitment to inclusive education and a focus upon theory and practice have guided the CoAD's educational focus.

Lawrence Technological University: History, Mission, and Culture

Lawrence Institute of Technology (LIT) was founded in 1932 as an independent, nonprofit institution of higher learning. The first president of LIT was Russel E. Lawrence. Henry and Edsel Ford helped launch the institution, providing guidance and space in their sprawling former Model T assembly plant for the school. Accordingly, the institution was "founded on the integrity of teachers and the fostering of a spirit of educational cooperation between industry and learning." The relationship between the school and local industry (through the embrace of cutting-edge technology and entrepreneurship in manufacturing) has continued to be central to the culture of the University, as has the related commitment to the working student.

By the late 1940s, severe overcrowding within the institution's original building in Highland Park led the second president, E. George Lawrence, to seek a new campus site. In 1955, Lawrence Institute of Technology moved to the present location on Ten Mile Road in Southfield, Michigan, acommunity with a current population of approximately 75,000 residents. Southfield lies within the 'first ring' of suburban development around the city of Detroit and remains linked to the questions and possibilities posed by this major urban center. Detroit is a remarkable urban environment, in which political, social, economic and environmental pressures are causing residents to reinvent the policies and practices that govern, shape, and inevitably define a city. Similar discussions are taking place in Flint, Pontiac and other former industrial centers around Detroit. Southfield, which is situated in the midst of these cities and the questions they pose, is an ideal location for the pursuit of scholarly investigation and education.

The third president of the institution was Wayne H. Buell who served as President from 1964 to 1977 and then as chairman of the board and CEO until 1981. Dr. Richard E. Marburger served as president from 1977 to 1993, and Dr. Charles M. Chambers served as president from 1993 to 2005. Dr. Lewis Walker was elevated from provost and vice president in 2006, serving as president until 2012. Walker and Marburger currently hold the title of president emeriti. The current president is Dr. Virinder K. Moudgil, who assumed office in 2012.

In 1989, the Board of Trustees changed the name of the institution to Lawrence Technological University (LTU), revising its organization and goals and establishing a curriculum based upon a strong liberal arts education core. The University is a co-educational, accredited university composed of the four colleges of Architecture and Design, Engineering, Management, and Arts and Sciences.

Lawrence Technological University enrolls over 4,000 students and offers over 60 day and evening associate, undergraduate, and graduate programs. The 100-acre campus in Southfield includes 13 major buildings, a campus quadrangle, and athletic fields. The University also owns much of the surrounding neighborhood on its western edge.

The mission statement of Lawrence Tech identifies, in part, a goal "to develop leaders through innovative and agile programs embracing theory and practice." Lawrence Tech strives to distinguish itself as a preeminent private university with outstanding academic programs that are accessible to both traditional and non-traditional students – a long-standing commitment that is at the core of LTU's past and future. Lawrence Tech's motto – "theory and practice" – reflects the University's historic orientation toward providing quality educational programs to educate the whole person and prepare its students for professional leadership positions.

College of Architecture and Design: History, Mission, and Culture

The School of Architecture was established in 1962, having evolved from the former Architectural Engineering Department of the School of Engineering. Earl W. Pellerin, FAIA, directed the development of the architecture program from the institution's founding in 1932 until his retirement in 1974. Karl H. Greimel, FAIA, served as dean from 1974 to 1990 and Neville Clouten, FRAIA, served as dean from 1990 to 2002. Following Dean Clouten's tenure, the College was served by two interim deans, David Chasco, FAIA, from 2002 to 2004, and Joseph Veryser, AIA, in the 2004-2005 academic year. The current dean of the College of Architecture and Design, Glen S. LeRoy, FAIA, FAICP, was appointed in June, 2005.

Under the Department of Architecture, the Bachelor of Architecture (B.Arch) professional degree program was first accredited by the National Architectural Accrediting Board (NAAB) in 1974. The School of Architecture was named the College of Architecture and Design (CoAD) in 1989 at the same time the institution became Lawrence Technological University. NAAB teams visited LTU in 1974, 1979, 1984, 1989, 1994, 1997, 2002, and 2008. In 1997, the Master of Architecture (M.Arch), which began in 1973, was accredited as the professional degree program at LTU. At that time, the B.Arch degree was discontinued. Beginning in 2009, qualified alumni holding a B. Arch. degree became eligible to complete additional coursework and upgrade their degrees to the M.Arch.

A semester calendar was adopted for the University in 1994, and the College of Architecture and Design incorporated major curricular changes in all of its programs. A four-year pre-professional B.S. in Architecture was devised as a prerequisite to entry into the professional M.Arch. (A Master of Architecture post-professional degree was adopted in 1995, however, a moratorium was placed on admission to this program in 2005 and the program was officially dropped in 2007.) In the 2012-13 academic year, the professional degree program was converted to a directentry Master of Architecture program. Students who cannot meet the academic criteria for continuance into the upper division or choose not to enter the upper division may elect to receive the Bachelor of Science in Architecture upon completion of all lower division coursework.

Other programs in the Department of Architecture in the College include a certificate in Building Information Modeling and Computer Visualization, a Bachelor of Arts in Architectural Studies, and a Master of Urban Design (m.U.D.) focused upon sustainable urbanism. In addition, a Certificate in Architectural Management is available and the College participates in a graduate-level University-based certificate in Interdisciplinary Sustainability.

Programs in the Department of Art and Design that relate to the built environment include a CIDA-accredited Bachelor of Interior Architecture, a Master of Interior Design, and a Master of Arts in Environmental Graphics. This department also offers Bachelor of Science degrees in Transportation Design and Industrial Design, as well as Bachelor of Fine Arts programs in Graphic Design, Game Art, and Interaction Design. These programs are NASAD-accredited. The Departments of Architecture, and Art and Design, participate in the offering of several dualdegree programs. The programs pair a degree in architecture with Graphic Design, Interaction Design, Urban Design, or Interior Architecture. The CoAD looks forward to opportunities for additional cross-disciplinary education and projects.

Founded upon the vision, mission, values and strategies outlined within the University and College strategic plans, the mission of the Department of Architecture is to develop critical thinkers and responsible practitioners who appreciate the manner (technology), method (technique) and means (tectonics) by which the built world is constructed. The objective is to understand and develop a symbiotic relationship between ancient and natural systems, technologies and infrastructures through the architectural act. Refer to *section I.1.4 Long Range Planning* for more information.

How the University benefits from the Architecture program

The architecture program is housed in the College of Architecture and Design, one of three professional colleges, along with Engineering and Management, at Lawrence Tech. Architecture contributes to the full life of the University by offering a way for technical expertise to serve people and communities, in a way that the other disciplines cannot. Architecture is about how technology works for people; this can be seen in ongoing program revisions, beginning with those in the integrated design studios and visual communications courses as discussed in *section II.2.3. Curriculum Review and Development*.

The architecture program contributes to the campus environment and this can be seen in the significant improvement to the physical campus in the last decade. The new architecture facility, the University Technology and Learning Complex (UTLC) was designed by the noted architecture firm, Gwathemy Siegel and Associates in 2000. It is not only a fine, articulate and flexible building, but it provides a community-scaled front door and face to the street. It also defined a campus quadrangle for the first time. The University's next significant building project will be an engineering and multi-discipline structure. This project, now in the early design stages, is being designed by 2013 AIA Gold Medlist Thom Mayne, FAIA, and his firm, Morphosis.

The architecture program further contributes to the University by the participation of its faculty in campus task forces that assess the progress of the institution. The University Task Force on Design Thinking, currently completing its report to the provost, was chaired by the dean of the College and benefitted from the participation of two members of the College faculty. A copy of this report is available in the Team Room.

Unique Synergies, Events and Activities

Within the University, the College and the Department of Architecture are a force for improving the campus environment physically and active participants in cross-disciplinary education. The College and the University have developed synergies that contribute to this academy. The College of Architecture and Design cooperates with both the College of Management and the College of Engineering to offer shared degree programs and dual degrees, including a degree program in Architectural Engineering, a dual M.Arch / MBA degree, a dual Bachelor of Science degree in Architecture and Construction Management, and a dual Bachelor of Science degree in Architecture and Civil Engineering. Additionally, a dual-degree program pairing a degree in architecture with Media Communications (in the College of Arts and Sciences) is pending.

The combination of architectural and urban design expertise and the University's commitment to leadership and entrepreneurial activism is exemplified by coursework and public interest work in Detroit and surrounding communities. These activities take place in the Detroit Studio, the detroitShop, and will have a new and visible presence in the forthcoming Detroit Center for Design and Technology. Please refer to *section I.1.3.E. Architectural Education and the Public Good* and *section I.2.3 Physical Resources*.

Holistic, Practical and Liberal Arts-based Education of Architects

We see architectural technology as a means to a better physical and humane environment and therefore support the University's Core Curriculum, which brings the liberal arts and humanities to the students. This strong and specific coursework exposes architecture students to other disciplines, their methods and accomplishments, and encourages the making of thoughtful, deliberate, and informed choices. Completion of all eleven core courses is required of all LTU students. The Core Curriculum is discussed in detail in *section I.1.3 Architectural Education and the Students*. The breadth of the architectural curriculum supports the position that an architectural education is an excellent education and good preparation for traditional, practical architectural practice as well as for other endeavors ranging from public service to education to management.

In terms of the practical education of architects, the program endorses the University's motto, "Theory and Practice". This endorsement, as indicated by the 2012 College Strategic Plan, has produced a focus on practice-oriented, multi-disciplinary and technologically-driven approaches within both curricular and extra-curricular activities (refer to *section I.1.4 Long Range Plan*). Through these experiences, the College equips students with the ability to think critically and creatively, to develop the capacity for making sound judgments on the basis of research, to develop strong leadership and teamwork skills, and to encourage students to seek active and meaningful participation in the life of their communities. Just as importantly, the CoAD remains committed to serving the needs of working students who may not otherwise have access to quality higher education by providing substantial course offerings in the evening, as well as online.

As the CoAD works to prepare students for 21st century architectural practice, the institution's technological roots (dating back to the involvement of Henry Ford) remain as relevant as ever. Beyond the use of digital means of representation and communication, programs within the college embrace the potentials inherent in digital fabrication and construction to expand the students' understanding of practice techniques, and opportunities to introduce insightful thinking about tectonics to the built environment and to sustainable practices. As the first institution to fully integrate online design studio delivery into an M.Arch program, the CoAD prepares students for global practice by introducing models for online design and management. In the 2012-2013 academic year, 93.4% of upper division students took at least one class in an online format, and on average, 5.3% of students were enrolled exclusively as online participants. By embracing new technologies in both practice and pedagogy, the CoAD reinforces the institution's desire to promote entrepreneurship and innovation among its graduates.

I.1.2. Learning Culture and Social Equity

Introduction

This section outlines a culture in which learning is the central fact of lives at the College and, further, how ideas about social equity play a role in making this culture possible.

Learning Culture: A Positive and Respectful Learning Environment.

It is the intention of the College of Architecture and Design (CoAD) to synthesize diverse approaches to inter-disciplinary collaboration, respect for people and places, and human resources into a comprehensive and coherent architecture and design education. It is the College's further intention to explore those goals with reference to the meaning and significance of technology: with reference to the technological orientation of the University as of theory (ideas) integrated with practice (action in the professional world).

With reference to its mission, the College of Architecture and Design at Lawrence Technological University believes in the value of the design studio model for the education of architects, designers, and artists. The studio experience encourages peer-to-peer learning, dialogue, mentoring, intellectual rigor, innovation, and immersion in the design process: through learning by doing, which is central to the idea of a profession. Additionally, the studio provides a sense of community among students and faculty in which respect for one another, a sharing of ideas, and collaboration are paramount. At its best, the studio is a collaborative environment, intended to echo the best aspects of the professional office, a setting in which practice activities are much more likely to be the product of collaborations than of an isolated individual. The architectural design studio is a shared experience. It is an open environment that encourages the making of important things and the pursuit of ideas among cooperating individuals. The College of Architecture and Design is dedicated to the pedagogy of theory and practice: not one or the other, but both, integrated and coherent. The design studio is the place where the CoAD community—faculty, staff, and students—engage with that commitment.

As part of the College's ongoing effort to enhance the experience of a positive and respectful design learning environment, it has recently engaged in two particular programs. The CoAD administration, faculty, and students jointly developed substantial refinements to the Studio Code of Conduct. And a new chair, Scott Shall AIA, was introduced in the architecture program one year ago. Professor Shall has pursued a series of productive conversations with students. These two programs are described immediately below as is the University's policy on Academic Honesty, which is regarded as an integral part of a respectful and inquiring educational setting.

Guiding Principles of Professional Conduct

CoAD Studio Code of Conduct. In 2004, the LTU Chapter of the American Institute of Architecture Students (AIAS), in coordination with faculty and administration of the College, convened the LTU Studio Culture Summit. The purpose of the Summit was to assess the state of studio culture in architecture schools across the nation. The report generated by that group instigated a series of formal and informal studio discussions about studio culture at Lawrence Tech. Formally, over the last decade, the Dean's Student Leadership Council has continued to discuss studio culture, as has AIAS and several faculty committees. Over this same time period, various studio culture surveys have been generated and distributed throughout the College seeking feedback from students on their experiences in studio and their ideas on how to improve the studio environment. The response rates to these surveys have been quite high, varying between 200 and 400 students or roughly 33% and 66% of the total student population in Architecture– reflecting a continued interest among students about this topic.

Wishing to build on this discussion, in the 2012-3 school year, the Chair of the Department of Architecture, in coordination with interested faculty and student leaders, reconvened the LTU Studio Culture Summit. To start the conversation, the Chair, Scott Shall, asked all studios to conduct a 30-60 minute conversation about studio culture. To establish a common, working framework, the Chair requested that all studios to frame their conversation as a series of "Rights," each of which was to be supported by two attendant "Responsibilities." Studio instructors sent notes from the resulting conversation to the Chair, who assembled the collection into a single document. The LTU Studio Culture Summit reviewed these notes and, in a series of meetings, edited them into the following list of ten rights that address the nature of the learning environment, including intellectual inquiry, diversity and accessibility, and time management:

Studio Rights and Responsibilities

1. **The RIGHT to collaborative creative inquiry**
   The RESPONSIBILITY to respect the work of others, written, spoken and created
   The RESPONSIBILITY to engage in the creative process

2. **The RIGHT to be intellectually challenged**
   The RESPONSIBILITY to initiate and pursue resources in order to support and expand inquiry
   The RESPONSIBILITY to engage and respect the objectives, outcomes, and measures of the course

3. **The RIGHT to use a safe and secure learning environment, 24/7**
   The RESPONSIBILITY to abide by the safety codes established by LTU
   The RESPONSIBILITY to respect others and their space

4. **The RIGHT to access necessary technology, training and support**
   The RESPONSIBILITY to respect and secure the technology provided
   The RESPONSIBILITY to work with faculty to actively pursue needed technology, training, and support

5. **The RIGHT to a respectful, open, and professional creative dialogue**
   The RESPONSIBILITY to be open to diverse perspectives and maintain sensitivity to other's cultural differences
   The RESPONSIBILITY to conduct myself in a collegial and professional manner

6. **The RIGHT to learn through experimentation, risk-taking and failure**
   The RESPONSIBILITY to produce and share knowledge gained through experimentation and failure
   The RESPONSIBILITY to manage time associated with experimentation and risk-taking in order to demonstrate achievement of course objectives

7. **The RIGHT to understand the University's use of student fees**
   The RESPONSIBILITY to organize and pursue change

8. **The RIGHT to the efficient, relevant, and productive use of time**
   The RESPONSIBILITY to be on time and respect the time scheduled for meetings and courses
   The RESPONSIBILITY to actively engage in course content

9. **The RIGHT to available, accessible, approachable, and accountable faculty**
   The RESPONSIBILITY to address faculty rationales and objectives
   The RESPONSIBILITY to communicate clearly one's concerns to the faculty

10. **The RIGHT to be heard and respected**
    The RESPONSIBILITY to listen carefully and communicate respectfully
    The RESPONSIBILITY to have respect for different points of view and to learn through cultural, racial,and political differences

The Studio Rights and Responsibilities, delineated above, are being disseminated to the students in both online and on-campus courses during the 2013-2014 school year, so that the entire student body has the opportunity to reflect on and amend this document as needed. The members of the LTU Studio Culture Summit will use comments generated from this and other planned public forums to craft evolving versions of the document in years to come, allowing the Rights and Responsibilities to remain relevant and become part of the Studio Code of Conduct. The Code is referenced in all course syllabi. As the *Conversation with a Chair* initiative (described immediately below) continues in the coming years, the dialogue between administration, faculty and students will evolve, leading to new observations, new actions, and, when appropriate, updated and wiser policies. The Studio Code of Conduct is available for review in the Team Room.

Conversations with a Chair. As a supplement to the discussions from the Summit and an extension to the less formalized conversations already occurring within the Department, in 2012, the Department Chair initiated *Conversations with a Chair*, a bi-monthly gathering designed to provide a non-threatening forum for students to discuss their pursuit of architecture and architectural education. Although topics covered through this event varied widely, from specific inquiries about enrollment at LTU to wide-ranging questions about the state of the profession, a much discussion centered around the studio and studio culture. The Chair noted all comments and questions generated through this event, reported the findings back to students and faculty and, in coordination with university procedures, created a plan of address for each significant issue noted by students. Notes on these conversations are available in the Team Room. In addition, all comments pertaining to studio culture became a part of the LTU Studio Culture Summit cited above. Several items related to studio culture that were discussed as a part of *Conversations with a Chair* have already been implemented, including the following points:

Issue 1: If all studios are held on the same day, it will facilitate more peer-to-peer learning

Starting in the 2013-2014 school year, all integrated design studios (ID1 through ID4) will operate on a Monday/Thursday schedule. All other studios will operate on a Tuesday/Thursday schedule. This will create a Monday and Tuesday overlap between roughly half the studios and a Thursday overlap of all studios.

Issue 2: The Tuesday/Thursday and Monday/Wednesday do note leave enough time between class meetings to complete studio assignments adequately and there is too much time from Thursday to Tuesday and Wednesday to Monday.

As noted under Issue 1 above, starting in the 2013-2014 school year, all integrated studios (ID1 through ID4) will operate on a Monday/Thursday schedule. If successful, the Department of Architecture will adopt a similar format for other studios as well.

Issue 3: The studios are too sterile and need to be filled with student work.
Issue 4: We need more exhibition spaces, filled with work.

During the 2012-2013 school year, the College created several new critique areas and exhibition spaces, including two, two-hundred foot long critique spaces immediately adjacent to the architecture studios, a new freshman critique area, a new gallery to exhibit alumni and faculty work, and a dozen rolling critique boards. During this same time period, the administration significantly renovated Gallery 210, the main gallery space for the College. During the 2013-2014 school year, the College will build more rolling critique boards and plan for several micro-lounges in order to facilitate greater vitality within the studio and College, and a stronger studio culture.

Issue 5: Allow students to change spaces to fit the particular studio section culture and work.

In 2012-2013, the faculty and administration amended the Studio Code of Conduct as to allow students to amend their studio space in accordance with the learning objectives and outcomes of that studio.

Issue 6: A short field trip or travel session at the beginning of a studio helps to build a coherent studio community.

Although travel and field trips have always been an informal part of the studio experience, greater emphasis has now been placed upon travel within the studio. In the 2013-2014 school year, the Studio Subcommittee of the Faculty Council is discussing how to better coordinate these experiences throughout the curriculum.

Issue 7: More cross-disciplinary exchanges are needed. We need to integrate engineering, art, and architecture.
Issue 8: We need to coordinate our projects with other disciplines.

Starting in 2013-2014, the College is organizing adjacent studios so as to avoid compartmentalizing disciplines and to encourage greater cross-disciplinary exchange. Students studying architecture, engineering, and the design disciplines will be in adjoining studio spaces, facilitating greater formal (pinups, reviews, and coordinated projects) and informal (conversations and consultations) cross-disciplinary sharing.

Issue 9: We need to coordinate all studio reviews within one critique week at midterms and finals.

In the spring of 2013, the faculty coordinated the final reviews for all integrated design courses (ID2 and ID4). At the end of the semester, all studios participated in *Fine Grain*, an end of semester show celebrating exemplary work from all disciplines. At the closing of this show, faculty reviewed the work and discussed how it spoke to the state of architectural education at LTU. In the future, the coordination of reviews will be even more robust, as will the *Fine Grain* Show as well as other formal and informal displays of work within the new gallery and exhibition spaces around CoAD. Final reviews of student work have been coordinated, scheduled, and publicized to students and faculty, over a three-day period for at least five years.

***Academic Dishonesty Policy*.** In the spring of 2013, the University established a new policy for the investigation allegations of academic dishonesty. The introduction to the revised policy, which may be found on the University's website at http://www.ltu.edu/currentstudents/honor_code.asp reads as follows:

"Academic integrity and honesty are basic core values of Lawrence Technological University. In carrying out its academic mission, Lawrence Technological University, like all universities, depends on the honesty and integrity of its faculty, staff, and students, and for this reason every member of the Lawrence Technological University community is charged with upholding the Academic Honor Code. Actions that breech the Code erode the trust of those who look to universities for honest evaluations of academic work arrived at through honest processes. Violations may also cause individual harm in that reports of performance made to post-graduate schools, professional societies, and employers would inaccurately represent a student's progress.

"Lawrence Technological University is committed to creating an academic community that values both individual and collaborative efforts that promote learning and discovery. Such a community expects honesty and integrity in the work of all its members. The Academic Honor Code speaks to the work of individual students within the community. It should not be construed as arguing against the important collaborations that also occur among students on campus. This documenis intended to clarify the adjudication of issues regarding academic honesty and fair play for students. Portions of this document have been adapted from (a) the 2002-03 University of North Carolina at Wilmington Academic Honor Code and (b) the 2002-03 Binghamton University Academic Honesty Code."

More information is available on the University's website, including the delineation of academic dishonesty offenses, academic integrity and other jurisdiction, appeals process, and other resources, which may be found at http://www.ltu.edu/currentstudents/honor_code_offenses.asp. A copy of the Academic Honor Code and the LTU Student Code of Conduct will be provided in the Team Room.

Social Equity: A Culturally Rich Educational Environment in which Each Person is Equitably Able to Learn, Teach, and Work.

From its inception, LTU has made its programs and an education available to people who might not otherwise have access to a quality, higher education as cited in *section I.1.1, History and*

Mission. LTU was established so that workers in Henry Ford's plant might have access to education. LTU was one of the first schools to establish degree programs that could be completed primarily at night so that working students might have access to education. Today, LTU continues that commitment, offering degree programs to working students with evening courses, the opportunity to work through a program at a pace appropriate to the individual student, and by dedicating itself to understanding the best practices of online education so that students who could not otherwise pursue a degree might be able to do so.

Disability initiatives. To enhance its efforts to support educational and work opportunities for those with learning or mobility disabilities, Lawrence Tech has established Disability Services, an educational support program administered by the Dean of Students. The goal of Disability Services is "*to permit students with disabilities to fulfill academic requirements and to provide effective auxiliary aids to ensure that they are not excluded from programs because of their disabilities."* Information pertaining to these services is accessible on the University's website at www.ltu.edu/student_affairs/disability.asp.

The application process for disability accommodation is straightforward and published online at this address: http://www.ltu.edu/student_affairs/disability_response.asp. The process is delineated in six steps:

1. Contact the Disability Services Coordinator prior to campus arrival to schedule an intake meeting

2. Provide documentation of disability and functional limitations

3. Meet with Coordinator at least once each semester to review accommodation requests in relation to each class

4. Notify the Coordinator for Disability Services of any additional needs as soon as they arise

5. Maintain the academic standards required of all LTU students

6. Abide by the Lawrence Technological University Code of Conduct

Accommodations, all of which are determined and provided on an individual basis, include:

- Note-takers
- Extended time for tests
- Reduced distraction testing environment
- Priority registration
- Adaptive equipment
- Referral to area resources
- Downloadable audio

To verify that faculty learn of the accommodations given to eligible students, letters explaining needed accommodations to faculty are written and provided to students at the start of each new semester. The University's accommodations, and additional services information, is accessible online at http://www.ltu.edu/myltu/disability_acc.asp.

In addition, Disability Services provides faculty with up-to-date information online regarding a range of diagnoses, including autism, Asperger's, visual impairment, attention deficit disorder,

and hearing impairment. Disability Services also has a great deal of information on communication etiquette to help students, faculty, and staff appropriately and respectfully communicate with others who are differently abled. That guidance includes:

1. When talking with a person with a disability, speak directly to that person rather than through a companion or sign language interpreter.

2. When introduced to a person with a disability, it is appropriate to offer to shake hands. People with limited hand use or who wear an artificial limb can usually shake hands. Shaking hands with the left hand is an acceptable greeting.

3. When meeting a person who is visually impaired, always identify yourself and others who may be with you. When conversing in a group, remember to identify instructions.

4. If you offer assistance, wait until the offer is accepted. Then listen to or ask for instructions.

5. Treat adults as adults. Address people who have disabilities by their first names only when extending the same familiarity to all others. Never patronize people who use wheelchairs by patting them on the head or shoulder.

6. Leaning on or hanging on to a person's wheelchair is similar to leaning or hanging on to a person and is generally considered annoying. The chair is part of the personal body space of the person who uses it.

7. Listen attentively when you're talking with a person who has difficulty speaking. Be patient and wait for the person to finish, rather than correcting or speaking for the person. If necessary, ask short questions that require short answers, a nod, or shake of the head. Never pretend to understand if you are having difficulty doing so. Instead, repeat what you have understood, and allow the person to respond. The response will clue you in and guide your understanding.

8. When speaking with a person who uses a wheelchair or a person who uses crutches, place yourself at eye level in front of the person to facilitate the conversation.

9. To get the attention of a person who is deaf, tap the person on the shoulder or wave your hand. Look directly at the person and speak clearly, slowly, and expressively to determine if the person can read your lips. Not all people who are deaf can read lips. For those who do lip-read, be sensitive to their needs by placing yourself so that you face the light source and keep hands, cigarettes, and food away from you mouth when speaking.

10. Relax. Don't be embarrassed if you happen to use accepted, common expressions such as "See you later," or "Did you hear about that?" that seems to relocate to a person's disability. Don't be afraid to ask questions when you're unsure of what to do.

A Plan to Maintain and Increase the Diversity of the Program

The College and the University strive to maintain a respectful and fair learning and working culture on campus. As part of this endeavor, the University has established policies intended to incorporate human diversity and to support that with clear grievance procedures.

***Diversity*.** Given an inclusive educational history and in support of LTU's long-standing pursuit of more inclusive models of education, the University has established clear and streamlined procedures for any breach of these core beliefs, including grievances related to harassment and discrimination. A copy of the LTU Policy on Diversity is provided in the Team Room.

A Focus on a Diverse and Global Society. In its mission documents, Lawrence Tech recognizes the diversity of its learners, other constituencies, and the greater society it serves. Lawrence Tech provides its services in a diverse region and increasingly diverse student body. The University believes that a wide **r**ange of student backgrounds, interests, and orientations contributes to enriching educational experience for all students and providing opportunities for global engagement.

***Diversity and Multicultural Orientation*.** In its mission documents, Lawrence Tech addresses diversity within the community values and common purposes it considers fundamental to its mission. The mission documents present Lawrence Tech's function in a multicultural society. Southeast Michigan is a diverse region with large immigrant populations and many spoken languages, and Lawrence Tech's students reflect this diversity. Lawrence Tech has actively recruited students from outside its traditional market of Southeast Michigan to include students from 25 states and 50 countries.

The architecture program has sent students on numerous international study opportunities, to Paris (the CoAD's oldest such program), Shanghai, Florence, and La Paz as noted in section I.2.3 Physical Resources. The College's international educational agreements have also significantly increased the number of international students attending the College and Lawrence Tech as noted in *section I.1.3D Architectural Education and the Profession.*

Lawrence Tech's origins attest to its continued focus on improving the community through the lives of its students. The University's focus on leadership includes institutional actions to advance the community. The Recovery Starts Here initiative is but one example of how the University responds to community needs by providing educational opportunities to residents affected by the recession. Lawrence Tech maintains a number of relationships with civic, economic, charitable, and professional organizations throughout Southeast Michigan including well-known organizations such as Focus: HOPE, the Detroit Economic Club, the Engineering Society of Detroit, and the Detroit Regional Chamber of Commerce. Lawrence Tech also is engaged with the community in a number of local initiatives and partnerships including the Ferndale University High School, the Osborn microenterprise project in Detroit, the College of Architecture & Design's Detroit Studio, and many partnerships with regional school districts. As a result of this extensive and sustained community involvement, Lawrence Tech was recently awarded the Carnegie Community Engagement classification, one of only 119 institutions nationwide – and one of only nine institutions in Michigan – to receive this status. Lawrence Tech's community engagement is discussed in detail in Criterion Five.

Putting Diversity into Practice. Lawrence Tech's mission has stated for many years that it "permits no prejudice" in its operations. Lawrence Tech is an equal opportunity employer, and has extended its recruiting reach for faculty and students outside its traditional service region to increase the diversity of the campus community.

Diversity in the Curriculum. Diversity is incorporated into many of Lawrence Tech's academic programs.

- The College of Architecture and Design's Detroit Studio and DetroitShop prepare architecture students to practice in urban settings.

- The College's international educational agreements have also significantly increased the number of international students attending the architecture program.

- All freshman students participate in the University Seminar program, which includes a diversity seminar series. Each student must attend two diversity seminars and complete a feedback assignment. The Undergraduate (CoAD lower division) Leadership Curriculum

includes cocurricular service requirements providing opportunities for students to experience diverse environments.

• The QUEST undergraduate research program operated by the College of Arts and Sciences also addresses diversity issues.

• The College of Management's Center for Global Leadership and Understanding provides cocurricular learning and research opportunities for students and faculty.

• The College's Center for Nonprofit Management and Leadership provides internship and co-op opportunities in a wide range of regional nonprofit organizations.

Diversity on the Campus. Lawrence Tech's campus environment is characterized by inclusiveness and respect. An increasing number of diverse student organizations exist on campus. These organizations include such groups as the Black Student Union, Indian Student Association, Society of Women Engineers, Out! at LTU, the Saudi Student Union, Habitat for Humanity, and the National Society of Black Engineers. Within the College of Architecture and Design, a student chapter of the National Organization of Minority Architects (NOMA) has been formed.

The Office of Multicultural Student Support Services is committed to the development of Lawrence Tech students as responsible leaders, global citizens, critical thinkers, and lifelong learners. The Office focuses on increasing the recruitment, retention, and graduation of Lawrence Tech students, particularly underrepresented groups. Programs include welcome receptions, cultural programs, discussions, advising, and speakers who focus on social, cultural, and academic issues.

Established Procedures for Grievances Related to Harassment and Discrimination

At the Department level, a student may discuss grievances with any faculty member, including with his or her dedicated faculty advisor, studio instructor, or any administrator or staff personnel, including the Department Chair and Associate Chair.Lawrence Tech is committed to providing an optimal working environment. In any organization, however, there can be differences of opinion with regard to working conditions, work rules, and other work-related issues. The Conflict Resolution Policy is designed to enhance communication by providing a documented process to resolve legitimate disputes. This policy enables a prompt, orderly means of receiving and responding to employee concerns. The policy will be evaluated annually by the administration to ensure that it meets the objectives of the University. The Conflict Resolution Policy is a guideline and the University reserves the right to terminate employees for any reason, with or without cause, in its sole discretion. Note that termination for cause of a tenured faculty member may only be accomplished by action of the Board of Trustees.

Lawrence Tech strongly encourages employees and supervisors to resolve employee-related conflicts on an informal basis. Employees should endeavor to resolve issues by discussing concerns with their immediate supervisors and/or their supervisor's supervisor. If an informal resolution cannot be reached, the employee may use the Conflict Resolution Policy to address work-related concerns. An employee filing a good faith complaint will not be reprimanded, punished, or harassed as a result of using this policy. On an annual basis, the Office of Human Resources is responsible for reporting the number of conflicts filed, the nature of the conflicts, and the outcomes. The report is filed in the University Library. Records of the Conflict Resolution Committee will not be available. The Director of Human Resources may conduct an immediate investigation of any harassment complaints that are lodged and implement prompt remedial action pending the rendering of a final decision regarding the complaint through the Conflict Resolution Policy. Additional information on the University's grievance procedures may be found in the Faculty and Staff Handbooks, available in the Team Room.

I.1.3. Responses to the Five Perspectives

I.1.3 A Architectural Education and the Academic Community

Introduction

The faculty, staff and students in the accredited degree program make unique contributions to the institution in the areas of scholarship, community engagement, service, and teaching. The department is committed to the holistic, practical, and liberal arts-based education of architects. It pursues this goal through the development of knowledge and the sharing of that knowledge through many avenues. These range from internal discussions within the department, interdisciplinary interactions at the College and University level, and engagement with the community--locally, regionally, nationally and internationally—in a variety of ways.

Scholarship

Faculty Involvement in the Academic Community. Members of the faculty pursue various outlets for engaging the academic community. Along with such traditional venues as national and international conferences, lecture series, and design critiques, faculty publish blogs of their work and ideas that are widely accessible to the general public and student population. These act as a supplement to classroom teaching as well as to focus discussion. These blogs include *Activist Architecture* (Professor Edward Orlowski), *Architecture in the Light of Day* (Professor Martin Schwartz) and *makeLab Blog* (Professor James Stevens). Faculty members participate in on-going dialogues in history, theory, and design through conferences, invited events and publications. These have included exhibitions at the Venice Biennale (Professor Scott Shall), the New York Museum of Arts and Design (Adjunct Professor Charles O'Geen); and presentations at the Politecnico di Milano (Professor Constance Bodurow), the Space and Place Conference at Oxford, England (Professor Joongsub Kim); the ACSA International Conference 2012, Barcelona (Professor Edward Orlowski), and the Digital Crafting Conference in Jedha, Saudi Arabia (Professor James Stevens). Many papers presented represent interdisciplinary research with colleagues from other colleges at the university including the College of Management (Professor Philip Plowright) and the College of Engineering (Professor Constance Bodurow). Faculty members have published books (Professor Dale Gyure, Professor Martin Schwartz) and several faculty members have books or book chapters in various states of preparation from proposal and final editing to recently published (Dr. Anirban Adhya and Professors Glen LeRoy FAIA, Edward Orlowski, Philip Plowright, James Stevens, and Ralph Nelson).

***CoAD Brown Bag*.** Once a month, the Department sponsors the Brown Bag Lecture Series – an informal College gathering in which two faculty members share their research and creative work; the faculty discuss the issues highlighted by the presentations. The Brown Bag Series provides faculty with an opportunity for a collegial dialogue about creative or scholarly work in a casual setting. Both works-in-progress and finished projects are welcome. While the setting is informal, the subject matters presented and discussed are serious, and the conversation frequently intense. Often, the points raised in the unchoreographed overlap of the two presenters offer faculty and administration within the College and Department the opportunity to uncover new partnerships or offer new support. The Brown Bag Lecture Series is held at the College's exhibition space in central Detroit, Studio Couture. Full-time and adjunct faculty and College administrators are invited to attend.

The Brown Bag Series started in January 2012. The first Brown Bag book is scheduled for publication in the Spring 2014. Since its inception, the following faculty have presented or will present work:

2012 Presentations

Jan. 20	Anirban Adhya, Peter Beaugard, Constance Bodurow, Jin Feng, Joongsub Kim, Ed Orlowski, Steven Rost, and Jim Stevens
Feb 10	Jin Feng / Steven Coy
Mar 9	Dan Faoro / Steven Rost
May 11	Jim Stevens / Amy Deines / Ralph Nelson

2012-2013 Presentations

Sep 14	Gretchen Maricak: "The Architectural Art of Gretchen Maricak" (Exhibition at the Birmingham [Michigan] Historical Museum)
Oct 12	Paul Wang / Anirban Adhya
Nov 9	Scott Shall / Ed Orlowski
Feb. 15	Doug Skidmore / Karen Swanson
Mar. 8	Dale Gyure / Meaghan Barry
Apr. 19	Constance Bodurow / Chris Schanck
May 10:	Ashraf Ragheb / Andy Hanzel

Fall 2013	**(to be confirmed)**
Sep. 13	Ayodh Kamath / Peter Beaugard
Oct. 11	Janice Means / Jason Stevens
Nov. 8	Margaret Wong / Steven Coy
Dec. 13	to be determined / Keith Nagara

Community Engagement

Public Lecture Series The College sponsors a public lecture series surveying the interests of all of its programs. The lectures are meant as opportunities for students and faculty to gain insight from exemplary professionals in practice and in other academic settings. The multidisciplinary nature of the series ensures a diversity of viewpoints, as well as cross-disciplinary conversations, and it encourages collaborations. These lectures are attended by faculty, students and staff from all departments as well as members of the general public and professional organizations such as AIA, AIGA, ASID, ASHRAE, and the US Green Building Council. The CoAD is a provider of AIA Continuing Education Learning Units. Many architectural practitioners take advantage of these offerings.

One or two lectures each year are organized as collaborative events with the School of Architecture at the University of Detroit Mercy. Other recent co-sponsors have included Eastern Michigan University and the Cranbrook Academy of Arts.

Public Lectures: Visiting Lecturers 2007 to 2013
2007-2008
Mark Nickita, AIA, Dan Rockhill, University of Kansas, Shane and Betsy Williamson, University of Toronto, Peter Horbury, Will Alsop

2008-2009
Deirdre Jimenez, Assoc. AIA, Michael Miner, Meredith Davis, James Timberlake, FAIA, James Robert Benya, John G. Ellis, FAIA, Lawrence Scarpa, FAIA

2009-2010
Lisa Iwamoto, Victor Dover, James Carpenter, Jay Shuster, Stanford R. Ovshinsky , Julie Snow, FAIA, Abbott Miller

2010-2011
Joachim Mitchell, New York University, Dan Winey, FAIA, Edese Doret, Ken Walker, FAIA, Michael Graves, FAIA, Rafael Vinoly, FAIA, Eugene Kohn, FAIA, John Norquist, Scott Shall, AIA, Mark Sexton, AIA, Tucker Viemeister

2011-2012
Paul Urbanek, FAIA, Leon Krier, Jon Calame, Douglas Farr, AIA, Evan Roth, Roger Mader, Emily Pilloton, A. Alfred Taubman, Leslie Keno, Robert Lutz

2012-2013
Josh Owen, Shawn Brixey, York University, Bryan Bell, AIA, Vincent James, FAIA, and Jennifer Yoos, AIA, Teddy Cruz, Lois Weinthal, Ryerson University, Mickey Jacob, FAIA, Thom Mayne, FAIA

Exhibitions 2007-2013
The College of Architecture and Design has recently expanded its exhibition venues and plans additional space for exhibits on campus and in its forthcoming Detroit Center for Design and Technology.

Studio Couture is a multi-purpose arts incubator with a gallery, student-directed design studio, and community arts space. Its mission is to use art and design methodologies to promote community building and urban renewal. The space will create entrepreneurial opportunities and demonstrate the theory and practice of design through technological and manual competences.

Studio Couture partners college students with local businesses in need of design services. It brings together educators, professionals, businesses, and students to promote innovation and design thinking in entrepreneurship. The goal of the center is to translate ideas and information into tangible outcomes that can affect behaviors and have a positive impact on society. The website of Studio Couture may be seen at http://studiocouturedetroit.org/.

From 2011 through 2013, *Studio Couture* has hosted the following exhibitions:

Studio Couture Exhibitions, 2011 - 2013
Detroit is here is an exhibition that invites artists, designers and architects to explore ideas that rebrand Detroit and Southeast Michigan through a positive filter. March 19, 2011 to April 3, 2011.

The Designed Class of 2011 is a group exhibition that highlights the fifteen graduates of Lawrence Tech's B.F.A. in Graphic Design and Digital Arts programs. The students have been formed and molded into "designed" individuals over the course of their education. Projects range from traditional print design to fashion and web design. Launch Project. April 15, 2011 - May 15, 2011.

AIGA Detroit Design Re:View 2011 is AIGA Detroit's fourth biennial juried design competition. Entries showcase the most successful and creative print, interactive, motion, and environmental graphic design created over the past two years. June 9, 2011 - July 14, 2011

Cranbrook Design: Into the Network In the new century, America has completed its transformation from an industrial society into a networked, global society. Old hierarchies and power structures of the industrial age have given way to new modes of work and social organization enabled by digital technology. September 21, 2011 – October 29, 2011

Harbinger: Shifting Culture and New Art form Detroit brings together six exceptional artists from Detroit, all of whom are part of the vibrant artistic revitalization of the city. November 4, 2011 - November 27, 2011

Compelling Realities recasts the city of Detroit through viewfinders of Brian Day, Jon DeBeor, and Jeff Gaydash. The show – featuring portraiture, architectural abstraction, and urban landscapes – utilizes formal black-and-white photography to allow us to shift our attention away from the known into the tangential world of the untold. The images suggest a re-evaluation of our sense of place as hard surfaces collide gently with atmosphere and memory through the seductive quality of the artists' image making.

Detroit Knows Cars illustrates the many different approaches to portraying the aesthetics, beauty, and significance of automobiles. The exhibit includes painting, photography, and sculpture – all confirming the notion that the automobile is an appropriate subject of fine art. The Detroit Knows Cars show features works from some of the best-known automobile artists in the country. January 6, 2012 - January 28, 2012

Language and the City. Our use of language influences the way we construct and engage with the built environment. In these situations, many ideas and possibilities are suggested to us, expanding the use of language from a mere informational or persuasive role and into the delightful and layered realms of misdirection, onomatopoeia, malapropism, pun, opposition or inversion of meanings, haiku, surrealism, dada, and general absurdity. January 20, 2012 – February 19, 2012

Bulking Up LTU's screen printing studio taught by Professor and artist Wesley Taylor present BULKING UP print, scale, and pattern. February 2 to 16, 2013

IVth Annual OFF THE WALL This graphic design exhibition was originally started at the Cranbrook Academy of Art in the 2D design department. OFF THE WALL was conceived in order to connect Cranbrook with the ever-expanding (national and international) design community. The show's focus is on printed matter of all formats (posters, publications, zines). March 2013

4 Square offered 80 faculty members of the College of Architecture and Design at Lawrence Technological University four square feet to share their research, thinking, and creative work. The curators gave no restrictions regarding media, topic, or position, provided the work created a clear and compelling glimpse into current thinking and future trajectories. December 6 – 20, 2013

UTLC Gallery
A. Alfred Taubman Career Retrospective Pioneering the Purchase, UTLC Gallery, March 28, 2012

Selections from the Collection of A. Alfred Taubman An exhibition of rarely shown artworks that includes work by Giacometti, Feininger, Munch, Tiepolo, Schiele, Burchfield, and Bonnard in an exclusive show for the LTU community; UTLC Gallery, April 22, 2013**.** Rebecca Hart, associate curator of contemporary art, Detroit Institute of Arts, critically examined this exhibition in a special lecture at the College's Architecture Auditorium.

Pixel Gallery
Pixel Gallery is the online gallery of the College of Architecture and Design for the display of work produced in the College's community of architects, artists, and designers. In 2013, the College will install several monitors in the Architecture Building and UTLC to highlight work from this venue. Pixel may be viewed at http://www.pixelgallery.info/

Level Gallery
The Level Gallery debuted in September 2012 in response to a need perceived in the College for more exhibitions of art, design, and architecture in the College where they could be easily seen by students, staff, and faculty. The Gallery debuted with a call for proposals in re-title.com (http://re-title.typepad.com/opportunities/2012/01/call-for-proposals-level-gallery.html)

The mission of LEVEL | Gallery is to bring diverse and contemporary exhibitions created by local, national, and international artists, designers, architects, and creative thinkers to the Lawrence Tech community. LEVEL | Gallery advances creative thinking by promoting dialogue and public engagement. The Level Gallery website is: http://levelgallery.wordpress.com/

During the 2012-3 school year, the following artists exhibited work:

Level Galley Exhibitions, 2012-3
Jef Bourgeau, American photographer, painter, and conceptual artist;
Exhibition: September 1-October 10, 2012; Artist talk: October 3, 2012
Seung Jae Kim, working Chicago artist, October 11- November 20, 2012
Andy Bloxham, November 21- December 31, 2012
Shawn Lawson, January 1- February 10, 2013
Jeffrey Thompson, February 11- April 20, 2013
Ema Sitamarian, April 21- August 31, 2013
JP (Joaquin Palencia), September 1 – October 10, 2013
Robert Campbell, October 11 – November 20, 2013
Thomas Nicolai, November 21 – December 31, 2013

Brick Gallery
In the summer of 2013, the College installed Brick Gallery – a curated venue dedicated to the display and discussion of exemplary research and creative work from CoAD faculty, adjunct and full-time, and alumni. At the start of each three-week show, the exhibitor will offer a lecture discussing the critical issues framed by the work. During the 2013-2014 school year, the following faculty and alumni will exhibit work:

Brick Galley Exhibitions, 2013-4
Charlie O'Geen, Exhibition September 9-27, 2013
Ayodh Kamath + Deirdre Hennebury + Mars Acton, October 18, 2013
Unsold Studios, October 21- November 8, 2013
Kristen Dean / Et Al Collaborative, November 11- November 29
Steve Rost, December 2- 20
Lisa Sauve and Adam Smith, January 13- January 31, 2014
Aaron Jones, February 3- February 21, 2014
Mark Farlow, Saroki & Associates, April 7- 25, 2014
Jason Stevens, April 28- May 16, 2014

Service

The Department of Architecture maintains strong relationships with its fellow disciplines in the College of Architecture and Design and is involved in a service role at the level of the University. Faculty from interior architecture and the applied arts are encouraged to offer perspectives on student work in architectural design critiques. Faculty members sit on critical committees such as the LTU Research Support Services Committee (Joongsub Kim, Constance Bodurow), University Assessment Committee (Ashraf Ragheb), Faculty Senate (Dale Gyure, Ashraf Ragheb), and the University Core Curriculum Task Force (Martin Schwartz, Gretchen Rudy). Department faculty (Joongsub Kim) actively participated in the implementation of the first university-wide LTU Inaugural Research Day in 2013 as a way to bring faculty and students together to emphasize the culture of research at Lawrence Tech. The event included oral and poster presentations of completed and in-progress research, with particular encouragement for interdisciplinary and student presentations.

Teaching

Teaching is the primary concern for the faculty at the College of Architecture and Design, and the University as a whole considers itself primarily a teaching institution. This attitude prioritizes the scholarship and quality of teaching in engaging students. It also supports both the delivery of core content while allowing diversity in student interest and learning styles.

In both the lower and upper division of the Master of Architecture program, students have access to a wide range of elective courses, dual degree opportunities, and applied research projects to strengthen their understanding of their architectural education. Dual degrees are offered within the College of Architecture and Design (architecture and interior architecture) and in conjunction with the College of Engineering (architecture and construction management, architecture and civil engineering) and the College of Management (architecture and business administration).

Supported by the Provost's Office, the College offers research assistant positions to several students each year. The benefit to the student is not only financial, but it allows a student to engage in professional level research by assisting faculty. The College offers regular teaching assistant positions in several areas of the curriculum including the structures sequence, environmental systems (HVAC, lighting, water, acoustics) courses, and building systems courses. A pilot project, using the team-based ARC 5804 Critical Practice Studio, offered in the summer 2012, saw two advanced upper division students working as teaching assistants integrated into the professional critic group. The program allowed the students to shadow the critic group but also apply their own skills in direct contact with the enrolled students.

In addition to the research assistant positions, the research labs and centers of the College of Architecture and Design regularly employ students to work on professional projects as an augmentation of their formal education. makeLab offers positions that address digital fabrication; Studio[CI] allows students to work with urban issues of density, data visualization and development; Studio Couture provides opportunities to learn curation and public engagement.

The upper division of the M.Arch is structured in general areas of architectural interest. Students are free to focus on areas of specialization or to combine several into a unique educational experience. The areas of specialization include ecology, health, culture, technology and management. These interest areas are defined by faculty research, design and practice activities; students engage the content through advanced studio choices and electives. For more information on these academic 'profiles', refer to *section II.2.2 Professional Degrees and Curriculum.*

Holistic, Practical and Liberal Arts-based Education of Architects

Student Involvement in the Academic Community. The College of Architecture and Design has a particularly active and recognized chapter of the American Institute of Architectural Students (AIAS). In 2012, the LTU AIAS Chapter received the AIAS Special Accomplishment Honor Award for its work in the *Freedom by Design* program. AIAS members attend the annual AIAS national conference, and the group conducts a student run Firm Tour series, visiting local architecture firms and landmark buildings to engage students in discussions with local architects. The chapter also hosted the 2012 AIAS Spring Midwest Quad Conference, and one LTU student was elected to an AIAS national administrative position. The AIAS Chapter's *Freedom By Design* program is an important outreach and service learning vehicle, which is student driven and managed. The program allows architecture students to gain real world experience through design and construction solutions for physically impaired individuals as part of community service. The group runs an annual "Freedom" Silent Auction to raise funds for its activities and which reaches out to local architecture professionals. To support these efforts, the Department and College provide financial and physical resources, mentorship, and advice. During the 2013-2014 school year, the College, at the request of and in coordination with the AIAS, will complete a massive

overhaul of the student office spaces. The workroom that results from this renovation will provide a venue for planning, research and work for all student members of CoAD's student organizations, including the AIAS. This shared space will allow students from all CoAD student organizations to more easily coordinate and support the efforts of their colleagues. Refer to *section I.1.3.E. Architectural Education and the Public Good* for more information as to how students are involved in the academic community and how this influences the CoAD's work in the region.

Within the curriculum, the Department of Architecture regularly supports student enrichment through a variety of activities, including a robust competition program. LTU students have had great success in architectural design competitions ranging from international idea-based programs to those addressing technical areas. The past several years have seen students place or receive recognition in competition events such as eVolo, D3 Natural Systems, ASHRAE Integrated Design, Zombie Safehouse, Design Against the Elements, Du(b)ailities (2A), Line Of Site, Design for the Children Africa Clinic, the Socio-Design Foundation, and the Chichen Itza Competition. In addition to competitions focused upon architectural design, the College and the University have supported students in multi-disciplinary innovation competitions. The Lawrence Tech inter-collegiate team won first place in the Chicago Innovation Chase, an intercollegiate entrepreneurship and innovation program designed to spotlight and mentor student talent to create the next generation of inventors, problem-solvers and entrepreneurs.

Opportunities for Members of the Community to Engage in the Development of New Knowledge

Conferences Since 2004, the College of Architecture and Design has organized an annual conference of the ***Seminars on Sustainability*** (SOS). The conference is a collaboration among the University's Center for Sustainability, the College of Architecture and Design, and the College of Engineering. Over the years, participation has grown to include members of the Lawrence Tech student chapters of the Architectural Engineering Institute (AEI) and the American Institute of Architects (AIAS), as well as members of both the Detroit and student chapters of the American Society of Heating, Refrigerating and Air-conditioning Engineers (ASHRAE). Outreach has included the Construction Specification Institute, Greater Detroit & Student Chapter Institute of Industrial Engineers, the Engineering Society of Detroit, ASHRAE Detroit Chapter & LTU Student Branch, LTU Architectural Engineering Student Chapter, American Institute of Architects LTU Student Chapter, Detroit Regional Chapter of the U.S. Green Building Council and the LTU Office of the President and Provost. The conference organizers are College colleagues Professor Janice Means, PE, and Professor Filza Walters, PE.

On April 20-23, 2011 College of Architecture and Design was the host institution for the ***ARCC Spring Architectural Research Conference***. The theme was "Considering Research: Reflecting upon Current Themes in Architectural Research". The conference included outreach to other local schools of architecture and received support from the Taubman College of Architecture and Urban Planning, University of Michigan, and the School of Architecture, University of Detroit Mercy. The conference included sixty-four paper sessions, four keynote presentations, three tours, and three round-table discussions over four days. Architectural researchers attended from twenty-one countries and many locations across North America. Keynotes lectures were presented by Kathryn Moore (UK), Arjen Oosterman (Netherlands), Nina Maritz (Namibia) and Alan Berger (USA). Students were heavily involved in the conference organization and production. The conference was organized by LTU Professor Philip Plowright.

On April 18–22, 2012, the College of Architecture and Design was the host institution for the ***Society of Architectural Historians 65th Annual Conference***, chaired by Dr. Dale Gyure of LTU. The conference featured thirty-four paper sessions and one upper division student 'lightning round' discussing current research in architectural history. An historic preservation seminar, "Retooling Detroit", was open to the public by reservation, and twenty-five tours explored

locations in and around Detroit. The paper sessions covered all geographic areas and time periods, including relevant topics such as contextualizing "shrinking cities," the architecture of Fordism, and cultural landscapes.

On October 18-20, 2012, LTU's College of Architecture and Design co-hosted (with NOMA Detroit) the ***40th Annual conference for the National Organization of Minority Architects*** **(NOMA**), held in venues in Detroit and at LTU. The CoAD sponsored a series of bus tours of Frank Lloyd Wright's Terkel House and Affleck House (the latter owned by LTU), as well as the Cranbrook campus, designed by Eliel Saarinen. Tours also featured the urban design and development features of Detroit and its region. LTU also hosted the keynote symposium, which featured Sue Mosey, president of Midtown Detroit, Inc.; Toni Griffin, consultant to the Detroit Works Project; Faye Nelson, President & CEO of the Detroit Riverfront Conservancy; and George W. Jackson, Jr., President & CEO of the Detroit Economic Growth Corporation. This session was hosted by Glen LeRoy, FAIA, FACIP, Dean of the CoAD.

On August 18-20, 2013, LTU's College of Architecture and Design served as the host institution for the **American Institute of Architects Research Summit**. The summit is a multi-year effort of the AIA to have dialogues that allow the AIA to learn about and document value propositions for firms engaged in research; to create a glossary of key architectural research terms; and to learn from participants about current trends in architectural research. LTU presented its current research agenda to participants and provided tours of its research labs. The College also hosted a tour of the Detroit region, Frank Lloyd Wright's Affleck house, and the Cranbrook campus.

Research and Design Labs. Lawrence Tech considers itself to be a teaching university with a focus on applied research. As a member of this academic community, the College of Architecture and Design has been aggressive in efforts to encourage practice and scholarship, at a faculty and student level, through the development of internal research laboratories and focused inquiry. These labs, centers, and individuals are encouraged to disseminate their knowledge widely and to engage students as integrated learning partners. The research labs and centers are *makeLab*™ (digital fabrication and entrepreneurship), *Detroit Studio* (urban design and community outreach), *studio[CI]* (urban density and infrastructure research), the *International Design Clinic* (socially-responsive art and architecture) and *detroitSHOP* (urban design and entrepreneurship). These labs and centers are interdisciplinary and involve students at as critical members. Complete information on the labs and their contributions may be found in section *I.1.3.E. Architectural Education and the Public Good.*

I.1.3 B Architectural Education and the Students

Introduction

The College of Architecture and Design is dedicated to providing a good, physical, learning environment for its students, to inviting a range of people with different ideas to teach and learn with them, to upholding the value of teamwork, and to supporting the promise of productive, long term learning.

Students are prepared to live and work in a world where diversity, distinctiveness, self-worth, and dignity are respected.

The mix of students at Lawrence Tech are provided opportunities for individual growth and exploration that is inspired by exposure to other ideas, perspectives, and experiences represented in fellow classmates. The myriad of processes for acculturation during the students' tenure at LTU affords them with many occasions to experience and learn from the cultures of others. The University and College respect individual cultures of origin and value them as part of the learning process. Diversity is discussed more fully in *section I.1.2 Learning Culture and Social*

Equity. Information about student demographics can be found in *section I.3.1 Statistical Reports.*

Opportunities for working with diverse individuals occur in the classroom and within student organizations. Studio and lecture courses, as well as student organizations, are intended to introduce students to the benefits of learning partnerships. Students are introduced to collaborative projects throughout the design studio sequence of courses and very specifically in the Critical Practice Studio, where students not only work in teams, but are coached about the team work process as an integral part of the course. Students are encouraged to work in a climate of trust, to nurture long-term relationships, assign equal workloads, engage in conflict resolution, apply disclosure, ask for feedback, share information, be respectful and be willing to change. Evidence of the work in this area will be available in the Team Room.

The College's Studio Code of Conduct addresses respect for colleagues on page 6 with some specificity and offers this general consideration:

> *"As we work within a rigorous, academic environment with the worthy intention of eventually joining a professional body, it is extremely important to respect the rights of those that are working towards the same goal,and, of course, those who are helping you achieve your goals. These individuals include fellow students, faculty,staff, and custodians, who are all deserving of your consideration. Education is a collaborative process and everyone in the College community should be accorded respect."*

The College's international travel and study programs reinforce ideas about respect and interest in differences. Our College has offered programs in China, France, Italy, Germany, Albania, and Bolivia; they permit students to design real-world projects with clients and to participate in structured coursework. In the process, the students learn to deal, first-hand, with the surprises of human experience. The College cultivates similar opportunities closer to home. Messages about differences and diversity are right at outside door of the University and the College's involvement in Detroit issues, ideas, and cultures, is intentional. The Detroit Center for Design and Technology will soon be under construction and it will place CoAD firmly in Detroit, on Woodward Ave., where our faculty and students can expand their work in this area. Refer to *section I.1.3 Architectural Education and the Public Good* and *section I.2.3 Physical Resources* for more information.

Lectures and Exhibitions, Visiting Faculty The College and Department intends that visiting critics, scholars, and lectures also contribute to the educational experience. Our faculty and administration endeavor to invite, as guests, practitioners, and scholars who represent a range of world experiences, cultural backgrounds, and a diversity of ideas. The exhibitions and gallery venues found within our building and at CoAD's downtown gallery spaces and studios contribute similarly to this way of thinking. Lectures and exhibitions at the College are discussed in detail in *section I.1.3 Architectural Education and the Academic Community*. A list of our recent visiting critics, scholars, and faculty is provided in *section I.2.1.A Human Resources and Resource Development-Faculty and Staff*. Respect for differences and a commitment to diversity of human experience is, of course, part of Lawrence Tech's equal employment and opportunity policy, which can be read in *section I.1.2 Learning Culture and Social Equity*.

Students enrolled in the accredited degree program are prepared to emerge as leaders in the academic setting and the profession.

Architecture students learn that leadership is about forging relationships. Through positive actions such a being a role model, sharing, enabling and encouraging student peers, student leaders are able to face challenges along with others in their group.

Leadership Program One of the most notable efforts in regard to leadership is Lawrence Tech's Leadership Program and its four courses required of all of the University's students. The program integrates leadership principles into the curriculum and nurtures the development of leaders,

entrepreneurs, and global thinkers, starting with students in their first year. The Office of Leadership Programs oversees all academic and extra-curricular programs dedicated to leadership education, development, community service, and involvement. Lawrence Tech is the first university of its kind to commit to a leadership curriculum for all students in their first four years.

The Leadership Program coursework consists of four courses, the University Seminar, Leadership Models and Practices, the Leadership Seminar Series, and the Leadership Capstone course. As an example of the coursework, the purpose of the Leadership Capstone is two-fold: 1) Students participate in practical leadership experiences that directly relate to their academic major, and 2) they reflect on and professionally present the culmination of their leadership education. The Urban Put Course in Corktown, which was designed and constructed by CoAD students under the leadership of Assistant Professor Steve Coy was produced through students in a course registered as a Leadership Capstone; please refer to http://www.knightarts.org/community/detroit/urban-putt-in-hibernation-for-winter-adding-promise-to-the-coming-spring. More information on the LTU Leadership Program may be found at the programs website, http://www.ltu.edu/leadership/.

Student Organizations Following the lead of the University, one of the goals of the College is to instill and nurture a well-rounded set of leadership skills.

Students begin to appreciate the many roles of leadership, respect for diversity and environmental needs through a variety of formal and informal academic experiences. One way the College achieves this goal is through the support of student organizations. It is through these organizations and their activities that students are really given a chance to understand the breadth of their professional opportunities.

AIAS, the *American Institute of Architecture Students***,** is active at Lawrence Tech and offers a variety of activities to support students' learning in the classroom. The chapter is actively involved in the Freedom by Design program and the AIA Michigan's Mentorship Program. It hosts architectural firm visits. The chapter members and general student population hold advisory positions in a variety of College committees. The last two University student body presidents have been CoAD students with strong AIAS ties. More information on the activities of the AIAS can be found in *section I.1.3 Architectural Education and the Academic Community*.

In addition, numerous professional, social, and academic organizations provide opportunities for students to grow in areas of leadership and professional competence. Student groups include *IASO, ASID, IIDA, AIGA, ASHRAE,* and *Tau Sigma Delta Honor Society*. These organizations provide an opportunity for members to meet each other and to engage with local communities through outreach and support projects. The University has recently added a *Habitat for Humanity Campus Chapter* (HFH CC), spearheaded my two architecture majors, Andrew Neevel and Vanessa Woods, with Edward Orlowski as Faculty Advisor. Brief descriptions of a selection of student groups follow, but more detail about activities and other groups may be found at the CoAD
Student Groups website, http://www.ltu.edu/architecture_and_design/clubs.asp#AESG.

ASHRAE, the *American Society of Heating, Refrigerating and Air-Conditioning Engineers*, gives architectural and engineering students the opportunity to network with professionals in the HVAC and architectural fields and provides tools for creating and sustaining the built environment. ASHRAE writes and maintains several standards of concern to both architects and engineers and has recently formed an alliance with the USGBC.
Faculty Advisor: Professor Janice K. Means, P.E.

IASO, the *Interior Architecture Student Organization*, gives students access to the latest interior design developments, the opportunity to network with peers and professionals, and a path to

become a member of the professional interiors organizations (American Society of Interior Designers - ASID; International Interior Design Association - IIDA; Coalition for Interior Design Registration - CIDR). Faculty Advisor: Professor Karen Swanson

NOMA, the *National Organization of Minority Architecture Students* has as its mission the building of a strong national organization, strong chapters and strong members for the purpose of minimizing the effect of racism in the profession. In 2013, NOMA established a chapter at LTU. Faculty Advisor: Professor Kenneth Crutcher

Honorary Societies
Tau Sigma Delta is the only nationally recognized honor society in the field of architecture, landscape architecture, and the allied arts. Staff Liaison: Ali Barnard

Lawrence Technological University Honors Society focuses on leadership, academic excellence and public service.

Lambda Iota Tau and **Tau Iota** are societies that honor students with excellent academic records and exceptional interest in and contributions to student activities.

Specific to the College, the Dean's **Student Leadership Council** provides students with the opportunity to speak with the College's administrative leader on a regular basis, to express their needs directly, and act as liaisons between the Dean and their student peers.

Other Student Organizations Lawrence Tech offers students a great variety of special interests activities and organizations. A list of organizations may be found at http://www.ltu.edu/studentactivities/organizations.asp.

A brief list includes many professionally-oriented groups, including the following:

Alternative Energy Student Group (AESG), American Chemical Society (ACS), American Institute of Aeronautics and Astronautics (AIAA), American Institute of Graphic Artists (AIGA), American Society of Civil Engineers (ASCE),American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE),Architectural Engineering Institute (AEI), Artists' Guild,Autonomous Vehicles and Robotic Systems Student Committee , Black Student Union (BSU), Blue Devil Development, Chaldean-American Students Association (CASA), Chess Club, Circle K International, Collegiate Entrepreneurs' Organization (CEO), Cru LTU, Hua Xia Association, Indian Student Association, Institute of Electrical and Electronic Engineers (IEEE), Lawrence Tech Dance Team,Life Science Association,LTU Bike Crew, LTU Concrete Canoe and Steel Bridge, Math Club,Muslim Student Association (MSA),National Society of Black Engineers (NSBE),National Society of Leadership and Success (NSLS), OUT! At LTU With Friends, Saudi Student Union, Society of Automotive Engineers (SAE),SAE Aero Design, SAE Formula Hybrid, SAE Formula One, Society of Manufacturing Engineers (SME), Society of Physics Students , U.S. Green Building Council (USGBC) Student Group

Students Planning Activities Monthly, yielding the unappetizing acronym SPAM, organizes activities beyond the professional, technical, and career-oriented interests. SPAM is the official programming board for Lawrence Tech. SPAM coordinates activities that enhance and enrich the quality of student life by addressing the needs and interests of its diverse student body. In the 2012-13 academic year, two of the 11 student staff members were architecture majors. Unlike most student organizations, SPAM is a university-sponsored group that is a branch of the Office of Student Engagement, a division of Student Affairs. The SPAM website may be consulted at https://sites.google.com/a/ltu.edu/students-planning-activities-monthly/about.

SPAM is acronymically relieved by SODA, the **Society of Dramatic Arts**. The purpose of the Society of Dramatic Arts at Lawrence Tech is to provide members an outlet for creative impulses,

to develop the skills of its members in all areas of production, and to build school spirit and a sense of community on campus. SODA presents at least one performance per semester for the entertainment and education of the Lawrence Tech community. Any current student enrolled at Lawrence Tech may become a member of the Society of Dramatic Arts.

In order to promote leadership and a more active student culture, Lawrence Technological University has, over the last three years, initiated new activities for students on campus, most notably an ambitious expansion of the **Athletics Program**. LTU is a member of the National Association of Intercollegiate Athletics(NAIA), Wolverine-Hoosier Athletic Conference (WHAC), and in the Michigan Collegiate Hockey Conference (MCHC). Teams include men's and women's soccer, basketball, bowling, lacrosse, and cross-country as well as men's hockey and women's volleyball. Many architectural students participate in intercollegiate athletics at LTU. The range of athletic activities is fully described at the website, http://www.ltuathletics.com/. Professor Steven Rost, College of Architecture and Design, is the University's Faculty Athletic Representative.

Scholarships Architecture students may be qualified for a number of University and College-based scholarship programs. Scholarship programs are yet another way that the College can bring a qualified, diverse student body to the study of architecture. The College's representative, Ali Barnard, maintains a listing of all scholarship opportunities available to our students (both universitybased and external) and assists CoAD students and applicants to find appropriate scholarships and fellowships. For more information on available student scholarships, please refer to *section I.2.1 Human Resources Students*.

Off Campus Learning Opportunities In addition to the curricular and extra-curricular opportunities available on the Southfield campus and Detroit centers, the College also offers students opportunities to participate in semester-long study abroad programs, each of which has a dedicated professional focus. Recent study abroad experiences include: Tirana, Albania (digital vernacular with makeLab), Shanghai, China (large-scale architectural practice), Paris, France, La Paz, Bolivia (socially-responsive art and design with the International Design Clinic), and Berlin, Germany (public and street art). All of these experiences offer an intensely immersive experience, often realizing creative work with other universities, community groups and artists within the host county. To build on this, and in response to the opportunities and relationships developed through these experiences, the College is currently seeking to develop "micro-campuses" in Shanghai, La Paz, and Tirana in partnership with local hosts. The latter two microcampuses should be operational by the summer of 2014. Discussion of the physical facilities for these off-campus learning activities are found in *section I.2.3 Physical Resources.*

Students in the program are prepared to understand the breadth of professional opportunities.

Architecture students are provided with a multitude of opportunities to learn about their chosen profession through a variety of formal and informal educational opportunities. Visiting and full-time professional licensed architects teach courses and, when appropriate, involve students in research and creative work (*section IV.2, Faculty Resumes*). Organized campus activities and student organizations (as described in this section, above) provide a comprehensive understanding of professional and cultural opportunities. The classroom experience is enhanced by public lectures and exhibitions of architecture and the arts (*section I.1.3A. Architectural Education and the Academic Community*). There are numerous local or regional field trips and opportunities to study abroad (*section I.1.3 D Architectural Education and the Profession*).

Most significantly, as the architecture program lives in a college with urban design, interior design, transportation design, art and other graphic and interactive design programs, the College, on a daily basis, makes the case that architecture is one of several related fields that are interdependent, that operate on similar principles, and that display a breadth of professional opportunities. The College offers dual degrees with the College of Management, the College of

Engineering, and the College of Arts and Sciences, including dual degrees with Civil Engineering, Construction Management, and Media and Communications, among others, and a degree program in Architectural Engineering (http://www.ltu.edu/engineering/arch.asp). The Department and College emphasize that an architectural education is a broad-minded and comprehensive education, one that is excellent preparation for work in a traditional and non-traditional architectural setting, in allied design fields, in education, in public service, and other endeavors.

In a more traditional way of thinking about the profession of architecture, the College's Internship Development Program activities inform students about their path to licensure and full membership in the profession. The school's IDP Educator Coordinator actively informs students of the IDP process through student forum meetings held in cooperation with AIAS. Information about IDP is posted on the college's website and integrated into several required courses. IDP activities at the College are discussed in *section I.1.3 Architectural Education and the Regulatory Environment*.

Students enrolled in the accredited degree program are prepared to make thoughtful, deliberate and informed choices.

Architecture students—all students--develop cognitive maturity when they engage in scholarly or reflective decision-making; this occurs in courses, but also by means of the many activities and opportunities delineated in this section. The key is to encourage students to move away from dependence on authority in school as a means of arriving at informed choices.

When architecture faculty members and lecture speakers discuss their professional experiences, their work, the work of other architects, including that of students, and the choices that are made, they are sharing decision-making processes with the students. The design process is, by definition, a critical and deliberative activity and an excellent preparation for meeting the world on its own terms. With this kind of educational preparation, students come to understand the importance of making wellinformed decisions regarding all aspects of their professional careers and their lives.

One of the first ways in which students begin to make informed choices is through participation in their individual and collective learning agendas. We believe that, as difficult as it can be for students to expose themselves to the criticism of their work, the public discussion of student projects, in class, in public reviews ("juries"), can be handled with dignity and such that students are stimulated to become good, critical thinkers and rigorous decision makers. The College encourages students to actively participate in their reviews, to speak up, to engage, to risk saying something mistaken, in order to advance their fluency with a critical thinking process, to learn, and to become independent thinkers. The Department and College further prepares students to be independent thinkers by providing exposure to people who do this exceedingly well: in lectures, at exhibitions, through travel, by individual and group critiques, by drawing, by modeling, and by talking and writing about architecture.

LTU Core Curriculum The strong and specific Core Curriculum of the University and the students' exposure to other disciplines, their methods and accomplishments, also encourages the making of thoughtful, deliberate, and informed choices. Completion of the core courses is required of all LTU students. The Lawrence Tech Core Curriculum and its objectives are currently undergoing a periodic review by a University task force with representation from two College faculty members. The Core Curriculum is delineated below and may be further reviewed at http://www.ltu.edu/arts_sciences/ltu_core/arts_sciences_core.asp.

The objectives of the Lawrence Tech Core Curriculum are:

- The ability to read and analyze challenging texts;
- The poise to articulate ideas orally and in writing;
- The capacity to evaluate conflicting ideas;

- The savvy to seek alternative solutions to problems in many fields;
- The stamina to succeed in difficult projects;
- The experience of working in, and leading, teams;
- An understanding of the past and the role of a citizen in a free society;
- The competency to simplify complex problems through the manipulation of symbols;
- The discipline to apply scientific principles to improve understanding;
- The confidence to be creative.

The Core Curriculum is:
• Four courses in humanities, based on reading original texts ("great books") and experiencing the great art of the world's civilizations:
Foundations of the American Experience ·
Development of the American Experience ·
World Masterpieces 1
World Masterpieces 2

• Two courses in communications, written, oral, and visual:
English Composition
Technical and Professional Communication

• Four courses in sciences and mathematics:
Two courses in mathematics, where what is studied depends on the student's major
Two courses in the natural sciences, including laboratory experience

• One upper-division elective in the humanities or social sciences
Literature, Social Science, or Psychology

Architecture is an inclusive pursuit; it is the combination of learning, cultural, and social experiences that ought to challenge students to think for themselves.

Students enrolled in the accredited degree program are prepared to develop the habit of lifelong learning.

As the evidence documented in this section and this report have established, as architecture students acquire confidence in their own voices, they transform themselves from passive to active consumers of knowledge. Students begin to search for and disseminate information on their own. This begins the process of lifelong learning.

Through the offering of AIA Continuing Education Learning Units by the College (as an AIA Continuing Education provider), students are exposed to many practitioners and AIA members that are engaged in their own pursuit of lifelong learning. These professionals act as role models for LTU students.

I.1.3 C Architectural Education and the Regulatory Environment

Introduction

The College of Architecture and Design prepares students for internship, examination, professional licensure, and professional practice by means of a range of activities that include coursework, special IDP information sessions, the examples set by individual faculty, the activity of the IDP Educator Coordinator, and an unusually high involvement in practice by students simultaneously enrolled in the professional degree program.

The College faculty have substantial and ongoing professional experience in and a commitment to the practice of architecture. This is particularly true of adjunct faculty, most of them active practitioners, and who teach a substantial portion of the credit hours in the program. Adjunct faculty teach alongside full-time coordinating faculty in all areas of the curriculum. Administrators, deans and department chairs likewise set an example for students by continuing to participate in practice activities. Faculty and administrators have been working at refining the professional practice curriculum to reflect an integrated approach to design, technology, and the implications for practice in a changing profession and with reference to the regulatory environment in which architects work.

The NAAB Criteria for Evaluation
The NAAB 2009 Conditions for Accreditation ask for three items to be addressed:

1. *Preparation for the transition to internship and licensure within the context of international, national, and state regulatory environments*
2. *Understanding of the role of the registration board for the jurisdiction in which it is located,*
3. *Provision, prior to the earliest point of eligibility, with the information needed to enroll in the Intern Development Program (IDP).*

The architecture program at Lawrence Tech addresses the NAAB Criteria in a variety of mutually supportive ways. LTU students are fully informed as to the path from education to internship to licensure to practice within the regulatory framework of the State of Michigan and nationally beginning in the first year of their professional education, on a continuing basis in annual programs, and in professional practice coursework. Students who express an interest in practice elsewhere are advised to consult with those jurisdictions. Architecture students are presented with this information in five ways:

1. Coursework
The architecture program offers courses that address the roles of education and internship, the legal and ethical meaning of practice, access to licensure, and an understanding of the several associated groups that cooperate to promote, regulate, and organize architectural practice, including the American Institute of Architects, the National Architectural Accrediting Board, the National Council of Architectural Registration Boards, the Intern Development Program, and state licensing boards.

This information is conveyed in courses specifically designed to address these issues. The required Architecture and Design Awareness ARC 1012 introduces the basics of professional engagement in the first year of the curriculum through an introductory lecture whose content appears in the final course exam. The material is further covered, in detail, in Professional Practice ARC 5913 in lectures, assigned readings, and course assignments. These ideas are covered in more focused ways in elective courses, including Construction Management ARC 5952, Project Management ARC 5942, Law for Architects ARC 5962, and Practice Management ARC 6912. Issues of the regulatory universe are also addressed, as appropriate, in the context of design coursework, environmental technology classes, and structural design classes. The changing context of the architecture profession and opportunities for involvement in understanding and guiding the evolution of the roles of the licensed architect are addressed in Ecological Issues ARC 5423 (required), the Critical Practice Studio ARC 5804 (required), the Activist Architecture section of the Advanced Design Studio 2 ARC 5824, Public Interest Design ARC 4997 / 6002, and Social Responsibility and Community Action SSC 6013

2. Informational Programs
Spring and fall semester informational events are sponsored by AIAS and the College each school year. Presenters knowledgeable about IDP activities and rules speak at these events and explain the requirements for advancement to licensure. Presenters have included Martin Smith and Rachel Kros of NCARB / IDP, Washington, D.C.; and Jennifer Myers, Matthew Guinta, and

Blake Elderkin, the state IDP representatives. These sessions specifically address professional practice and registration from education through internship to licensure and practice, with an emphasis on IDP.

3. Access to the IDP Educator Coordinator for the College
The IDP Educator Coordinator for the College is Associate Professor and Associate Chair Martin Schwartz, AIA. Professor Schwartz has been a registered architect since 1982 and has practiced in Los Angeles, New Orleans, and Ann Arbor, Michigan. He has taught in the professional practice curriculum at Lawrence Tech and has worked with Professor Dean Ralph Nelson and adjunct faculty to refine the curriculum in this subject area. Professor Schwartz has been the College's Educator Coordinator since 2008. In that capacity, he has participated in five summer IDP conferences and in an open discussion about IDP and the schools with AIA President Mickey Jacobs, FAIA, and others (IDPAC Meeting,discussion on the future of IDP, Detroit, April 2, 2012). Professor Schwartz has advised students on their IDP eligibility for the last five years, answering questions about getting started with IDP, advising students on the acceptability of work experience areas, and communicating with IDP in Washington, D.C. on behalf of the students. He also assists the AIAS to organize the informational programs.

College of Architecture and Design IDP Student Information Sessions and Professional Issues Lectures

2010	March 16, 2010: speakers: Martin Smith and Blake Elderkin, State IDP Coordinator September 22, 2010: speaker: Rachel Kros, IDP Program Manager
2011	March 15, 2011 November 21, 2011: speaker, Jennifer Myers, State IDP Coordinator
2012	February 24, 2012: speaker, Martin Smith, Manager, Intern Development Program
2013	April 4, 2013: speaker, Mickey Jacob, FAIA, 2012 AIA National President April 18, 2013: speaker: Matthew Guinta, State IDP Coordinator October 10, 2013: speaker: Nick Serfass, assistant director, Intern Development Program, NCARB

IDP Student Tracking Spreadsheet Students who inquire about participation in IDP are referred to the Professor Schwartz, the IDP Educator Coordinator. All student inquiries and actions are recorded, by student name, so that the program can be certain that questions are answered and that students' access to IDP and NCARB activities is facilitated as soon as students become eligible. The IDP Tracking Spreadsheet is available in the Team Room.

4. American Institute of Architecture Students (AIAS)
The AIAS chapter at Lawrence Tech is strong and active. It was the first chapter, nationally, to participate in the noted national program known as "Freedom by Design." The chapter encages knowledge about the profession and progress toward licensure in its various activities including, most notably, its participation in, organization, and sponsorship of the organization of the College's informational programs. More information on the activities of the AIAS can be found in *section I.1.3 Architectural Education and the Academic Community.*

5. Employed Students
As a result of LTU's historic mandate to provide accessible forms of higher education (refer to I.1.1. History and Mission), a very large number of CoAD students work while in school and this is particularly true of the upper division students, most of whom are actively working in the profession while they pursue the M.Arch degree. In a survey conducted in the fall semester 2012, it was found that about 80% of the upper division students were employed and that of those, 79% of those were employed in architecture or closely related fields. The students are, therefore, coming to understand the requirements of practice andits regulations in a very real way while they are engaged in their education. They frequently bring their practice questions and experiences to class for discussion. Just as the faculty serve as role models and talk about practice in a range of

venues, students bring their practice experience to their coursework and to school as well.

Associate Professor Joongsub Kim, PhD, AIA, AICP, is one of the six recipients awarded the 2011 NCARB Grant for the Integration of Practice and Education in the Academy. The National Council of Architectural Registration Boards (NCARB) awards grants to support the creation and implementation of new methods to integrate practice and education in the academy. Professor Kim received a $13,800 NCARB Grant for his project called “Public Interest Design Practices and Research (PIDPR) Workshop.”

The workshop aims to make students aware that PIDPR helps to expand the boundaries of traditional architectural practices, helps students understand the principles of PIDPR, and provides students with opportunities to apply these principles in practice, in collaboration with local stakeholders. To achieve these goals, the workshop, through collaboration between academics and professionals, offers seminars to investigate the principles of PIDPR, a laboratory to apply the principles to real-world projects; and a PIDPR online forum (PIDPR-OF) to engage students around the world in dialogue about PIDPR. PIDPROF promotes the participation of students from other schools in reviews of projects and competitions between student-led PIDPR projects. The workshop educates students, faculty, and practitioners about he significance and benefits of the architecture profession, to be more meaningful, research-based, diverse, socially grounded, and beneficial, and to help them engage in PIDPR through partnerships between profession, academia, and communities. Refer to section I.1.3. Architectural Education and the Public Good.

Conclusions

The College of Architecture and Design will continue to evaluate and address its perspective on education, internship, registration and practice through a range of activities. It is the firm intention and responsibility of the architecture program to keep students fully informed and prepared for professional practice with a complete awareness of the laws of the State of Michigan and the standards of the architectural profession.

I.1.3 D Architectural Education and the Profession

Introduction

As an academic unit within a University devoted to the tenet of “theory and practice,” the College of Architecture and Design continues to refine and expand its role as a school that seeks to educate practice-ready, thoughtful, and responsible professionals. As a learning community, the College is dedicated to understanding the meaningful and responsible uses of architectural technologies and how they serve the public good.

Practice in a Global Economy that Recognizes the Positive Impact of Design on the Environment
In the past six years, the College has greatly expanded its global presence through the establishment of internationally based programs and partnerships, as well as through growth in international student enrollments and faculty exchange programs. International programs encourage students to develop the global perspective required of architects who will practice in the twenty-first century and to understand the shared and varying approaches to design that will serve people around the globe. It is the intention of the architecture program that students’ global awareness is enlarged along with their awareness of the values of good design and design thinking.

The College’s international educational agreements have also significantly increased the number of international students attending the College and Lawrence Tech through exchange programs, contributing to a growing international awareness and empathy on campus, one that benefits the

broader University.

The College currently maintains or is negotiating ten articulation agreements with the following institutions:

- Canadian University of Dubai (Dubai, United Arab Emirates): Agreement in process
- Conestoga College (Kitchener, Ontario, Canada): Agreement in process
- Harlaxton College (Grantham, Lincolnshire, United Kingdom)
- Humber College (Toronto, Canada): Agreement in process
- North China University of Technology (Beijing, China)
- Polis University (Tirana, Albania)
- St. Clair College (Windsor, Ontario, Canada)
- Shanghai Institute of Technology (Shanghai, China)
- Sheridan College (Toronto, Canada)
- Sichuan University (Chengdu, China)

Additionally, the College has developed a series of international design studio programs, which are available to all architecture students and which enable faculty to participate as well. Permanent programs are currently based in Paris (summer design studio and additional on campus coursework), Florence (fall design studio and additional coursework in cooperation with Kent State University), and Shanghai or Beijing (summer studios). Additional programs have recently been offered in La Paz, Bolivia; Caracas, Venezuela; Turin, Italy; Tirana, Albania; and Berlin, Germany. Since 2011, 69 students and eight faculty members have benefited from participation in these opportunities. The College is currently developing permanent "micro-campuses" with partners in La Paz, Tirana and Shanghai.

Preparation to Recognize the Positive Impact of Design on the Environment

The positive contribution of design to the environment lies at the core of an architecture curriculum. At Lawrence Tech, this is emphasized by a curriculum that ties design awareness to fundamental design coursework, integrates ideas about technology and tectonics with architectural design, and links architectural history with architectural and urban design coursework to illustrate the place of design throughout the culture. The upper division program builds on the lower division foundations to solidify professional skills as it offers greater flexibility in the students' approach to the development of their individual design awareness. This is accomplished through varied design studio projects and faculty, and a substantial number of elective courses. The College offers courses and research lab opportunities to students in sustainable design practices, public interest design, community design service, and urban design to underscore students' a sense of the significance of design skill and thinking in the urban and natural environments.

Environmental Issues in the Required Curriculum
ARC 4224- Allied Design: Sustain Arc.
ARC 4244- Allied Design: Landscape
ARC 4254- Allied Design: Preservation
ARC 4264- Allied Design: Urban Design
ARC 5814/5824 Advanced Design Studio section: Activist Architecture Studio
ARC 5423- Ecological Issues

Environmental Issues in the Elective Curriculum
ARC 5572 - Sustainable and Innovative Materials in Architecture
ARC 5592 - Sustainable Architecture and Building Systems
ARC 5594 - Sustainable Architecture Studio

The College takes advantage of the Detroit area's rich, local architectural resources and recognizes the well-documented challenges to its economy and culture to examine the

contribution that design can make. Students are regularly taken on field trips to major works of architecture. They are also given opportunities to contribute to the pressing design needs of Detroit and surrounding communities in coursework and through the initiatives of the program's research labs. The new Detroit Center for Design and Technology, expected to open in the fall of 2014, and the new Public Interest Design Workshop (made possible through a 2011 NCARB grant) are permitting the College to expand its work in these areas. The Detroit Studio, offered to students at the junior year level, has carried out community design projects for real clients with real needs for almost 15 years. For more detailed information on the program's commitment to environmental design issues, please refer to I.1.3. Architectural Education and the Public Good.

The College initiatives cited above support and are supported by LTU's long-standing dedication to sustainability as a critical issue, an opportunity for innovation and entrepreneurship, as well as the resulting impact these concerns have upon the University's academic programs and its business and facilities operations. Numerous degree programs on campus recognize sustainability as a core component to professional practice in the 21st century, and in 2011, the University Assessment Committee adopted sustainability as one of the core learning objectives for all undergraduate students at LTU. The LTU Center for Sustainability "provides a unique network of interdisciplinary academic, research and professional programs that advance sustainable design and development and attracts partnerships from academic, professional, municipal and commercial entities." In 2010, LTU was recognized by the Detroit Free Press as one of Michigan's 'Green Leaders'. At both the Institutional and College level, sustainability has been central to the educational and developmental mission of Lawrence Tech. It is the philosophy of the CoAD to treat sustainability not as an additive component of architectural education, but as something central to the 21st century practice of the profession – one that is informed by matters of ecology, economy, and equity. As a result, virtually all design studio courses address the positive potential of design at many scales, from sustainable strategies, infrastructures and development practices to the imaginative use of traditional and undervalued materials and construction methodologies.

Understanding the Diverse and Collaborative Roles Assumed by Architects in Practice

As a College with a relatively large architecture program and with its associated design programs in the Department of Art and Design, students recognize the wide range of roles assumed by architects through traditional, non-traditional, and specialized practice and are offered opportunities to understand allied design fields. Architectural education is considered an excellent preparation for a wide variety of endeavors, including those not commonly associated with design per se.

Diversity of roles and collaboration are embedded most substantially in the upper division program, where students have more flexibility to determine their own coursework profiles. Their approaches to their own education reveals interest in diverse and overlapping topics such as ecology, management, technology, health, urbanism, and culture. Program flexibility allows students to configure their coursework, such that the curriculum both completes their professional education (based on four years of lower division professional preparation) and helps them to develop skills within their special areas of interest. In this way, professional competence is promoted and upper division students are exposed to insights and experience aimed at a range of the challenges that demand architectural expertise. This coursework, derived from design studios as well as required seminars and significant credit hours dedicated to elective courses, encourages students to think about both alternative and traditional architectural practice.

Students in the College often work in teams on design projects and to complete other course tasks. The notion of a collaborative and process-directed design approach, however, is addressed specifically and by design in the upper division ARC 5804 Critical Practice Studio. This studio is the required first studio in the upper division program and is led by visiting faculty in collaboration with College faculty. The studio asks student teams to take on collaborative

research-based design projects to resolve, environmental, urban, sustainable resource, and other broad topics with technical, cultural, and architectural significance.

Diverse and Collaborative Roles and Responsibilities of Related Disciplines

From the first semester, students within the Department of Architecture at the CoAD are placed within a multi-disciplinary setting. The first-year foundation studio sequence – ART1113 Basic Design 1 and ART1133 Basic Design 2 – is designed as a platform for exploring foundational design concepts that are shared by students in architecture, interior architecture, architectural engineering, graphic design, game art, transportation design, urban design and interaction design. In the summer of 2013, the physical space given to this shared studio space was renovated and each student in the studio given a dedicated studio desk. The College and Department believe that this new physical resource will build upon the multi-disciplinary curricular resource already in place to establish even greater dialogue among students pursuing different degrees.

As students advance in the curriculum, other courses provide shared platforms for exchange, including ARC1012 Art and Design Awareness, ARC3613 History of Designed Environment 1, ARC3623 History of Designed Environment 2, and the four-part Integrated Design (ID) sequence, which directly emphasizes the collaborative roles and responsibilities of related disciplines in years 2 and 3 of the curriculum. The Integrated Design (ID) sequence of four design courses places architecture in the context of other disciplines. Each course is collaboratively taught by architects and allied practitioners representing expertise in landscape design (ID 1), interior design (ID 2), construction and tectonics (ID 3), and urban design (ID 4). Each of the four studios is associated with a lecture component intended to articulate the fundamentals of the allied disciplines with reference to their architectural significance, a lab component intended to explore this overlap through acts of experimentation and analysis and a studio component intended to synthesize the findings of both through creative action of the fields under consideration. For more information, refer to *section II.2.3. Curriculum Review and Development*.

Respecting Client Expectations and Understand the Needs of Communities

As a practice-oriented program, the College routinely engages clients, sponsors, and constituents in required studio projects and other coursework.The work of the Detroit Studio, which serves neighborhood organizations, local governments, not-for-profit organizations, and other community groups. The DetroitShop studio works with major property owners and developers in downtown Detroit to consider urban problems and solutions. The work of the International Design Clinic asks students and professionals from a range of disciplines to collaborate with activists, community groups and creative professionals from around the world to realize much-needed creative work within fringe and illegal settlements. Digital design studios, working through the makeLab digital construction workshop, undertake projects for a variety of not-for-profit and corporate clients and the University. In each of these opportunities, students must assess client or community needs as they define the design problem to be solved.

Additionally, individual faculty, working throughout the curriculum, collaborate routinely with client groups, giving students first-hand experience in confronting client and community expectations, interpreting needs into appropriate design-based solutions, and delivering effective results.

Advocacy for Design-Based Solutions that Respond to the Multiple Needs of a Diversity of Clients and Diverse Populations as well as the Needs of Communities

In the College, each lower division student participates in an educational or service experience that places him or her in a cross-cultural environment. This is manifested in the community-based Detroit programs, in study abroad projects, and in the client-based work undertaken by students and faculty. Through these efforts, each student works with a diversity of clients and client types,

as well as a diversity of population and socio-economic characteristics, locally and internationally. These experiences are documented in a "Leadership Portfolio" that is required of every student in the University. The University's Leadership Program is described in *section I.1.3 Architectural Education and the Students.*

Contributing to the Growth and Development of the Profession

Students in the College understand the growth and development of the profession in a variety of ways. The traditional path to this understanding is through architectural history, as well as professional practice and management courses, which depict the great movements of architecture, the evolution and the future of the architectural profession.

In addition, the College offers a strong series of experiences that engage professional practice and practitioners. Over 90% of the College faculty members are active practitioners in architecture or an allied discipline. They bring their practice experience and knowledge directly into the classroom and studio.

Many faculty members (38% of current full-time and adjunct faculty) are members of the American Institute of Architects and are active in Institute leadership, serving on national, state, and local boards of directors or as committee chairs. Eight current full-time or adjunct faculty members have been elevated to fellowship status (FAIA) in the Institute. Adjunct Professor Paul Dannels, FAIA, is the 2013 AIA Michigan Vice President and will assume the Presidency in 2014. College Dean Glen S. LeRoy, FAIA has been an AIA 2011-2013 Regional Director.

The College pays the AIA dues for any full-time faculty member who maintains an active involvement in the organization. Through its highly active American Institute of Architecture Students (AIAS) chapter, the College establishes a bridge between the academy and practice. These activities supplement the historical knowledge gained in coursework and give students a direct window into current practice as it is evolving. In these several ways, the College offers professional mentorships for its students, design retreats with AIA members, and studio guest critiques. The College also maintains professional relations through its Architecture Advisory Board, the Art and Design Advisory Board, the Transportation and Industrial Design Advisory Board, and the Master of Urban Design Advisory Board. The College also participates in activities with its Architecture and Design Alumni Cabinet.

The College is also active with regard to issues of professional licensure. Students are made aware of the IDP program through regular information sessions coordinated by the College and AIAS and in their beginning coursework. Students are encouraged to start IDP records as soon as they become eligible to document internship experiences. Students who are close to graduation with the NAAB accredited M.Arch degree may take an upper division class that enables them to better understand NCARB exam content and approaches; this course culminates with each student preparing an individual work plan toward licensure. With AIA and the College's advocacy, the State of Michigan recently passed a concurrency law permitting graduates with NAAB accredited degrees to sit for the NCARB exam upon graduation. This program will help address a need espoused by the AIA to promote professional licensure and reduce the time toward licensure among emerging architectural professionals. College alumnus and longtime adjunct Professor Ben Tiseo, FAIA, was instrumental in the effort to make this regulatory change in Michigan.

I.1.3 E Architectural Education and the Public Good

Introduction

The College of Architecture and Design strives to prepare students to be socially responsible members of their communities, of the profession of architecture, and to act in the public interest.

At the College, students develop an understanding of social issues and of architects' individual responsibilities as members of their communities. This is achieved through class projects in a variety of courses, research and design lab projects involving students and faculty, and extracurricular programs that are carried out locally, and increasingly, nationally and internationally. Students enrolled in the College's accredited degree program are prepared to address important activities that serve to advance the public good.

Opportunities for Involvement

In recent years, Detroit has received global attention in scholarly publications, professional magazines, and popular media due to the city's historic efforts to address its many difficulties at the grassroots, governmental, institutional, and professional levels. The College of Architecture and Design faculty, students, and graduates have actively participated in efforts to address Detroit's challenges. The College has offered services to Detroit entities. It is well positioned to continue its leading role in creating synergistic alliances to address that city's challenges, and has provided architecture students with opportunities to learn how to do so. Students and faculty have played a significant role in advancing the public good in Detroit and in other cities that face similar challenges. They have also taken experience gained in Detroit and sought to apply their knowledge elsewhere.

Locally (and farther afield) the needs of the public are addressed in courses such as Integrated Design 1-4, Allied Design, the study abroad programs in France, Albania, Bolivia and Germany, Advanced Design studios; and through research and practice labs such as the Detroit Studio, makeLab (digital fabrication), DetroitSHOP (urban interventions), studio[Ci] (urban research and design lab) and the International Design Clinic (socially-responsive design activism). Students and faculty also address the public realm invenues beyond coursework through AIAS community projects, such as Freedom by Design, through the Public Interest Design Workshop, as well as through participation in Habitat for Humanity.

Involvement through coursework
Consideration of the public good through design skills and thinking is included in design studio coursework. Students address community and social responsibility issues (NAAB objective C9) in the Integrated Design 2 curriculum in 2nd year, Integrated Design 4 curriculum in the third year and in Advanced Design Studio in their final year of study. This commitment is reinforced in the Allied Design studios, all of which address ethics and professional judgment (NAAB objective C8) in the context of design.

Further opportunities to engage with realistic community needs are offered at the upper division curriculum through a range of urban design courses and electives.

Involvement through research and design labs
The CoAD research and design labs help students acquire the knowledge needed to mitigate social and environmental problems. They provide students with a variety of opportunities to explore relationships among social, economic, physical, political, and psychological impacts on the built environment, through class and funded projects. Students acquire the knowledge necessary to investigate social and environmental challenges, especially in disadvantaged communities, through asset-based planning, datadriven design, and applied research. Projects undertaken through these programs employ grounded theory and practice, and social scientific research.

The Detroit Studio, led by Dr. Joongsub Kim AIA, AICP, was developed to provide students with an enriched educational experience through community-based architectural, urban design and community development projects. It offers accessible and useful programs and information to the public, the design profession, municipal officials and the business community. The Studio began in 1999 by the College of Architecture and Design as a central Detroit, off-campus studio facility.

The location creates a unique educational setting for students through developing community-based and service learning projects in partnership with municipalities, professional and community organizations, business leaders, and local schools. The studio has carried out iwork in the Detroit Studio with students through the following courses: ARC 3117 Integrated Design 3, ARC 3126 Integrated Design 4, ARC 4264- Allied Design: Urban Design, ARC 5714 - Urban Studio 1, and ARC 5724 - Urban Studio 2.

The Detroit Studio offers opportunities for students to be active and engaged citizens. Students at the Detroit Studio engage with real clients on real projects as responsive designers and as active participants in community affairs. Their work adds value to the community and the physical environment through meetings and workshops with presentations to community groups and municipal development authorities,as well as with city council members. The studio receives funding from national and local research grant awards, municipal agencies, foundations, philanthropic organizations, non-profit organizations, educational institutions, and business corporations. Notable funding sources in the past six years have included: The National Council of Architectural Registration Boards (NCARB), the Boston Society of Architects, and the American Architectural Foundation.

Projects undertaken at the Detroit Studio have been oriented towards neighborhoods and grassroots community development organizations in response to deteriorating, underserved residential areas in Detroit. While the Detroit Studio will continue to focus on these areas in the future, since 2010 the Studio has also responded to significant recent changes in Detroit and other cities in the United States and other countries. For example, students at the Detroit Studio have participated in sponsored projects such as the Oxford Downtown Master Plan Project (responding to declining, small city, downtown areas), the Woodward Avenue Linear City Project (responding to growing attention being paid to regional public transit in Detroit), the Parkside Neighborhood Healthy Community Design Guideline Project (responding to growing levels of obesity and other health crises), and the Rouge Park Regional Park Master Plan Project (responding to the demand for attention to regional sustainability, ecological urbanism, and shrinking city phenomena). Additionally, a number of student research assistants at the Detroit Studio conduct funded applied research studies on contemporary and emerging urban challenges.

The Detroit Studio is guided by an Advisory Committee comprised of representatives from government, the profession, and academia. The Committee advises the Detroit Studio on bringing together diverse interest groups and building a culture of civic engagement. Since the last accreditation visit, the work of the Detroit Studio has been published in a range of publications, including The Detroit Free Press, Architect Magazine, the books Carrot City: Creating Places for Urban Agriculture and DAS USAMERIKANISCHE MODELL DER / COMMUNITY DESIGN CENTER (Germany, in press), and proceedings from the following conferences: International Making Cities Livable, Environmental Design Research Association, Association of Collegiate Schools of Planning international and national conferences, ARCC Annual Meeting, and ACSA international.

studio[Ci] ,an applied urban research lab, conducts projects focusing on sustainable urbanism through research projects involving student research assistants. The studio is a design lab within the College founded by Professor Constance Bodurow Assoc. AIA, and a multidisciplinary team of professional architects, urban designers, civil and environmental engineers. studio[Ci] investigates sustainable urbanism through three primary areas: value densification, convergence of intensity [Ci], and parametric urbanism. Studio[CI] has been successful in its interactive relationships, presenting research papers and posters to the academic community as well as obtaining funding from external organizations including the Coleman Foundation, The Ford Motor Company Fund, The City of Southfield, Local Initiatives Support Corporation (LISC), The American Institute of Architects (AIA), Michigan State Housing Development Authority (MSHDA), and Lawrence Technological University's Office of the Provost. The studio's work has been

published in the ARCC Journal, Revue Internationale de Géomatique, the proceedings of the EAAE/ARCC International Conference on Architectural Research, and the ACSA 100th Annual Meeting.

detroitSHOP is a multidisciplinary design laboratory that promotes Detroit through applied research in collaboration with Detroit's urban stakeholders. The studio brings together educators, professionals, businesses, and students to promote innovation and design thinking that are disseminated as deployable design solutions. The work combines urban design, architecture, graphic design, industrial design, and community engagement. It was developed by Associate Dean Amy Deines Assoc. AIA, ASID, and supported by the College. Students learn about the risks, benefits, and realities of an interdisciplinary practice in an urban core. It helps students and the greater Detroit public to understand that design is not a luxury, but a powerful agent of change.

In the spring 2013 semester, the studio consisted of architecture, graphic design, interior architecture and business management students that collaborated on both design and business concepts along the Woodward Corridor in the central business district in downtown Detroit. The studio has already received attention in such publications as Model D, Crain's Detroit, www.examiner.com, www.automationalley.com,the Plan Journal, and Lawrence Tech News, and on radio station WWJ's WWJ Destination 313. Please visit the website to see content and mission at www.detroitshop.org.

makeLab, the College's digital fabrication lab, has actively engaged students in digital design, prototyping, and fabrication, through class projects and funded professional work. In the makeLab, students are given opportunities to work on real architecture and design projects with actual clients, including most recently, an international design competition collaboration. makeLab was founded in 2010 by Professor James Stevens, AIA. It began as an entrepreneurial start-up and has progressed beyond teaching and research to provide private contract design services. The group regularly teaches international workshops, with recent sessions in China, Albania, and Bolivia. The work of makeLAB has appeared in publications and has been the recipient of funding from various sources including the following:

May 2013, The Product Manufactory (TPM), Industry Sponsored $9,000.
Project: Prefabricated Conference Room, Link: http://make-lab.org/gallery/tpm-conference-room/.
Resulting Paper: Digital Vernacular: Practicing Architectural making
Arab Society of Computer Aided Architectural Design (ASCAAD), Effat University, Jeddah, Kingdom of Saudi Arabia.

June 2012, The Suitcase CNC, Coleman Foundation Fellowship (Continuation funding) $1,000
Project: Design and build suitcase CNC for teaching in the Balkans. http://make-lab.org/gallery/suitcasecnc/
Resulting Paper: Digital Vernacular: Democratizing Architectural Making
Making Futures Conference, Plymouth College of Art and Design, Plymouth, England.

The International Design Clinic (IDC) is an independent, not-for-profit organization dedicated to realizing much-needed creative work with communities in need around the world, founded by department chair, Professor Scott Shall, AIA. Since its inception in 2006, the IDC has completed over a dozen projects on four continents, including an urban tent for the homeless made of reclaimed water bottles and plastic bags; a communal playspace for Romanian orphans made of construction debris; a vision for education for the migratory communities of India based upon borrowed resources; a three-dollar projection system designed to rearticulate the manner in which art and architecture is conceived, displayed and regenerated; and a street-based educational system designed within vending architectures for kids working the streets of Bolivia.

The work of the IDC has been disseminated widely, including in presentations at Third and fifth

International Symposiums On Service Learning In Higher Education, the 2011 ARCC National Conference and the 2008 International Conference on Informal Settlements And Low Income Housing as well as invited lectures at Brown University (2009), the University of Maryland (2009), the New School for Design at Parsons (2008), and the Pratt Institute (2008). Shall's writing on socially-responsive design, has been featured in a range of peer-reviewed publications, including works by the AIA Press (2010) and the University of Indianapolis Press (2010). In 2008, Interior Design magazine published the work of the IDC along with projects by Kengo Kuma & Associates, OMA, and Buckminister Fuller in an article highlighting practitioners who are challenging the edge of design practice. IDC work has been exhibited in venues around the world, including solo shows at the San Francisco Museum of Art in La Paz, Bolivia (2011) and the AIA Center for Architecture in Philadelphia (2009), as well as group shows at the Sheldon Swope Museum of Art (2010), the SPOT gallery of Poznan, Poland (2010), the Goldstein Museum of Design (2010), and multiple shows at the Crane Center in Philadelphia (2010, 2011). The IDC's most recent community-based work, chainlinkGREEN was selected for exhibition at the 2012 Venice Architecture Biennale.

Public Interest Design Workshop is a new workshop sponsored by an NCARB grant focusing on expanding the boundaries of architecture. In the Workshop, students focus on systems, service, or industry, examining their impact on design. This approach allows students to redefine the meaning of architecture, the mission of architectural profession, the roles of diverse players in the production of the built environment, and the relationship between those players. In the first four semesters of its existence, 29 students have participated in the workshop, which is conducted by Associate Professor Joongsub Kim, AIA, along with a local practitioner liaison. Guest speakers and critics have included faculty members and outside practitioners, most notably Bryan Bell of DesignCorps.

Dr. Kim was one of the six recipients in the USA who were awarded the 2011 NCARB Grant for the Integration of Practice and Education in the Academy. The National Council of Architectural Registration Boards (NCARB) awards grants to support the creation and implementation of new methods to integrate practice and education in the academy. Professor Kim received a $13,800 NCARB Grant for his project called "Public Interest Design Practices and Research (PIDPR) Workshop." For more information on this grant proposal, please refer to *section I.1.3 C Architectural Education and the Regulatory Environment*.

The AIAS Chapter's ***Freedom By Design*** program is an important outreach and service learning vehicle, which is student-driven and managed. This national program was introduced at Lawrence Tech, which was the first AIAS chapter to undertake Freedom By Design in the United States. The program allows architecture students to gain real world experience through design and construction solutions for people with physical disabilities as part of community service. Their work in this program is supported by an annual auction, which has involved faculty, professionals, and community members, in the fund raising effort. In 2012, the Chapter's leadership in Freedom By Design was recognized with the AIAS Special Accomplishment Honor Award.

Community Engagement Projects
LTU students and faculty frequently involve themselves, on an ad hoc basis, in community-based projects, because the need is there and the experience is so valuable. One such effort is the involvement of a student who made herself available on a pro bono basis to prepare drawings needed by Detroit Kitchen Connect in southwest Detroit, an incubator facility and service for people who want to initiate a food-related business. The DKC website says,

> *"There is nothing easy about launching a food business. One of the biggest obstacles for starting a food business in Detroit is the high cost of setting up a commercial kitchen. Detroit Kitchen Connect (DKC) exists to help you overcome that obstacle. We aim to increase entrepreneurial success by providing a supportive, diverse, inclusive community along with access to commercial, licensed kitchen facilities and equipment in a reduced*

risk environment."

More information on DKC may be found at these websites:
http://detroitkitchenconnect.com/
https://www.facebook.com/DetroitKitchenConnect1
http://www.crainsdetroit.com/article/20130714/NEWS/307149975/kitchens-in-sync-with-space-scarcenew-program-aims-to-get-small-biz#

In another example, a pair of upper-division students in the Activist Architecture and Design Studio designed and built a 'pop-up' welcome center in the Jefferson-Chalmers neighborhood in Detroit in the spring / summer of 2013. As part of the annual 'Jazzin' on Jefferson' festival, the GoEast Welcome Center provided a central location for community activism groups such as the Jefferson East Business Association, D-Hive, and the Village of Fairview Historical Society to participate in a major neighborhood renewal effort. More information on the GoEast Welcome Center design team can be found at:

http://www.juneonjefferson.com/go-east-design-team/

University Sponsored Project: *Alternative Spring Break*
University sponsored alternate spring breaks give CoAD students the opportunity to work with students form other disciplines and in a variety of communities. In the recent past, the Alternative Spring Breaks have included the following programs:

2013 ASB in New York City
2012 "Serve the D" in Detroit
2011 Working to end domestic violence in Grayling, Michigan
2010 Fighting homelessness in Goshen, Indiana

Public Lectures and the Public Good
The College's public lecture series regularly hosts architects and planners whose primary focus is public interest design and the public good. Recent lectures that speak directly to these issues have included:

Douglas Farr, FAIA, United States Green Building Council / USGBC
Jon Calame, partner and operations officer at Minerva Partners
Emily Pilloton, Studio H
Bryan Bell, AIA, author, founder of Design Corp, and recipient of the AIA's Latrobe Prize
John Norquist, Congress for New Urbanism
Teddy Cruz, Estudio Teddy Cruz and the University of California, San Diego (recipient of AIA's Teaching Award)
Scott Shall AIA, Giving a Damn is not Enough, Temple University, Philadelphia

The lecture series is fully described in *section I.1.3 A. Architectural Education and the Academic Community.*

Nurturing a climate of civic engagement, including a commitment to professional and public service and leadership

The course and lab venues at the CoAD provide students with opportunities to understand the potential ethical, social, and psychological effects of their design decisions by conducting interviews, focus groups, surveys, workshops, community reviews, and participatory action research in partnership with clients, local residents, public officials, and professionals. For example, in the Detroit Studio students write an essay about the ethical implications of design proposals. These opportunities challenge students to explore the ethical implications of their decisions through interaction with class clients or research assignments. Ethical implications of architectural decisions are part of the critical content of all design studios.

The Detroit Studio, the DetroitSHOP, the International Design Clinic, the Activist Architecture Studio, and the Allied Design Sustainable Studio, offer coursework in which students network with representatives from government, the design professions, the business community, and civic leaders, and they benefit from their advice and insight. Students participate in reviews with practicing architects and urban designers / planners who offer professional input and feedback on student projects. These courses and research-design labs expose students to practical community projects with the goal of understanding client roles and requirements. Outside experts are invited to join students at community workshops with clients and residents to discuss and reconcile varying perspectives and to build consensus on solutions

Long-range planning activities at CoAD

The efforts described above are aligned with and supported by the College's long-range intentions, which include continuing to develop opportunities for public interest design. The next step in the College's involvement will be the Detroit Design and Technology Center, currently under construction at the corner of Woodward and Willis in downtown Detroit. The Center will permanently host both classes and research initiatives at that location and give the College a visible and convenient working presence in the city. The research, classes, and community outreach based in the Center will enable the College to advance the knowledge base of the profession. In addition, the College also aims to offer opportunities for architecture students to engage in cross-disciplinary work with students in other College programs. Refer to *section I.1.4 Long Range Planning*.

Conclusions

The College of Architecture and Design equips students with an informed understanding of social and environmental problems, and develops their capacity to address these problems with ethically sound architecture and urban design decision-making skills. The College consistently addresses the public goodwithin the context of its history, mission, and culture, and ensures that the public good will continue to be addressed in the future.

I.1.4. Long Range Planning

The Process to Identify Objectives: LTU Mission and Strategic Plan
Lawrence Technological University has a history of Strategic Planning. The latest plan was adopted by the Board of Trustees in February 2012 and may be found in the Team Room for review. This Plan is the fifth in a series of strategic plans that have guided LTU since the University formalized the planning process in 1999.

The 2012 Strategic Plan presents a vision, mission, values and cause:

Vision To be a pre-eminent private technological university producing leaders with an entrepreneurial spirit and global view.

Mission To develop leaders through a student-centric environment with innovative and agile programs embracing theory and practice.

Values
1. Theory and Practice
2. Student-focused and Caring
3. Teamwork and Trust
4. Character and Integrity

Cause The intellectual development and transformation of our students into critical thinkers, leaders, and lifelong learners.

To act upon these values, and realize the mission, vision and cause cited above, the University established ten plan objectives:

1. To develop a culture of undergraduate and graduate practice-oriented, leading-edge technology and practices
2. To expand LTU Online using advanced learning technologies
3. To enhance cross- and inter-disciplinary programs
4. To attract and develop notable faculty
5. To build the University endowment
6. To develop a high level of student engagement and create a student-centered learning environment
7. To create a 24/7 campus learning and living environment
8. To implement a robust recruitment program
9. To create a targeted marketing strategy
10. To refine financial aid protocols in order to better serve our students

College of Architecture and Design Mission and Strategic Plan
On June 1, 2011, the College of Architecture and Design adopted an updated strategic plan. This document is the result of a collaborative process among faculty, staff, students, and administration and is available for review in the Team Room. The College's plan is consistent with the University's Strategic Plan and with the Art & Science LLC Consulting Group's report and is intended to serve as a guide for decision-making for the College until 2016. In its plan, the College of Architecture and Design establishes its vision "to be a preeminent, multi-disciplinary, practice-oriented school of architecture and design, both nationally and internationally."

Founded upon the vision, mission, values and strategies outlined within the University and College strategic plans, the mission of the Department of Architecture is to develop critical thinkers and responsible practitioners who appreciate the manner (technology), method (technique) and means (tectonics) by which the built world is constructed. The objective is to understand and develop a symbiotic relationship between ancient and natural systems, technologies and infrastructures through the architectural act.

Core Attributes of the College and Department
This vision, and the strategic plan created to realize it, establishes three core attributes, formulated as "points of differentiation" within the College Strategic Plan of the College and Department, each of which is related to the history of the university, the LTU 2102 Strategic Plan, and manifest within the five perspectives described in *section I.1.3 Architectural Education and the Profession*. Each attribute is also, appropriately, a key point of definition within the College mission statement.

1. **A Grounded Practice** ("practice-oriented")
From its beginnings on the grounds of the Model-T Ford plant in Highland Park, MI, Lawrence Technological University has long embraced a theory and practice model of education. This model remains central to the vision, mission, and objectives of LTU, CoAD, and the Department of Architecture. Refer to *section I.1.1 History and Mission* and *section I.1.3 Architectural Education and the Profession* for a more detailed account.

2. **An Expanded Practice** ("multi-disciplinary")
The four Colleges of Lawrence Technological University – Engineering, Architecture and Design, Arts and Sciences, and Management—each represent a core concern of Henry Ford's work and the industry-based innovations that made them possible. For Ford and the University, these practices, and transitively the disciplines and academic units in which they are housed, gain value

from their overlaps. The College of Architecture and Design views this expanded mode of practice as a central operating principle.

3. **An Advancing Practice** ("preeminence")
The term "pre-eminent" is a dangerous one, a platitude that has become somewhat worn. However, when viewed against the dedicated technological focus of the University and the theory and practice mission that guides it, the term becomes a bit more specific, and thus, useful. For the College of Architecture and Design and the Department of Architecture, the term has led to a focus upon technology, as well as the related concerns of practice (technique) and material innovation (tectonic).

Core Objectives of the Department
Based upon the history, mission, and focus of the University, the LTU 2102 Strategic Plan and the 2011 College Strategic Plan, the Department of Architecture has identified key objectives to guide future efforts. To organize these objectives, the Department identifies each objective with a specific time period:

- The short-term objectives outlined in this report include relevant short-term goals and metrics from the 2011 CoAD Strategic Plan, designed to covers years 1 (2011) through 3 (2013) and including Assessment Reports from 2011-3.

- The medium-range objectives include relevant medium-term goals and metrics from the 2011 CoAD Strategic Plan, designed to covers years 4 (2014) through 6 (2016), with curricular goals from the same period.

- The long-term objectives are desired projections, based upon the material contained in the sections above and the other items found within the existing University and College Strategic Plans.

The following list is a sampling of Departmental objectives:
1. **A Grounded Practice**
Short Term Objectives
- The Department will redevelop its Integrated Design Studio sequence to be more "integrated" and cooperative among disciplines, as well as appropriate to emerging practice.

- The Department will support the AIAS, with financial, physical, and intellectual resources, so that it might open membership to more students and expand the interface of student organizations with their corresponding professional organizations.

- The Department will continue working with the Distinguished Architectural Alumni members to fund improvements for Affleck House and extend funding for the Alumni Graduate Fellowship in honor of Earl Pellerin.

Medium-Range Objectives
- The University's leadership curriculum in the College must forcefully integrate knowledge and experience in global and cross-cultural awareness, urban knowledge and practices, teamwork, and service learning.

- The Department will institute a co-op, internship and/or work/study program to help students gain professional experience as a part of their academic studies. To support this initiative, the Department will work with the University's Office of Student Services to establish an employment bank to assist both students and alumni.

Long-Term Objectives

- The Department will create and raise funds to support the National Advisory Board composed of leading individuals from the profession, allied fields, and the broader community. The role of this board is to assist in raising the national profile of the Department and College and its programs, assist with recruitment and placement of graduates, and assist in developing national networks to promote fund raising.

2. **An Expanded Practice**
Short Term Objectives

- The Department will work with the other programs within the College to support and help develop new courses, programs, and labs in Detroit, to support applied multi-disciplinary research, community outreach, and K-12 partnerships.

- The Department will work with the Art and Design Department to create a curated gallery space for alumni work. The purpose of this exhibition space will be to expose students to the exemplary multi-disciplinary work of the College's alumni and encourage more cross-disciplinary communication.

- The Department will establish a dedicated space for students in the shared foundation sequence, including dedicated studio desks.

- The Department will create more critique and exhibition spaces to facilitate the sharing of creative work between disciplines throughout the College.

- The Department will develop additional study abroad opportunities at all levels, in a variety of countries, and in all disciplines in the College. The Department will establish three micro-campuses within the next two years: Albania, Bolivia and China. The Department will seek external funding for to assist students with study abroad opportunities.

Medium-Range Objectives

- The Department will work with the College and University to expand its Detroit facilities to include: Studio Space at undergraduate and graduate levels, Gallery/Exhibit Space, Applied Research Facilities, Community Meeting Space, Fabrication Lab, Space for Visiting Scholars, and the Potential for Residential Life

- The Department will develop additional dual-degree programs to help students understand the practices of other fields and develop new modes of architectural practice.

- The Department will create more spaces to support informal gathering of students to foster greater cross-disciplinary dialogues.

Long-Term Objectives

- The Department will increase the number of articulation agreements in order to defray the overall cost of education for our students and build a more diverse student body. The College intends, in the next five years, to develop articulation agreements with an additional five community colleges in Michigan, and additional two three-year colleges in Canada, and fifteen four-year colleges.

3. **An Advancing Practice**
Short Term Objectives

- The Department will expand the current advisory council to include practitioners representing emergent architectural practices, including digital fabrication and online design. The council

will render advice with regard to curriculum, network with the profession and community, and help position the program for fund raising.

- The Department will expand lab facilities, including fabrication labs, woodshop, metals lab, mechanical/electrical/lighting labs, and a premier broadcast media facility, in cooperation with the Media Communications program at the University.

- The Department will work with the University to provide 5-year university-based scholarships for qualified students entering the CoAD direct entry Master's program as continuing or transfer students.

Medium-Range Objectives

- In the next two years, the Department, College and University will establish a series of two or three research entities or centers to support and expand faculty research. The purpose of such entities would be to promote a research agenda that is more active and agile. A template for the establishment of research entities must include space cost and allocation, revenue distribution, and the grants process.

- To critically engage and thoughtfully develop online courses and degree programs in order to open CoAD coursework to a more diverse student population. The College is already a distinguished national and international leader in online architectural education, growing from no students to 38 students in just three years. The College intends, within 3 years, to expand the MArch online program to approximately 50 full-time equivalent online students. By 5 years, the program should grow to greater than 70 students.

- The Department will maintain a budget to support the dissemination of faculty and student work, including travel, publication and exhibition.

- The Department will work with the Advancement office to concentrate external fund-raising for endowed and expendable graduate scholarships to attract non-Lawrence Tech based undergraduate applicants into the graduate program.

Long-Range Objectives

- The Department will seek to partner with Cranbrook Academy to develop a joint M.Arch degree program. This new program will marry the strengths of both institutes and create a program that profoundly realizes the University's motto of Theory and Practice.

- The Department will create a more targeted and robust campaign to recruit students aligned with key labs and programs. Over the last five years, the College has averaged 530 applications per year from Michigan sources and 108 applications from out-of-state or international sources. Over the next five years, the College will attempt to grow these numbers by 25% annually in Michigan-based applications and 50% from out-of-state or international sources.

Description of Data and Information Sources Used to Inform Development of Objectives

To develop the College Strategic Plan and Departmental objectives, several sources of information are used, representing a range of scales and including a variety of participants: professionals, administrators, faculty, and students.

1. **Professional Sources and Advisory Committees**
Each department within the College has a departmental advisory committee, made up of leading voices within the field. The role of the departmental advisory committee is to review the activities of the department, present advisement from the perspective of the profession, and support the

continued dialogue between the department and the profession. The Architecture Advisory Committee meets formally once a year, with additional meetings occurring as needed in the intervening months.

The members of the current Advisory Committee for Architecture include:

John Castellana, FAIA	Senior Vice President	TMP Architecture
Alan Cobb, FAIA	Senior Vice President	Albert Kahn Associates
Rainy Hamilton, AIA	President	Hamilton Anderson Associates
Bill Hartman, AIA	Director of Design	Gensler
Deirdre Jimenez, AIA, ASID	Managing Principal	Jacobs Engineering Group
Arthur F. Smith, FAIA	Principal	Harley Ellis Devereaux
Paul Tonti, AIA	Vice President	SmithGroup
Mark Sexton	Principal	Krueck + Sexton Architects
Paul Urbanek, FAIA	Design Leader	SmithGroup

Additional members will be added to the Architecture Advisory Committee in the fall of 2013 and an updated list made available to the visiting team in the spring of 2014. Notes from the 2011-2012 and 2012-2013 meetings are included in the team room.

The College Advisory Committee is made up of selected individuals from each Departmental Advisory Committee. The College Advisory Committee meets once per year and functions in a manner similar to the Departmental Advisory Committees.

2. NAAB Reports from Previous Visits

The Department of Architecture has a long-standing history of utilizing NAAB annual reports and accreditation visits to assess the effectiveness of current objectives and refine the tactics used to meet these objectives For example, over the last five years, the Department has elected to frame the University-sponsored Assessment Reports (described below) around the points raised by the 2007-2008 NAAB accreditation visit. The items identified through the NAAB visit of 2007-2008 have thereby become a consistent point of conversation and assessment within the department, facilitating a long-term address of these points. The 2013-2014 accreditation visit has played a similar role in recent years, instigating a productive series of conversations relative to the effectiveness of long-term strategies and vision statements, which resulted in a series of specific outcomes. Refer to *section II.2.3. Curriculum Review and Development, section I.1.5 Self-Assessment Procedures*.

3. University Sources

University Strategic Plans Since 1999, the University has created five Strategic Plans, each of which is a refinement of the vision, objectives, and measures found in the previous Plan. The 2012 Plan reaffirms the long-standing dedication to theory and practice and puts in place a renewed dedication to student-centered practices, two areas long-embraced by the Architecture Department. The evaluation of objectives and measures from 1999, as manifest within this set of University Strategic Plans, have proven invaluable to the College and Department as each entity endeavors to develop objectives and measures.

Annual Performance Report Every third year, each degree-granting program within the University is required to construct an extensive evaluation of that unit's activities. The Department of Architecture at LTU crafts four such reports: Master of Urban Design, Master of Architecture, Bachelor of Science in Architecture and Bachelor of Arts in Architectural Studies. Included within this assessment is an analysis of all objectives and measures offered by the Department within the previous report, as well as a refinement of the vision described by said items. Strengths and weaknesses are clearly assessed and a plan put in place to build upon the former and address the latter. The next Annual Performance Report for the architecture department is due in 2013. Please see the Annual Performance Reports

http://www.ltu.edu/architecture_and_design/accreditation.asp

Assessment Reports The University has established ten undergraduate learning objectives for all LTU graduates and requires each Department to assess success in the following areas:

Discipline-Specific Knowledge
- Knowledge in Discipline
- Technology
- Sustainability

Critical Thinking
- Communication

Mathematics
- Reading
- Scientific Analysis

Leadership & Ethics
- Leadership
- Teamwork
- Professional Ethics

Each Department is also expected to assess all graduate activities based upon five graduate learning outcomes:

Discipline-Specific Knowledge:

"LTU graduates will apply and, in accordance with their course of study, develop advanced knowledge within their discipline."

"LTU graduates will analyze and interpret information and implement decisions using the latest techniques and technologies."

Critical Thinking:

"LTU graduates will evaluate scholarly literature and, in accordance with their course of study, contribute to the literature."

"LTU graduates will communicate effectively using written, oral, graphical, and digital formats."

Leadership & Ethics:

"LTU graduates will develop a broad perspective on professional issues, such as lifelong learning, sustainability, leadership, and ethics."

Full descriptions of both undergraduate and graduate University learning outcomes can be found at: http://www.ltu.edu/cm/attach/07caa05a-bc64-41fa-a43b d5f09c9eccc1/Educational%20Goals%20December%202011.pdf

Each September, departments share their findings from this assessment with the University in a written report and a presentation given to all University faculty during Assessment Day. The intent of both forms of dissemination is to facilitate a far-reaching discussion about Departmental objectives and the assessment of these key ideas. As mentioned above, the Architecture Department at LTU has elected to use the points raised through the 2007-2008 Accreditation Visit as the principle point of investigation for the Assessment Reports of the last few years. All Department of Architecture Assessment Reports conducted since the last NAAB visit are included in the team room.

University Task Forces The Provost and Administration of the University routinely assemble task forces to address key concerns within the University. Significant task forces formed by the University are:

Academic Affairs Committee
Assessment Committee
Board of Trustees
Community Outreach Committee
Credit Review Committee
Dean's Council
Design Thinking Task Force
Faculty and Staff Campaign Committee
Faculty Senate
Finance Committee
Financial Aid and Scholarship Committee
Guest Credit Committee
Honors Committee
Kern Grant Committee
Legislative Committee
Research Support Services Committee
Self-Study Steering Committee
Social Committee
Social Media Task Force
Staff Recognition/Development Committee
Staff Senate
Strategic Planning Committee
Student Discipline Committee
Student Elections Committee
Tuition and Fee Appeals Committee

The members of these task forces perform an evaluation of the topic area, including an assessment of any relevant programs, and offer a clear plan of action. Given the leading role played by the Architecture Department at LTU, its programs have been a part of many such evaluations and our faculty have been involved in the majority of these groups as well.

Given the necessary overlap between the Architecture Department and most University task forces, the conversations of the latter often impact the formation of objectives for the former. One example is the Sustainability Task Force, which in 2011 became a standing University Committee:

Rachel Azima – College of Arts and Sciences (replaced by Dr. Nicole Villenueve in 2012)
Donald Carpenter – College of Engineering
Alan McCord – Associate Provost
Edward Orlowski – College of Architecture and Design (chair)
Jacqueline Stavros – College of Management

Under the leadership of Professor Orlowski, the work of this committee resulted in creation of a University-wide, interdisciplinary certificate program in sustainability in 2011, and the group is taking a leadership role in assisting all academic departments in satisfying the University's undergraduate learning objective in sustainability.

4. College Sources

Administration Meetings Every two weeks during the fall, spring and summer semesters, all members of the College administration, including the Dean, Associate Dean, Chair of Art and Design, Chair of Architecture, and Associate Chair of Architecture, Director of Architectural Engineering, Manager of Marketing and Support, and the Dean's Assistant meet to discuss immediate and far-reaching concerns of the College. These discussions, which can range from immediate, logistical concerns to strategic planning, are assessed with a view to the College Strategic Plan and the Objectives it outlines, using many of the measures discussed here. A sampling of notes from this forum are included in the Team Room.

Faculty Meetings Every two weeks during the fall and spring semesters, all full-time faculty members and administrators meet to discuss items pertaining to the curriculum, the logistical and physical support provided by our University and College, and how these matters intersect with the objectives of the University, College and Department. Adjunct faculty are welcome to attend this meeting. A sampling of notes from this forum are included in the Team Room.

Faculty Council Faculty Council meets every other week during the fall and spring semesters. The Council is made up of five members, representing a range of disciplines and perspectives within the College. The chief purpose of the Council is to advise the dean on academic and other matters. The approval of the Faculty Council is required for advancing any curricula initiative. The discussions of the Council are held with an eye to the Strategic Plan of the College and objectives it puts forth. The advisement of the Council, which is delivered during the College faculty meeting described above, provides a key feedback loop to the faculty and administration of the College and is viewed as a key resource relative to the mission and objectives of the College and Department. A sampling of notes from this forum are included in the team room.

Upper Division Faculty Meetings The Faculty of the College who coordinate upper-division courses meet 4-8 times during the fall and spring semesters. The role of this group is to review new upper-division course proposals, assess processes for upper-division admissions, and represent the interests of faculty in matters of upper-division curriculum and program direction.

College Committees The Dean or Associate Dean assembles Committees to oversee particular topics for the College. The Dean or Associate Dean, in consultation with the Chair of Art and Design, and the Chair of Architecture chooses the members of each task force based upon their expertise and experience. College Committees may include full-time faculty, part-time faculty, staff, administration and/or students. Each Committee may elect to bring in professionals or other experts with relevance to the topic under consideration. The purpose of each Committee is to gather and assess data sets and facts, discuss the impact of this information upon the primary call of the task force, and make recommendations for action. Current Committees within the College include the Exhibition Committee, the Lecture Committee, Affleck House Restoration Committee, Upper-division Admissions Committee, and Promotion and Tenure Committees. Standing Committees convened by CoAD Faculty Council are discussed *in section I.2.2 Administrative Structure and Governance*.

Student Leadership Council The Dean, Chair of Art and Design and Chair of Architecture meet monthly with the student leadership council – an assembly made up of representatives from all student groups, including the AIAS ASHRAE, IDSA and AIGA. The purpose of the Council is to offer advisement to the administration relative to all student affairs and to act as a conduit between the CoAD administration and the student body-at-large. As a source of information and assessment, it is viewed as one of the closest to the daily running of the College and thus of great value to the administration. A sampling of notes from this forum are included in the Team Room.

5. Departmental Sources

Department Meetings The Department of Architecture and the Department of Art and Design each hold one-hour departmental meetings immediately following every College Faculty Meeting. During these sessions, that include every full-time faculty member of the Department, the faculty and administration discuss curricular and logistical items of relevance to the Department. For example, during the spring of 2013, the faculty discussed the revisions to the Integrated Design course sequence, the Visual Communication sequence, the integration of a portfolio requirement for all transfer students, changes in grading policy, and how each of these matters would impact the curriculum and mission of the Department. In all matters, the Departmental discussions are conducted with a keen eye to the data sets described in this section and the objectives of the unit.

Curricular Subcommittees Of The Faculty Council The Faculty Council assembles Curricular Subcommittee to oversee particular aspects of the curriculum. Curricular Subcommittees include full-time and part-time faculty, administration and students. The Subcommittee may elect to bring in professionals and other experts of relevance to the topic under consideration. Current curricular subcommittees within the Department of Architecture include: integrated design courses and studios, visual communication, building systems and technologies, and professional practice. Please refer to *section II.2.3. Curriculum Review and Development* for more information about the curricular development fostered by the Visual Communication and Integrated Design curricular subcommittees

Department Task Forces The Department of Architecture assembles task forces to investigate items key for the realization of the objectives of the department. The Department Chair chooses the members of each task force based upon their expertise and experience. Departmental task forces may include full-time faculty, adjunct faculty, staff, students, administration, and/or practitioners. Each task force may elect to bring in professionals and other experts of relevance to the topic under consideration. The purpose of each task force is to gather and assess relevant data sets and facts, discuss the impact of this information upon the primary call of the task force, which is issued by the Chair, and make recommendations. Current task forces within the Department of Architecture include: digital fabrication and construction, online design methods and project management, and socially-responsive design and development.

Grade Comparison Reports At the end of each term, the Chair of Architecture receives a comprehensive grade comparison report, which includes the grades issued for all architecture courses. The Chair reviews this material in order to find any inconsistencies or other items of concern. The Chair then works with the Coordinator of the course (with multiple sections) to investigate these items further and offer a specific address. Items at odds with the stated objectives of the College and/or Department are, thus, quickly spotted and addressed. Refer to the Team Room for grade reports from the fall 2012 and spring 2013 terms.

Topical Reports The Chair of the Department of Architecture or the chair of any of the task forces and committees cited here may request reports from the College and University to use in their deliberations. A selection of recent reports, including an assessment of all LTU transfer students from 2008-2013, may be found in the Team Room.

Conversation With A Chair Every semester, the Chair of Architecture holds monthly, an open session with all interested students. These sessions, titled “Conversations with a Chair”, provide an informal forum for LTU Architecture students to discuss any items of interest, including those related to the Department, College or profession-at-large. Please refer to *section I.1.2 Learning Culture and Social Equity* for a description of the notes and outcomes from the four 2012-2013 meetings.

Internal Audits: Student Evaluations and Surveys At the end of every term, the Chair receives a copy of all student evaluations for each course within the Department. The Chair also receives a spreadsheet providing a comprehensive breakdown of the Department’s performance during the previous term. The Chair reviews this material in order to find any inconsistencies or other items of concern. The Chair then works with the Coordinator of the course to investigate these items further and offer a specific address. Items at odds with the stated objectives of the College and/or Department are thus quickly spotted and addressed. When necessary, the Chair may also conduct or request a survey of all students. The results, both the routine and topical audits, provide key insight to the Chair regarding the performance of the faculty and how successfully the Department is realizing key objectives. Refer to the Team Room for the results from a 2013 survey administered to 350 students of Architecture. Refer to the Team Room for student evaluations from the fall 2012 and spring 2013 terms.

Description Of Role Of Long-Range Planning In Other Programmatic And Institutional Planning Initiatives

The insights offered by the various task forces, committees, subcommittees and other bodies described above inform the short-, medium- and long-range plans of the Department. The assessments, data sets and other analytics described above provide key feedback loops relative to the success or failure of the Department in meeting core objectives. In addition, the following long-range objectives are a direct result of the metrics and discussions described in the previous section:

1. **Program Focus**
As mentioned in *section I.1.1 History and Mission*, the Department has long-embraced the Theory and Practice ideal and technological focus of the University. Moving forward, it is the Department's intent to return to the etymological root of the latter ideal – techne - and pursue the strategic overlap between changing tool sets (technology), the impact these tools have upon the profession (technique) and the material practice that results (tectonic). The embrace of these concerns occur in three areas of core strength within the University, College and Department, as manifest within the strategic plans and objectives of each unit and the evidences used to refine them:

Digital Fabrication, Construction And Management Initially established through the research and creative work of a single faculty member, this area has become a core strength of the Department. In reviewing student and faculty feedback and performance, it is clear that digital fabrication and construction are not only areas of interest, but of aptitude. Recent additions to the faculty, including Ayodh Kamath and Doug Skidmore, have skills sets and interests complementary to this area and should contribute to its growth. Forthcoming facility improvements in *section I.2.3 Physical Resources* will also support this initiative.

Online Design Methods And Management LTU's long-standing objective to provide the most inclusive education possible has led to the University pioneering several initiatives that are now widely accepted, including evening education. Four years ago, this objective led the University and College to open one of the first completely online architecture studios in the world. Since that time, the College has developed a core of faculty proficient in this emerging venue, tested various hardware and software supports, and created a great deal of implementable insight. The College disseminated some of these findings at an ACSA Conference in 2011. In the years to come, the College intends to support this burgeoning expertise through dedicated facility upgrades, financial support and other resources. Additionally, the Department intends to continue a long, careful examination of this area, with the intent of developing additional coursework and, if appropriate, courses of study.

Socially-Responsive Design And Development Most of the labs founded by LTU faculty, including Detroit Shop, Detroit Studio, the International Design Clinic and Studio Ci, are focused upon providing community-focused design and research. Additionally, quite a few faculty members, including Joonsub Kim, Amy Deines, Scott Shall, Edward Orlowski, Anirban Adhya, Jim Stevens and Constance Bodurow, have developed research agendas sympathetic to this concern. This has, quite naturally, led to numerous LTU elective studios and coursework that are dedicated to the exploration of this particular design arena. Moving forward, the Department intends to more strategically assemble and support this expertise. The Detroit Center discussed in this report will play a key role in this effort.

Each of the concerns mentioned above surfaced through the analysis of the data and conversations outlined in the previous section and with a keen eye to the College and University strategic plans and objectives. A departmental task force is currently investigating each of the three areas outline above and will soon provide actionable items to the Department, College and University so that each unit might support and develop these initiatives.

2. **New Programs**

Discussions regarding the development of an architectural engineering program at LTU began in 2006 with initial meetings between the dean of the College of Architecture and the dean of the College of Engineering. The two deans agreed that the University was well-suited for such a program because of the strong, cooperative relationship between the two colleges. Also, market positioning was strong because there were only 14 architectural engineering programs in the United States at that time, and none were within 250 miles of Detroit. Only three of these programs stressed a close integration of architectural design with engineering.

A professional advisory board was created to assist in the conceptualization of the program. They concluded that the program must be a 5-year, direct entry masters' degree, because combining the complexities of engineering education with architectural design could not be accomplished in a 4-year bachelors' degree. They also stressed the importance of graduating engineers that had a strong sense of design and design/production skills, as well as the ability to integrate design and building systems. This led to the strategy that the program would be shared between the College of Architecture and Design and the College of Engineering, although it would eventually become an ABET accredited engineering degree.

Architectural engineering students enroll in 10 courses in the College of Architecture and Design curriculum, including portions of the early architectural design studio sequence, building systems, project management, and lighting systems design. In addition, a unique architectural engineering studio sequence developed by the architectural and architectural engineering faculty, and co-taught by architects and engineers, explores and integrates structural systems, site design/civil engineering, mechanical systems, and electrical systems with architectural design. These studios are physically located in the College of Architecture and Design facilities to enhance communication and synergy between the architectural and engineering disciplines.

The program kicked off in the fall of 2009, and it has grown steadily since that time. Enrollment and course credit hours are shared between the two colleges. In 2014, the first architectural engineering students will graduate. In 2015, the program will submit its formal petition for ABET accreditation in engineering. Enrollment in the program at the beginning of the fall 2013 semester is approaching 100 students.

Based upon a review of current data sets and ongoing discussions within the venues outlined above, the College and Department are examining the formation of several new programs of study, including programs dedicated to each of the three areas identified as core strengths above and a program in Landscape Architecture. The College is currently interviewing candidates to fill a full-time, tenure-track line dedicated to landscape architecture.

3. **Facility Improvements**

In 2014, the College will consolidate all Detroit-centered research labs and classrooms, including Detroit Shop, Detroit Studio and Studio Ci under one roof into the Detroit Center for Design and Technology. This new facility is a direct result of the advice of faculty, professionals and community members, including input from the College Advisory Board and points raised during College and Departmental Meetings. The faculty and administration believe that the Center will play a key role in realizing the objectives outlined in both the University and College Strategic Plans. More information on the Detroit Center is included section in I.2.3 Physical Resources.

Additionally, the College is currently planning for a massive expansion of the makeLab. This expansion is the result of input from students, faculty and administration, who believe, based upon evidences provided through the venues and data sets described above, that the equipment and expertise offered by this facility is of great value to all programs and will furnish a critical resource for the College. The expanded facility will also allow the Department of Architecture to

offer additional, dedicated courses of study and, eventually, new programs of study relative to digital fabrication and construction. The Department's Task Force on digital fabrication and construction, cited above, is currently investigating this concern in greater detail and will provide advice to the Chair and College by the spring of 2014.

Description of The Role Played By Five Perspectives
In crafting the NAAB report, a group of faculty convened to discuss the alignment between the University and College Strategic Plan, the objectives of the Department and NAAB's Five Perspectives. Through this process, the faculty uncovered many overlaps between these frameworks. These corroborations are fully delineated in the sections that address the Five Perspectives.

I.1.5. Program Self Assessment

Introduction

The University and College conducts its self-assessment activities in a variety of ways. The College has worked, over the last several years, to link assessment and response activities to NAAB student performance criteria and to NAAB's observations resulting from the 2008 accreditation visit. The University has endeavored to establish and assess a core set of student learning objectives in accordance with the advisement of the Higher Learning Commission.

Institutional Requirements and Procedures for Self-Assessment

Assessment activities across LTU are rooted in our response to the requirements of the Higher Learning Commission (HLC). The HLC is one of two commission members of the North Central Association of Colleges and Schools (NCA), which is one of six regional institutional accreditors in the United States. HLC accredits degree-granting post-secondary educational institutions in the North Central region. HLC visits the University on a ten year basis and, if necessary, asks the institution to submit a follow up report in 5 years period.

The North Central Association requires that programs be put in place to assess student outcomes related to educational goals. To do this, LTU's Assessment Committee was formed, comprised of one faculty member from each of the academic departments. In addition, a member is appointed from the LTU Office of Institutional Research. The Committee is chaired by another member of the faculty, under the title of "Director of Assessment". This position is rotated among the Colleges. The provost and associate provost are members ex officio.

The Assessment Committee is empowered to ensure that all educational goals of the University are assessed in every program. Some goals are assessed University-wide, using the same instruments; goals include writing and oral communication, teamwork, and, in the future, leadership and critical thinking. Other goals are vary from one program to another, for example advanced learning and skill in using technology; in these areas, assessment strategies are developed and carried out within the colleges and departments.

In 2002, to support the work of the Assessment Committee and facilitate a campus-wide dialog on this topic, LTU instituted an annual Assessment Day, held on the third Friday of the fall term. The morning program consists of reports on University-level assessment activities, and an address by an outside speaker on an assessment topic that will be the focus for the coming year. In the afternoon, departments organize breakout sessions to review progress and set the departmental assessment agenda for the year. Attendance at this event is mandatory for full-time faculty and encouraged for adjunct faculty.

How the program is progressing towards its mission

The architecture program is progressing in the execution of its mission in four ways:

1. It is continually assessing its work as a part of the overall Lawrence Technological University assessment program, including the annual faculty Assessment Day discussed above. The College has incorporated NAAB criteria into its University mandated assessment scheme. This program is described in this section below in year-by-year notes.

2. The College Assessment Committee has carried out detailed assessment surveys and forwarded recommendations for action, again with reference to NAAB criteria. Evaluation of history and theory, design, sustainability, technical coursework, writing, professional ethics, through the lenses of NAAB criterion A9: Historic Traditions and Global Culture and NAAB criterion C9: Community and Social Responsibility is described in this section, below.

3. Student course evaluations are solicited, collected, analyzed, returned to faculty and copied to the department chair for all courses every semester. This process is described in this section.

4. The architecture program faculty carried out significant revisions to the architectural design course sequence and to the visual communications course sequence in the 2012-2013 school year. This process and the results are described in *section II.2.3. Curriculum Review* and Development.

A description of the school's self-assessment process, specifically with regard to ongoing evaluation of the program's mission statement, its multi-year objectives and how it relates to the five perspectives

The College of Architecture and Design prepares program level assessment studies each year in conjunction with the University-wide Assessment initiatives. The assessment studies are based on the university's educational goals and, where applicable, NAAB student performance criteria. The goals were condensed and revised in 2010-2011 to provide for a five-year assessment cycle. The assessment topic studied in an academic program may parallel the University-wide Learning Outcomes to be assessed or be another topic. The program level Assessment Initiatives for the Department of Architecture are described below starting in 2008-09 (first academic year since the last NAAB visit) to the present.

Assessment Year 2008-2009
Assessment of the University-wide Educational Goals
1. Writing and Oral Communication skills. In the summer of 2008, the University Writing Skills Subcommittee reviewed papers submitted in spring 2008, by the Department of Architecture in 3000 level classes and compared results to 2003 writing skill assessments.

The Department participated in the Oral Communication Subcommittee assessment recommendations, which student studio presentations were to be recorded and graded.

2. Character Assessment: The Department participated in the university wide "Portrait Values" character exams for freshmen, fall 2008, and seniors in the spring 2009.

Work Plan 2008/2009
1. Revise the program to address the integration of the new Leadership coursework (required by the university) into the degree requirements.

2. Student feedback efforts indicated an ongoing concern for coursework overloads in the third year of the architectural program. A fourth year student survey identified problem areas in specific

courses and overall coordination of coursework in this year. Program modifications were based on input from this survey and faculty input and feedback.

3. Development of proposals to address the NAAB curricular issues: professional ethics, handicapped accessibility, and development of writing skills in the curriculum. The recommendations were expected to be completed by May 2009.

Assessment Year 2009-2010 Faculty agreed that at least one assessment goal will be assessed every semester. Assessment goals will be aligned with the NAAB Student Performance Criteria. The Assessment Plan outline indicated the correlation between the University educational goals and the NAAB criteria required for the Master of Architecture Degree Accreditation.

The Committee continued to coordinate a yearly schedule as to which goals and which core courses were to be assessed every semester in preparation for the next NAAB accreditation visit. Every selected goal (i.e., performance criterion) was to include outcomes, objectives, and assessment implementation strategies.

1. *Writing Skills*
The CoAD Faculty Council convened an ad hoc committee to prepare and plan a writing improvement program. In summary, the committee made recommendations to revise courses throughout the program to emphasize written communication skills, provide examples of increased writing assignments, recommend grading standards, and revise prerequisites for junior/senior history/theory classes.

In 2009-2010, the committee developed a focused writing assessment to be implemented for design studio classes with select faculty volunteers to participate. The faculty developed a grading rubric, grading form, and instructions for faculty.

The committee recommended the following regarding the history and theory curriculum to increase the emphasis on writing: (a) COM 1103 English Composition should be made a prerequisite for ARC 3613 History of the Designed Environment 1 (HDE 1) in anticipation of more writing in this course in the future; and (b) passing the COM 3000 Writing Proficiency Exam should be made a prerequisite for all history and theory electives in the Department of Architecture.

2. *Ethics Assessment*
The NAAB VTR suggested broadening and strengthening ethics course content in the program. The Department of Architecture posited that existing ethics course content was not well documented but does exist currently in the curriculum. The faculty recommended reinforcement of ethics content at multiple levels of the program: requiring students address ethical issues in upper division studios and thesis work; and strengthening professional ethics in ARC 5913 Professional Practice and in other upper division practice courses.

3. *Advanced Knowledge in Accessibility*
The 2008 NAAB VTR cited accessibility as area of concern that requires curricular or course modifications. The designation of handicapped parking stalls was lacking in the capstone course ARC 4114 Advanced Design 5. In fall 2009 and spring 2010, the coordinator of ARC 4114, Professor Tom Nashlen established an increased emphasis on the issue in his classes as a course coordination topic, and reports that evidence is documented for compliance in this requirement.

4. *Curricular Revisions to the Integrated Design Studio Sequence ARC 2117, ARC 2126, ARC 3117, and ARC 3126*
In 2009-2010, student feedback from the CoAD student group indicated a concern for the Integrated Design Studio Sequence (IDS) course sequence in the second and third year of the program. A student and faculty survey was completed to identify problem areas, overall coordination of coursework in the second and third year. The surveys were beta tested with students and faculty and distributed in the spring term in April. Plans to implement coordination and course work revisions were to be considered for the 2010-2011 year

5. *Review of Grade Point Average (GPA) Distribution to Avoid Grade Inflation*
Efforts continued to review the distribution of grades for all classes, based on data provided by the Office of Institutional Research. The purpose was to review courses and instructors for evidence of grade inflation and large variations in course average GPA's in curricular areas. Reports were distributed and reviewed by administrators and coordinators and utilized to assist chairs and coordinators in full-time and adjunct faculty evaluations, and benchmarking of grades for consistency between sections.

Assessment Year 2010-2011 The assessment activities in fall 2010 and spring 2011 were continuations to action plans of prior assessment sub-committees: Writing, Accessibility, and Ethics, these are summarized below. The work plan for the following year was to assess sustainability in different areas of the curriculum, which was the topic of the Assessment Day 2011.

Action Plans
1. Writing Skills
"Objective: Students will be literate and skilled in writing. This will be evidenced in design and architectural history coursework."

Assessment: Surveys, sample student work, and rubrics were developed from the previous year's assessment day. A pool of writing samples was drawn from the following courses: ARC 4173 Frank Lloyd Wright and His Historical Context (fall 2010) and ARC 4183 20th Century Architecture (spring 2011). The writing samples for evaluation were term paper assignments. The sample consisted of nine papers from the Frank Lloyd Wright class and 13 papers from 20th Century Architecture class.

The samples were evaluated for structure, grammar, syntax, and other mechanical issues, using the LTU College of Arts and Sciences lists of "Banned Errors" and "Minor Writing Errors" as guidelines. They were also examined for structural components such as thesis sentences and introduction-body-conclusion formats. Each sample was assigned a letter grade for purposes of the course, and an alternative grade of "Acceptable" or "Unacceptable" for purposes of assessment. All papers were graded by the same instructor using the same guidelines to ensure consistency. For purposes of assessment, it was determined that twenty-one of the papers (95 percent) were "Acceptable" and only one (5 percent) was "Unacceptable."

Actions: It was proposed to run the test again, as it may be more successful if the assessment is conducted in design studios (such as competition studios) in which writing is required as part of the project submittal. It was also then recommended that an English Composition 2 course be added to the lower division curriculum in place of Technical and Professional Communications to address the students' lack of writing skills. Concurrently, the College faculty voted to bring this issue to the attention of the University's Core Curriculum Task Force through the two College faculty serving on this body)

2. Accessibility Requirements
"Objective: Students will have experiences that promote a high level of professionalism and demonstrate expertise in satisfying and displaying evidence of accessibility requirements in upper design studios."

Assessment: Review of sample of student design projects, syllabi in ALL design studio sequence for compliance: Are instructors addressing it? Are students doing it? NAAB accessibility criteria and objectives must be included within all design course syllabi and other syllabi where relevant. A lack of proper and complete documentation for barrier-free (handicap, ADA, etc., graphics and accessibility) was found. Provision for handicap access and HVAC is one of the many NAAB Criteria associated with ARC 4114 Architectural Design 5, (the comprehensive design course) and other courses.

It was necessary to clarify accessibility requirements and standards for each architectural design studio, for evidence of incorporating accessibility standards into student design projects, and assess results of rubrics for individual projects and studios for completeness and consistency (by faculty and/or individual external jurors).

Actions: The coordinator of ARC 4114 Architectural Design 5 addressed the need to update the inclusion of accessibility provisions and shared a documentation standard covering accessibility standards for parking areas, rest rooms, and ramp requirements in design projects.

3. Professional Ethics Assessment: Lower Division Students
The Ethics Assessment Committee developed the standard Defined Issues Test (D.I.T) based exams with expert consultants for the freshman and junior levels classes in summer 2011 and fall 2011.

Objectives: "a. Students will have opportunity to develop personal values as foundation of integrity and professional ethics.
b. Students will be exposed to professional ethics subject matter in the architecture curriculum."

Assessment: A direct assessment of student ability in this area was performed using a Defined Issues Test based on accepted references in professional and academic circles, In junior year ARC 3117 Integrated Design Studio sections, lower division ARC 1213 Visual Communication 1 classes, and upper division ARC 5814 and ARC 5824 Advanced Design Studios 1 and 2. The exams were scored based on feedback from faculty familiar with these instruments and results were tabulated and student performance was evaluated.

Actions: In phase 1, tests were administered in fall 2011 classes and the results tabulated in spring 2012. Faculty were to recommend curricular changes based on test results. In fall 2012 and spring 2013 phase 2 was to be completed. In spring 2014 NAAB accreditation visit will take place, and visiting team feedback will provide an indirect assessment.

4. Professional Ethics Assessment: Upper Division Students
Objectives: "Graduates will have had experiences that promote a high level of professionalism and integrity, responsible decision making, confidence in approaching opportunities, and pride in their abilities. Graduates will have had opportunities to develop personal values as the foundation of integrity and professional ethics. (Reference: NAAB Criteria C5, C6. C.8, and C.9)."

Actions: Professor Martin Schwartz, and Assistant Dean Ralph Nelson, prepared a memo, "Outline of Essential Issues in Professional Ethics" that formed the basis of new work in this area. ARC 5913 Professional Practice instructors were asked to enhance and extend ethics subject area coursework and to save samples of student work for assessment and review. Adjunct Professor Matthew Bohde reworked the teaching of ethics in ARC 5913 Professional Practice 1 with changes to the course syllabus: it is now the standard syllabus for all instructors in this

course. Examples of student work in this course regarding ethics will be available in the Team Room.

5. Teamwork and Learning Styles Study
Objective: "Graduates will have had defined roles in teamwork experiences in which both process and progress are monitored. Graduates will have team experiences in which they focus on a common goal, take responsibility for their own contributions, as well as for the team's product, and evaluate one another's contribution to the team. Graduates will have had team experiences in which they practice making decisions, reaching consensus, and resolving conflicts. University Goal IV-1,2,3. (Reference: NAAB Criteria C1 and C6)."

Assessment: A research study was initiated in the 2010-11 academic year and applied to studio coursework in the summers of 2011, 2012 and 2013 looking at the relationship between team member interaction, cognitive thinking style, and design processes. The study involved the engagement of 12 teams of upper division architectural design students engaged in a design-based ARC 5804 Critical Practice Studio (formerly titled, Master Class). The studio requires students to work in teams in order to carry out research, consider solutions to a given challenge, and prepare designs. The teams were based on individual cognitive thinking style preferences in order to create heterogeneous team compositions. Heterogeneous thinking styles in teams have been shown to positively affect design quality outcomes but at the increase of intra-team social tension. The studio operated on the presupposition that personality-based instruments have a low probability of predicting individual success but personality-based instruments may have a predictive quality for how team members interact with each other.

Evaluation: Each of the 12 teams of five to seven individuals had representatives of each of the four gradients of thinking style follow Basadur's Simplex model. Gender, ethnicity, cultural background where not factored into the team selection. The study set up a team structure in which no member was identified as a 'leader' or 'coordinator' so to allow emergent and transferral leadership. Success was judged based on clear criteria of judgment. The judgment criteria, the TOISE Qualitative Measure, was developed for the research program and tested for inter-rater and intra-rater reliability (see Plowright, Philip and Matthew Cole (2012). "Bringing Structure to Judging Success in Architectural Design: The TIOSE Qualitative Measure". *International Journal for Architectural Research*. Volume 6, Issue 3. Archnet-IJAR, Massachusetts Institute of Technology. 7-19). The TIOSE Measure contains five (5) factors for judgment. The factors were developed by reviewing the priorities of multi-year outcomes of architectural design projects, discussions with master practitioners and design educators, and the identification of issues involved in core success of architectural projects over a several year period. The factors are divided into two groups. The first group contains three factors (Thoroughness, Informativeness, and Organization) which are considered baseline factors. These pertain to research, data gathering, communication, and project structure. The second group contains two factors (Synthesis and Evocativeness) that are considered advanced factors involving complex intra- and inter-discipline integration, as well as cultural knowledge. This second group requires at least competency in all baseline factors in order to be successful.

Actions: Initial analysis of the pilot study showed a strong correlation between access to diverse thinking styles and quality of design outcomes. The critical factor in team success is hypothesized to be grounded in framing (seeing another's point of view and value) along with quality of interpersonal communication (judgment of authenticity and transparency). They study showed that team cohesion and decision-making structure (value judgment and range of access to content) was as important as thinking style. This information is used to structure future team based projects.

Assessment Year 2011-2012 During 2011-2012 academic years, the Department of Architecture reviewed the following subject areas. In 2011, the University Assessment Committee proposed the additional of sustainability as one of the University's learning objectives.

1. **Sustainability Assessment: Architectural History**
Objective: "CoAD graduates will demonstrate an awareness of how architects and designers have incorporated sustainable techniques and materials throughout the history of world architecture."

Assessment Tools: Examinations in ARC 3613 and ARC 3623 History of the Designed Environment I and 2 courses.

Evaluation: Exams were evaluated to determine if students scored 70% or higher on questions pertaining to sustainable issues. In the results the students answered 54% of sustainability-oriented questions correctly. Several problems led to the unsuccessful results of this assessment. They are discussed individually below.

The history of "sustainability" can only appropriately be addressed in course material covering the late twentieth and early twenty-first centuries; unfortunately, that is beyond the scope of the History of the Designed Environment 2 class. An attempt was made to emphasize the pseudo-sustainable aspects of architects like Frank Lloyd Wright and Louis Kahn, but in the end this really only led to a discussion of the environmental sensitivity of their designs.

Action: An effort was made, in the department, to better define sustainability. Emphasis was be placed on explaining aspects of sustainable design in the appropriate history and theory classes, such as ARC 5643 Design Theory or lecture classes such as ARC 5423 Ecological Issues. A larger sample size was to be evaluates and topics were to be consistently developed for all sections of the class.

2. **Sustainability Assessment: Architectural Design**
Objective: "Students completing the core architectural design studio sequence will demonstrate an understanding of, and an ability to implement, design solutions reflecting the current imperatives of sustainable design as outlined by the CoAD Curriculum committee."

Evaluation: It was proposed that each of the core architectural design studios identify one issue of sustainable design pertinent to the larger educational goals of that studio (i.e.: ARC 2117 Integrated Design 1 focuses on the site; ARC 2126 Integrated Design 2 focuses on interior space; ARC 3117 Integrated Design 3 focuses on tectonics and materials; ARC 3126 Integrated Design 4 focuses on urban design; and ARC 4114 Architectural Design 5, on comprehensive design and systems integration).

Assessment: Each of the established learning sub-objectives were to be measured against criteria derived from and comparable to those found in established industry measurement tools such as LEED, the Living Building Challenge, Green Globes, and the SEED Network.

3. **Sustainability Assessment: Urban Design Studios**
Objective: "Enable the ability to design projects based on holistic knowledge of multiple dimensions of sustainability (social-economic-environmental) across multiple scales (architecture-site-community-city-region). "

Assessment: A grading rubric can be specifically developed for certain studios such as junior-year integrated design studios, especially ARC 3117 and ARC 3126, and the comprehensive design studio, ARC 4114 Architectural Design 5, incorporating specific sustainability measurement criteria such as LEED. Student designs will be analyzed in terms of exceeding, meeting, or under-achieving in the above mentioned evaluation criteria.

4. **Sustainability Assessment: Architectural Technology**
Objective: "Students will demonstrate the ability to exceed codes and standards for sustainability criteria e.g. energy conservation, selecting and integrating materials and systems, and indoor environmental quality. Students will also demonstrate an ability to use Building Information Modeling (BIM) and other computer tools in an interoperable manner for design, construction, and simulation to support sustainable outcomes."

Assessment: Students complete and enter design and construction document projects in local, national, and international competitions. An external body evaluates students' project entries to evaluate sustainable criteria.

Action: Based on feedback from jurors and evaluation of successful winners, the program curricular content was to be adjusted to address shortcomings.

Assessment Year 2012-2013
In 2011-2012, the College focused on two of the NAAB 2009 Criteria: (C9) Community and Social Responsibility and (A9) Historic Traditions and Global Culture. These criteria were selected as they were new NAAB criteria and had yet to be identified and assessed in the program. Both criteria were discussed as part of the department's work on Assessment Day 2012. Faculty groups were formed to investigate appropriate assessment tools, evaluation and actions to be taken to satisfy them in the curriculum.

1. **Urban Group**
Objective: "To meet NAAB criteria C9: Community and Social Responsibility"

Assessment: Assess through design studio projects and class exercises and with design critiques (interim, midterm, and final).

Action: It was proposed that all students take one socially-responsible studio: for example, the Detroit Studio (sections in ARC 3117 Integrated Design 3 and ARC 3126 Integrated Design 4), Allied-Urban Design (ARC 4264 Allied Design), and Activist Architecture (section in ADS 2 ARC 5824).

Responsibility: Core faculty and coordinators of courses cited above.

2. **History and Theory Group**
Objective: "To meet NAAB Criteria A9: Historic Traditions and Global Culture."

Assessment: Course work e.g., papers in ARC 3613 History of the Designed Environment 1, ARC 3623 History of the Designed Environment 2, ARC 4183 20th Century Architecture. Exams (80% or more students achieve C or better)

Action: Documentation of projects and course work results meeting the evaluation standards.

Responsibility: Core faculty and coordinators of courses: History of Designed Environment 1&2; IDS3 Landscape and Urban Globals; Building Systems 1&2; Art and Design Awareness, 20th Century Architecture

3. **Design Studio Group**
Objective: "To meet NAAB Criteria A9: Historic Traditions and Global Culture."

Assessment: Applied precedent studies and design studio projects demonstrating an understanding of systematic precedent relationships and performance.

Action and Evaluation: Students will demonstrate the ability to examine and comprehend the fundamental principles present in relevant precedents and to make choices regarding the incorporation of such principles into architecture and urban design projects. A portion of the student's grade will be based on this criterion.

Objective: "Meet NAAB Criteria C9: Community and Social Responsibility"
Courses: Professional Practice

Tools: Course readings, discussion, papers, and examinations

Benchmark: Student will demonstrate an understanding of the architect's responsibility to work in the public interest to respect historic resources and to improve the quality of life for local, global, and interstellar neighbors. A portion of the student's grade will be based on this criterion.

4. **Technical Classes Group**
Objective: "To meet NAAB criteria C9: Community and Social Responsibility"

Assessment: Course work e.g., projects that demonstrate compliance w/ bldg codes & standards

Evaluation: Students will apply codes and standards successfully. Rubric to evaluate projects work. 80% or more students will score 75% and above exams that cover codes & standards.

Action: Documentation of projects and course work results meeting the evaluation standards.

Additional Department tasks for 2012-2013
The assessment plan for the architecture program was revised to update old NAAB criteria (37 goals) to the NAAB new criteria (3 realms) and match them to the existing University Goals and new educational goals. Results shall be included in the 2013 Department of Architecture.

Complete annual Architecture Program Assessment reports are available in the Team Room.

A description of the results of faculty, students', and graduates' assessments of the accredited degree program's curriculum and learning context as outlined in the five perspectives

At the level of coursework, each semester, architecture students are asked to complete anonymous evaluations for each of their courses. These course evaluations are typically administered electronically via Blackboard, which allows for tracking of response rates. Both full-time and adjunct faculty members are addressed. In the case of tenure-track faculty members, the option of paper-based evaluations are available, to promote maximum response rates. The students are asked to assess course content, pace, difficulty, and organization on a five-point scale.

In addition, students are asked to assess instructor preparedness, clarity, enthusiasm, responsiveness, and fairness on a five-point scale. Lastly, an opportunity is provided for the students to submit comments to expand upon and clarify their quantitative assessments of the above categories. After final grades have been posted, the College administrative staff compiles the results of the evaluations, and forwards them to both the faculty member, and their direct supervisor: the Department Chair.

In addition to annual assessment plans and reports submitted by all academic departments, the University engages in a range of student surveys that yield indirect assessment measures for consideration by the Assessment Committee. The two major surveys used at Lawrence Tech are the National Survey of Student Engagement, scheduled to be administered in the spring semesters of 2014, 2017, and 2020; and the Noel-Levitz Student Satisfaction Survey, scheduled

to be administered in the spring semesters of 2013, 2016, and 2019. As of this writing, the spring 2013 Noel-Levitz survey was not conducted, and rescheduling is pending.

At the curriculum level, the College relies on a range of assessment instruments, including advisory committees, Annual Performance Reports, Assessment Reports, Grade Comparison Reports, Topical Reports, "Conversation with a Chair" sessions, Student Evaluations and Surveys, and other methods specified by tasks forces, committees and administrative requests. Please refer to *section I.1.4 Long Range Planning* for more information on each of these measures.

A description of the manner in which results from self-assessment activities are used to inform long-range planning, curriculum development, learning culture, and responses to external pressures or challenges to institutions (e.g., reduced funding for state support institutions or enrollment mandates)

Information gathered through student course evaluations each semester is utilized to inform planning, curriculum, and culture at the faculty, departmental, and curricular levels. Faculty members are encouraged to review the results of these student surveys, and develop strategies for enhancing classroom delivery techniques to build upon areas of student satisfaction and address areas of weakness. Department chairs review the evaluations of courses taught by each faculty member, and use these results as an opportunity to mentor faculty in their annual review meetings. In the case of adjunct faculty, course evaluations (along with assessment from curricular area coordinators) provide the chairs with a picture of teaching performance. Lastly, curricular area coordinators are provided with composite statistical breakdowns of the evaluations of the courses they coordinate. These reports do not identify individual faculty, but they do help the coordinator identify areas where student satisfaction trends highlight a need for greater clarity, or other curricular or cultural enhancement.

The insights offered by the various task forces, committees, subcommittees and other bodies described in *section I.1.4 Long Range Planni*ng inform the short-, medium- and long-range plans of the Department. The assessments, data sets and other analytics described in that section provide key feedback loops relative to the success or failure of the department in meeting core objectives. For a more detailed account of the curriculum development resulting from these self-assessment activities, please refer to *section II.2.3. Curriculum Review and Development*. For more information regarding new initiatives resulting from the Conversation with a Chair meetings, refer to *section I.1.2 Learning Culture and Social Equity.*

I.2. Resources

I.2.1. Human Resources & Human Resource Development

Introduction

The College of Architecture and Design is administered by a group of individuals who take responsibility for the safe, secure, and orderly coordination of activities, education, and facilities on behalf of the students and faculty. Some of these staff and facilities also serve other departments on campus.

Faculty and Staff

Dean, College of Architecture and Design The Dean is the chief academic and administrative officer of the College of Architecture and Design and is ultimately responsible for its operation. The Dean authorizes all College contracts and financial expenditures. The Dean represents the College to the University administration and Board of Trustees and cultivates relationships outside the College with the profession, industry, and the community. The Dean works with the

Office of University Advancement to raise funds for the College and supervises academic functions including those carried out by other College and Department administrators. All administrative positions listed in this section report to the Dean.

Associate Dean, College of Architecture and Design It is the responsibility of the Associate Dean to support the Dean in the operations of the College of Architecture and Design. This includes general administrative tasks, including business matters and budget control, facilities management, and representing the interests of the College to the University. Additional responsibilities include supporting the relationship between the College and the City of Detroit, its business leaders and design professionals, as well as developing and managing the College's new Detroit Center for Design and Technology. The Associate Dean is also responsible for supervising and supporting College academic accreditations, coordination with the Edward Donley Computer Center (EDCC) for computer hardware and software, and fundraising. The Associate Dean represents the Dean and the College at University and community meetings and events and on University committees. This administrator supervises the Administrator of Student Services, oversees the AIA/Continuing Education program for the College, the woodshop manager, the facilities coordinator, the ACRC (Architecture Computer Resource Center) Manager, and the Digital Projects Librarian (manager of the Architecture Resource Center). The position includes some teaching responsibilities.

Chair, Department of Architecture The Chair has primary administrative responsibility for the academic programs in the Department of Architecture and for faculty-related matters in the Department. Responsibilities include faculty coordination, establishing teaching assignments, making teaching performance appraisals, and directing the overall execution of the architecture curriculum. The Chair oversees scheduling, manages the department budget, and monitors degree programs; and initiates and maintains communications within the Department, to the community, and to local and national professional organizations. The Chair manages faculty and student recruitment and retention for the Department. The position includes some teaching responsibilities.

Associate Chair, Department of Architecture The Associate Chair assists the Chair in the management of student affairs in the Department of Architecture. Responsibilities include assisting the Chair in overseeing course scheduling, teaching assignments, and the department budget; monitoring curriculum and degree programs, meeting with students and prospective students and their families for recruiting, retention, and advising, as well as initiating and maintaining communications within the College. The Associate Chair assists the Chair and the Associate Dean with the preparation of program and accreditation reports. The Associate Chair represents the Chair in Department and University committees and activities. The position includes some teaching responsibilities.

Faculty A full description of educational, academic, and scholarly experience for each full-time faculty member can be found in *section IV.2 Faculty Resumes*. The full matrix of faculty credentials (full-time and adjunct) and courses taught since fall 2011 can be found at https://www.ltu.edu/architecture_and_design/_faculty_matrices.asp and in the Team Room in spring 2014. Resumes for adjunct faculty will also be included in the team room.

Administrator of Student Services The Administrator of Student Services directs student service activities in the College for all departments. The Administrator maintains student records, organizes student orientation needs, leads student advising and registration, coordinates support for student organizations and activities, coordinates student professional employment opportunities, and responds to a range of student inquiries. The Administrator is the College's representative to the University's Dean of Students, Registrar, Admissions, and Advising offices and works with the department Chairs and the Deans to manage student and parent questions, controversies, and appeals.

Student Service Coordinator The Student Service Coordinator assists the Administrator of Student Services with incoming student orientation, registration and admissions matters; and plans, promotes, and coordinates the Paris Study Abroad Programs. The Student Service Coordinator also provides administrative support to the Transportation Design and Industrial Design programs, as well as to the Art and Design faculty, including computer hardware and software and printing for that program, management of student records, and accreditation.

Upper Division Student Services Coordinator The Upper Division Student Services Coordinator provides current and prospective upper division students with academic advice regarding the M.Arch, M.U.D., M.I.D. and M.E.G. programs, requirements for admission, and registration assistance. The Coordinator processes upper division applications, IDP Eligibility Forms for NCARB, independent study requests, and course evaluations; updates the catalog, conducts degree audits in anticipation of graduations, and supports the office work of the Department of Architecture Chair and Associate Chair.

Manager of Marketing and Support The Manager of Marketing and Support assists the Dean and other administrators in the general administration of the College, acting as the chief of staff in the area of supervision, hiring and training of non-academic personnel; and assists with budget and business matters. The Manager coordinates College-based recruitment, marketing and outreach activities including enrollment, articulation agreements with other colleges, website content and social media support, and other College publicity activities. The Manager also oversees and coordinates Industry Advisory Board Meetings, student organizations (AIAS, Student Leadership Council, IASO, IIDA, IDSA and TSD), and coordinates special events for the Dean and the College including participation in National Portfolio Day and other student recruiting opportunities, University events, and similar activities; and carries out other duties as assigned by the Dean.

Assistant to the Dean The Assistant to the Dean provides office work support to the Dean and Associate Dean and to department chairs. The Assistant handles College correspondence, maintains calendars and schedules appointments, coordinates room and event scheduling for the Dean and the College, carries out College and professionally related College research, oversees administrative correspondence, participates in budget control and with expense reports, and assists with faculty and staff personnel issues including the preparation of contracts and other agreements.

Faculty Secretaries Faculty Secretaries provide a range of support services to the faculty and help coordinate College-related activities. They order textbooks, coordinate the scheduling of College events and reserve rooms, photocopy faculty work, distribute inter-departmental communications, post faculty and student communication electronically to the University website, “Blackboard” online communications website, and dissemination by email. They handle numerous clerical tasks generated by the faculty. The Secretaries distribute faculty contracts, monitor class cancellations, and keep faculty meeting minutes.

Because the Department offers a substantial schedule of evening courses, one Faculty Secretary is in residence at the College from 1:00 p.m. to 8:00 p.m., Monday through Thursday. The evening Secretary specializes in course evaluations, filing grades, file management, making arrangements for the Detroit Studio, and carrying out other faculty support tasks.

Facilities Coordinator The Facilities Coordinator supports the school through the management of its audio-visual equipment in classrooms and the auditorium and with the arrangement of audio-visual setups for specific events. The Coordinator is responsible for equipment management including inventories of and maintenance or repairs to College equipment and properties, and assists in the operations of campus buildings. The Coordinator is responsible for general security related maintenance tasks associated with equipment, the storage of student

work and project archives, and studio cleaning. The Coordinator manages maintenance of the Affleck House, the Frank Lloyd Wright-designed residence owned by the University.

Digital Projects Librarian / Architecture Resource Center The *Architecture Resource Center* (ARC) is managed by the Digital Projects Librarian and library assistants, including students. The Librarian provides research assistance to students and faculty, organizes the Center's holdings, and directs Center assistants.

The *Architecture Resource Center* is associated with the University Library and it addresses the architecture and design research and teaching needs of students and faculty. The Center houses course reserve materials, and audio-visual equipment including the collection of photographic slides, slide and data projectors, photographic equipment with a small photo studio space, and building performance instrumentation. The Resource Center holds a small collection of books and journals for convenient reference as well as the Drawing Collection, College Archives, and the Video Collection, which include recordings of public lectures held in the College over the years. The ARC is in the process of digitizing the entire collection of 35mm slides.

Woodshop Manager The Woodshop Manager is responsible for shop safety, shop maintenance, the purchasing of materials and equipment, the supervision and training of students, and the supervision of shop assistants. The *Woodshop* supports students with the development of their prototype construction ideas and models for coursework.

Architecture Computer Resource Center Manager The ACRC is directed by the ACRC Manager who coordinates student assistants, orders materials, and maintains equipment. The *Architecture Computer Resource Center* (ACRC) is the College print lab and is housed in the College. It provides students and faculty with cost savings and convenient printing services. Student assistants are available to assist with printing and plotting. The ACRC also provides a large flat scanner for student use.

Faculty and Staff Policies
The University maintains a series of policies to direct the activities of administrators, faculty, staff, and students. They include:

Human Resources to Support Learning and Achievement The University has specific requirements for each faculty position, which are outlined in the Faculty Handbook. Full-time faculty credentials, experience and resumes, including scholarship and research information, and course assignments for the last two years may be found in *section I.3.3 Faculty Credentials*.

Diversity Lawrence Technological University and the College of Architecture and Design are committed to the establishment and continually advancing atmosphere of social equity and respect among students, staff and faculty. Information on the University's and CoAD's diversity polices and initiatives may be found in *section I.1.2 Learning Culture and Social Equity.*

EEOA / Equal Employment Opportunity Lawrence Tech is an equal opportunity employer. The University's Employee Handbook states: "Equal employment opportunity has been, and will continue to be, a fundamental principle at Lawrence Tech, where employment is based upon personal capabilities and qualifications without discrimination because of race, color, religion, sex, national origin, disability, height, weight, marital status, or any other protected characteristics as established by law. The policy of Equal Employment Opportunity applies to all policies and procedures relating to recruitment and hiring, compensation, benefits, termination and all other terms and conditions of employment."

Furthermore, the University has implemented an Affirmative Action Plan (AAP), which has been developed to:

- Prohibit discrimination on the basis of race, sex, national origin, age, religion, marital status, Vietnam-era veteran status and mental or physical disability.
- Establish a commitment to employ women, people of color, people with disabilities, and veterans.
- Assure that the University's AAP aligns with federal and state laws, regulations and executive orders.

The Office of Human Resources has been charged with assuring that Lawrence Tech complies with both the Americans with Disabilities Act (ADA) and the Persons with Disability Civil Rights Act (PWDCRA) and to ensure equal opportunity in employment for qualified persons with disabilities. In addition to establishing procedures intended to provide persons with disabilities meaningful employment opportunities, "Lawrence Tech makes reasonable accommodations for qualified individuals with known disabilities unrelated to the performance of the duties and responsibilities of the position unless doing so would result in an undue hardship. All employment decisions are based on the merits of the situation in accordance with the defined criteria, not the disability of the individual. This policy governs all aspects of employment, including selection, job assignment, compensation, discipline, termination, and access to benefits and training." This text appears in the Faculty Handbook, which is available in the Team Room.

Workload Balance of Faculty and Staff
The tutorial exchange between students and faculty and staff is maintained and student achievement is supported through faculty and staff assignments within the College of Architecture and Design, as well as support from the University community.

Faculty and Students
Faculty assignments are determined by University policies as articulated in the Faculty Handbook, and as interpreted by the College. The University has established a relatively wide range for annual faculty assignments: teaching (40%-80%), service (10% minimum), and scholarship (10% minimum). As practiced in the College of Architecture, each full-time faculty member is expected to maintain a minimum of 50% teaching and 15% student advising (as a service commitment). Other assignment categories are negotiated between the faculty member and the chair, and they are reviewed as part of each faculty member's annual performance review. These assignment allocations promote the College's strength as a teaching institution and secure adequate time for one-on-one conversations with students. All faculty members post and maintain office hours, so as to be available for student advising and consultation.

In addition, faculty members routinely provide individual or small group instruction to students through independent studies, directed studies, and thesis courses. These individualized courses are given credit in the faculty members teaching assignment load percentage. Faculty members are also given assignment release time or an allocation of service percentage in order to advise student groups in the College and University; examples include the IDP Educator Coordinator, faculty AIAS liaison, and the faculty athletics advisor.

Faculty members, both full-time and adjunct, also supervise the work of students in several capacities. Upper division research assistants work closely with individual faculty members to support their research agendas. Student teaching assistants support faculty members in the delivery of their classes. Both full-time faculty members and, in particular, adjunct faculty frequently hire students to work in their professional practices.

A College-based Student Leadership Council exists to foster a dialog between students and the administration. Each academic year, student leaders in the College identify key issues to be addressed and problems to be solved. For more information, please refer to section I.2.2 Governance.

The Chair of the Department of Architecture holds regular "Conversations with the Chair" sessions with students. The result of these activities has been a significant increase in student services, facilities improvements, more effective and cooperative student organizations, and better communications. For more information, please refer to section I.1.2 Learning Culture and Social Equity.

College Staff and Students

The College maintains a student services staff, headed by an administrator. The staff maintains student records, oversees the advising process, tracks academic probation, audits student records for graduation, refers students to counseling or other University services, and supports student organizations. As an indication of the importance placed on student success, the dean of the College is the academic advisor for all students that are placed on academic probation; the dean is assisted in this role by the Administrator of Student Services.

The Dean's Office, through the Manager of Marketing and Support, maintains student scholarship data for both existing and prospective students. Beyond University-based scholarships, information is made available to students and their families on philanthropic grants, as well as non-University based scholarship aid and fellowships. The Dean's Office, as a service to student organizations, maintains their financial accounting, thus, allowing all organizations to exist with a solid financial footing. Additionally, the Dean's Office support and manage fundraisers annually that provide funding for specific needs of the organization.

University Support for Students

The College maintains a sound and consultative relationship with the University's Dean of Students on issues and services including University athletics, support for student organizations, student housing, food services, campus safety, and disciplinary action, when necessary. The Dean of Student's staff is capable of assisting students and alumni with career services, resume development, job referrals, and placement. The Career Services Office, in cooperation with the AIAS chapter, also holds several seminars for students each year to increase employment market awareness, as well as a series of "career day" events that bring students and potential employers together. A 2013 survey of recent graduates of the College of Architecture and Design indicate an 89% hire rate for the immediate period following graduation.

In the Taubman Student Services Center, the University maintains a "One Stop Center" that addresses a variety of academic, financial, and personal student needs. The Center offers testing and placement, counseling, course assistance, and tutoring through the Academic Achievement Center. Additionally, the University maintains an Office of Commuter Services. This center organizes student events and trips to provide a richer college experience for students that do not live on campus.

Opportunities to Pursue Professional Development for Program Improvement
Faculty Development and Advancement

College faculty members are active members of professional organizations, scholars, practicing architects and designers, researchers, contributors to community groups and civic planning and development efforts, as well as teachers. Evidence as to how faculty members remain current in their fields and bring new insights to practice and teaching, may be found in *section I.3.3 Faculty Credentials*.

The Lawrence Technological University *Faculty Handbook* was substantially updated in 2012 to reflect the needs of a changing university and new academic opportunities. The faculty, faculty senate, administration, and the Board of Trustees approved this document. Criteria for faculty

appointments, promotions, determination of rank, tenure, and faculty development, and sabbatical policies are described in the *Handbook*, which is available in the Team Room.

Support for Research, Scholarship and Creative Activities
The College of Architecture and Design and the University have established policies and practices to support research, scholarship, and creative activities among faculty. The College supports faculty design and research labs, as well as outreach activities. They include financial and in-kind support, incentives, recognition, and the assignment of time to undertake these activities. Policies and practices include:

Sabbatical Leave. The University has a liberal policy of granting sabbatical leave to undertake research and scholarship. Each year, typically, one and sometimes two faculty members in the College of Architecture and Design are awarded a one semester sabbatical leave with full pay. The award is a competitive process, based on the submission of a sabbatical proposal. Upon returning to the campus, each recipient presents research findings to the University faculty and staff at a symposium sponsored by the University's Faculty Senate. Faculty members are also encouraged to seek other means to disseminate their sabbatical findings.

Seed Grants. The University awards a series of "seed grants" to faculty through a competitive process judged by faculty peers. The grants average approximately $3,000 and they are intended to jump start research that will ultimately lead to presentations, publications, or further externally funded research. Over the last three years, six seed grants have been awarded to seven members of the CoAD faculty that collectively totaled $16, 901 in funding.

Specialized or Sponsored Grants. The College, University, and individual faculty members maintain relationships with grantors, who support faculty research. Recent research grants have included awards from the American Institute of Architects (AIA), the Ford Motor Company Fund, the Coleman Foundation, the Michigan Architectural Foundation, and the Local Initiatives Support Corporation (LISC), among others. Faculty members also individually pursue grants from regional and national grantors, with support from the College and University.

Upper Division Research Assistants. The University awards up to four research assistantships to the College annually to assist faculty members in pursuing their research agenda. The upper division assistant receives a full tuition fellowship in return for 20 hours per week of research support to the faculty member. Through a competitive process, faculty members may be awarded the services of a full assistant or a half-time assistant.

Student Assistants. Faculty members may apply for student assistants to help with grading, technical support, or tutoring students. These assistantships are granted, in part, to allow faculty members time to pursue research and creative activities.

Scholarly Travel. The College maintains a fund to support scholarly travel to present papers or exhibit work at peer reviewed venues, both national and internationally. In most years, all faculty members who apply will receive full or substantial support for dissemination of their research and creative activities. Faculty members that are pursuing tenure at the University are prioritized for full support. In the last two years, faculty members have received full or partial financial support to present papers and attend conferences in locations such as Milan, Italy; Barcelona, Spain; Montreal, Quebec; Jeddah, Saudi Arabia; Venice, Italy; Rio de Janneiro, Brazil; Dublin; Ireland; and Oxford, England.

*Faculty "Brown Bag" Series***.** The College faculty sponsors a "brown bag" series of presentations that allows faculty members to present their research findings and receive critiques from peers. This allows faculty members to better prepare external dissemination of research and creative activities. Detailed information on the presentations can be found in *section I.1.3 Architectural Education and the Academic Community.*

Faculty Exhibitions. The College operates a downtown storefront gallery, Studio Couture, that offers a public audience for creative work produced by faculty.

Awards
The University sponsors several awards for faculty excellence and achievement. They are competitive and include financial awards. CoAD faculty and staff have been recognized frequently:

Marburger Award
The Mary E. and Richard E. Marburger Fund For Excellence in Achievement Awards are presented annually to an outstanding faculty member, staff member, and administrator. Each recipient receives a stipend of $1,000. Recent recipients from the CoAD are:

2013 James Stevens, Faculty Member of the Year
2012 Gayle Schaeff, Staff Member of the Year
2011 Keith Nagara, Distinguished Achievement Award: The Champion for Institutional Excellence and Preeminence.
2010 Leslie Michalik, Administrator of the Year
2008 Joongsub Kim, Distinguished Achievement Award: The Champion for Institutional Excellence and Preeminence.
2007 Philip Plowright, Faculty Member of the Year

Teaching and Using Technology Award
The Teaching and Learning Using Technology Award is given annually to a faculty member who demonstrates an "innovative use of technology and strategies to support creation of an engaged learning environment." The award includes a $750 stipend. Recent recipients from the CoAD are:

2013 Mark Farlow (adjunct)
2011 James Stevens
2010 Constance Bodurow
2009 Danny Price

Coleman Foundation Faculty Entrepreneurship Fellows
The Coleman Foundation is a private, independent grants organization that focuses its activities primarily in the Midwest. The Foundation supports cancer care, treatment and research; disability services; and education with a strong emphasis on entrepreneurship. Each year, faculty members are awarded Coleman fellowships that include an average of $5,000 per fellow for the development of entrepreneurial education content in new or existing courses. Recent Coleman Fellows from the CoAD are:

2013-14 Anirban Adhya and Edward Orlowski
2012-13 Constance Bodurow and Amy Deines
2011-12 Steven Coy
2010-11 James Stevens
2009-10 Peter Beaugard

Kresge Foundation Visual Arts Fellow
In 2013, adjunct professor Charles O'Geen, won an unrestricted prize of $25,000 as one of 18 Kresge Artist Fellows in the Literary and Visual Arts.

Salary Adjustments. The University and College conduct annual reviews of faculty performance. These evaluations cover teaching, service, and research and creative activities. They form the basis for merit salary adjustments or performance-based salary adjustments.

Payment of Organization Dues. The College typically pays a faculty member's dues to a professional or academic organization based on the faculty member's request. Awards are made if the faculty member is active in organizational leadership or if the organization can assist the faculty member in career development. Furthering faculty research and creative activities are among the reasons for granting financial support. In fiscal year 2012, the College covered faculty organizational dues in the amount of $8,671. In fiscal year 2013, that amount increased to $10,602.

Faculty Assignments and Contracts. Faculty members are allotted 20% of their time to pursue research, creative work, or consulting activities that can further their professional development and assist in developing a dossier to support a tenure application.

The Tenure Process. The tenure process at LTU is rigorous. It is a two-step process that involves a mid-term review by faculty peers and a final tenure review by an assigned committee, administrative review, and a final tenure decision by the University's Board of Trustees. Teaching; Research and Creative Activities; and Service to the University, College, Profession and Community are all criteria in the granting of tenure. More information on the tenure and promotion process may be found in the Faculty Handbook in the Team Room.

Visiting Faculty

In the last few years, the CoAD has hosted several visiting faculty members. This program gives visitors access to the College facilities, students and faculty, and it enlarges the College's experience with the world and new subject areas. The program is clearly at an early point, but it is one that will continue.

The list of visiting lecturers, faculty, and critics is extensive and reflects the CoAD's interest in a wide range of architectural, interior, urban, transportation, sustainability, graphic, development, and design thinking activities now under discussion in the profession. The CoAD has also hosted regional, national, and international figures in these conversations in public lecture venues, as well as in courses.

Visiting Scholars and Professors

Gi-Mun Seong
Associate Professor and Visiting Scholar, fall 2011 to summer 2012
Department of Architecture
Chungju National University, Korea

Joohi Ryu
Assistant Professor and Visiting Scholar, fall 2011 to summer 2012
Department of Architecture
Chungnam National University, Korea

Professor Seong and Professor Ryu visited CoAD to advance their studies on public-ness and place identity in urban squares, comparing case studies in Korea and the United States. They were hosted by CoAD Professor Joongsub Kim.

A. Alfred Taubman

Mr. Taubman, the well-known real estate and retail shopping center developer and philanthropist, joined the CoAD in the fall of 2010 to co-teach (with CoAD Dean Glen LeRoy, FAIA, FAICP) a Real Estate Development course, emphasizing his understanding and analysis of land economics and the psychology of retail design. Professor Taubman delivered four lectures, brought his business associates (architects and others) to present material to the class. He also participated in the assessment and discussion of the students' team-based semester projects.

Visiting Critics
The following architects and professors, based in practices and at universities across North America, taught with us as studio leaders and critics in the upper division Critical Practice Studio (formerly Master Class) in summer semesters since 2007.

Shane Williamson, FCA and Betsy Williamson of WilliamsonWilliamson, Toronto, Ontario, Canada Academic affiliation: University of Toronto, 2007

Dan Wood, AIA and Amale Andraos of WORKac, NYC, New York
Academic affiliation: Columbia University and Princeton University, 2008

David Dowell, AIA and Josh Shelton, AIA of El Dorado Architects, Kansas City, Missouri
Academic affiliation: University of Kansas, 2009

Alexander D'Hooghe PhD of ORG, Boston, Massachusetts
Academic affiliation: Massachusetts Institute of Technology (MIT), 2010

Mason White of Lateral Office, MRIAC, Toronto, Ontario, Canada
Academic affiliation: University of Toronto, 2011

Dale Clifford of Binary, Pittsburgh, Pennsylvania and Tucson, Arizona, 2011
Academic affiliation: Carnegie Mellon University, 2012

Georgeen Theodore RA, Tobias Armborst and Daniel D'Oca of Interboro Partners, Brooklyn, New York Academic affiliation: New Jersey Institute of Technology (Theodore), Harvard University and Maryland Institute (D'Oca), and Vassar College (Armborst), 2013

Students
Introduction: Admissions Policies and Procedures All applications for admission to the accredited architecture degree program are evaluated on the prior educational and professional experience of the applicants based on the submittal of specific documentation described below. The application review process is administered by University admissions counselors, the College's Administrator of Student Services, and the Associate Chair of the Department of Architecture.

Application Requirements Prospective students must complete and submit one of the following applications for admission, the LTU Undergraduate (CoAD lower division) Application, the LTU Graduate (CoAD upper division) Application, the Common Application, or the Universal College Application. These applications are available online at http://www.ltu.edu/futurestudents/apply.asp. Students may download paper applications or apply online.

In addition to the application and depending on the academic status of the applicants (high school senior, home-schooled, secondary-level student, transfer student, etc.), Lawrence Tech requires that applicants submit the following items:

M.Arch DE Direct Entry Master of Architecture—168 credit track
Freshmen and transfer students must submit the following:
* LTU Undergraduate, The Common Application or the Universal College Application (http://www.ltu.edu/futurestudents/apply.asp). Students can download paper applications or apply on-line.
* Official high school and college transcripts
* Letter of recommendation from a teacher/professor at the last college the student attended.
* One page essay including: educational and professional goals; involvement and accomplishments; memberships; community service; and organizational and leadership

initiatives.
* ACT or SAT scores
* Portfolio of art and design work (digital or hard copy).

M.Arch 36 Master of Architecture—36 credit track

There are no application requirements for LTU students already enrolled in the CoAD M.Arch Direct Entry track with a cumulative GPA of 3.0 or higher. These students automatically proceed into the upper division courses**.** Non-LTU pre-professional students, LTU lower-division students with a GPA of 2.99 or lower, and Post-Professional must submit the following:

* LTU Graduate Application (http://www.ltu.edu/futurestudents/apply.asp).
* Official college transcripts from all colleges attended.
* A resume, including all work experience and extracurricular activities.
* Three letters of recommendation: two from faculty members and one work reference (preferably from an immediate supervisor at the applicant's current place of employment).
* Educational transcripts from a pre-professional architecture program that demonstrate the applicant's acquisition of NAAB competencies in subject areas covered by LTU's lower division coursework. These NAAB competencies are abilities in the following areas:

  A4 Technical Documentation
  A7 Use of Precedents
  A8 Ordering Systems
  A9 Historical Traditions and Global Cultures
  B1 Pre Design
  B2 Accessibility
  B4 Site Design
  B5 Life Safety
  B6 Comprehensive Design
  B8 Environmental Design
  B9 Structural Systems
  B10 Building Envelope Systems
  B11 Building Service Systems
  B12 Building Materials and Assemblies

* A demonstration of NAAB competencies in a range of visualization and design abilitiesand experience by the submittal of a portfolio of work. Work should include creative, academic work and may include professional work with a clear statement of the applicant's contribution. Portfolios must be submitted electronically in a single PDF format and contain no more than 25 images, with a total size not to exceed 15 MB.
* A one-page essay describing the applicant's personal and professional achievements within the last five years and the applicant's specific academic and professional goals for the next five years.

M.Arch 3+ Master of Architecture—90 credit track

Students who are Post-Baccalaureate Students (earned a Bachelor degree in a non-architecture discipline) must submit the following:

* LTU Graduate Application (http://www.ltu.edu/futurestudents/apply.asp).
* Official college transcripts from all colleges attended.
* A resume, including all work experience and extracurricular activities.
* Three letters of recommendation: two from faculty members and one work reference (preferably from an immediate supervisor at their current place of employment).
* Portfolio of art and design work (digital or hard copy).
* A one-page essay describing the applicant's personal and professional achievementswithin the last five years and the applicant's specific academic and professional goals for the next five years.

International Students International students must submit the following additional items to the Office of Admissions at least 90 days before the desired semester of enrollment:

* Certified true copies of original academic transcripts and an authorized English translation when necessary. Any and all college or university transcripts must be submitted to World Education Services (www.wes.org) for a course-by-course evaluation.
* Course descriptions and syllabi translated in English
* Evidence of English proficiency in countries where English is not the primary language.
* Affidavit of Support (for F-1 visa holders)
* Completed F-1 visa Transfer Form (for F-1 students transferring from a U.S. college or university)
* Home country address
* Completed Document of Support Verification Form http://www.ltu.edu/futurestudents/international/obtaining_I20.asp) or available from the Office of Admissions.

Applicant Status: Freshman Students Students attending college for the first time are considered freshmen. High school students who have completed some post-secondary coursework before their high school graduation are also classified as freshmen students.

Freshmen must have a 2.75 re-calculated grade point average to be admitted as architecture majors. (A re-calculated grade point average is that which includes only courses in the following subject areas: English, foreign language, mathematics, social sciences and natural sciences.) If the re-calculated grade point average is 2.5 to 2.74, students are accepted as "undeclared" majors in the College of Arts and Science with an "architecture attribute," so that the student's academic advisor knows of the intended major. After completing a minimum of 12 credit hours of coursework, a student may petition to enter the major of choice. Freshman with a re-calculated grade point average 2.49 and below are denied admission to the University.

Applicant Status: Transfer Students Transfer students are those who have graduated from high school and have taken 30 or more credits at a post-secondary institution. Students with an associate's degree are classified as transfer students. Transfer students must have an overall grade point average of 2.2 or higher (University requirement is 2.0) to be admitted to the architecture program. In order for a course from another institution to be transferable to Lawrence Tech, transfer students must have completed the course with a grade of "C" (2.0) or higher. Award of transfer credit is based on transfer guides and articulation agreements, portfolio review, course descriptions, and syllabi. Transfer guides are available for review at http://www.ltu.edu/futurestudents/transfer/transfer_guides.asp. As of the fall semester 2014, transfer students must submit design portfolios for review, even if there are transfer credit guides or articulation agreements in force, to verify that LTU and NAAB learning objectives have been addressed.

Applicant Status: Pre-professional Students Pre-professional students are those who have earned a Bachelor of Science in Architecture (BSc) degree prior to their application for admission to Lawrence Tech. These students are typically applicants to the Master of Architecture (M.Arch) program. Recent graduates of Lawrence Tech with a BSc degree who have a grade point average of 3.0 or higher are automatically admitted to the Master of Architecture program. Students who entered the program as Direct-entry M.Arch students do not receive the BSc degree. Conditional admission may be awarded to students with a lower grade point average if the quality of their admissions documents (letters of recommendation, design portfolio, and work experience) indicate that there is a strong likelihood of success in the program. These students are required to maintain minimum 3.0 grade point averages each semester and, in some cases, to maintain a minimum grade of B (3.0) in each class to maintain their status in the program. In the event that the applicant's transcript is deficient in one or more courses, students may be admitted under the condition that required additional courses are completed successfully.

Applicant students who hold pre-professional degrees in architecture other than those specifically denoted as the Bachelor of Science degree in Architecture may be admitted to the M.Arch program after a careful review of the degree transcript, and where necessary, reviews of course descriptions, course syllabi, and design portfolios to verify that LTU and NAAB learning objectives have been addressed. In the event that the degree is nearly equivalent but deficient in one or more courses, students may be admitted under the condition that required additional courses are completed successfully.

Applicant Status: 3+ Master of Architecture Students Students who have earned a bachelor degree in a subject other than architecture prior to application to the M.Arch degree program are required to meet the same application requirements as the pre-professional degree students, with the exception that they are not expected to submit a substantial portfolio of design work. The curriculum for this path to the professional degree is designed to fill in course deficiencies and thereby meet CoAD and NAAB standards.

Admission Decision Procedures
All applications are processed through the University's Office of Admissions. Admission decisions are made only after the applicant has submitted all requirements.

*Freshmen***.** Freshman student applications are reviewed by an admissions counselor from the University's Office of Admissions. Each admissions counselor is responsible for reviewing applications from specific geographic areas.

Transfers. Transfer applications are processed by a University admissions counselor who handles architecture majors. Transfer credit for design coursework is reviewed by the Associate Chair of Architecture, who reviews portfolios, transfer guides and articulation agreements (where in effect) and course descriptions and syllabi as necessary. Faculty subject area coordinators may also be consulted to verify the validity of the transfer request.

Pre-professionals. Pre-professional degree applications (for admission to the M.Arch program) are reviewed by the Associate Chair of Architecture.

3+ Master of Architecture. 3+ Master of Architecture applicants are reviewed by the director of the 3+ M.Arch program and by the Associate Chair of Architecture, if required.

Financial Aid
Approximately two-thirds of the University's students receive financial assistance from private, state, or federal programs, which totals more than $40 million annually – $16 million in outright grants and scholarships and $26 million in low-interest loans. Financial aid eligibility varies by student, depending on need, merit or ability, and the availability of funds.

The Office of Financial Aid, as a division of Enrollment Services, assists students with financial planning. Knowledgeable counselors help students explore the ways to finance their education including scholarships, grants, work study, loans, alternative loans, and government benefit programs for the education of veterans.

All students are encouraged to complete the Free Application for Federal Student Aid (FAFSA) by March 1 and provide all requested documentation by April 1 every year to avoid potential processing delays. Awards are offered based on a first-come, first-served basis.

Specific information on the range of available scholarships may be found in *section I.1.3 Architectural Education and the Students.*

Scholarships
Architecture students may be qualified for a number of University and College-based scholarship programs. Scholarship programs are yet another way that the College can bring a qualified, diverse student body to the study of architecture. There are several competitive and significant scholarship enhancements available for students entering the College of Architecture and Design. Digital portfolios can be submitted to archportfolio@ltu.edu.

University Scholarships. All lower-division students are automatically reviewed for merit scholarships at the time of their acceptance. (http://www.ltu.edu/futurestudents/freshman/scholarships.asp). No additional applications or steps are necessary. Scholarships amounts range from four-year full tuition for full time students to $3000 annually for part-time students. Direct-entry M.Arch students with good academic standing receive a five-year scholarship.

Endowed Scholarships. During the spring semester each year, all returning students may apply for endowed scholarships for the next academic year. Designated scholarship awards are made in the range of $500 to $5,000 per year. Applicants may be full-time or part-time students with sophomore, junior, or senior standing within the year of the award. Applications are due May 15th for the next academic year.
Applications are available from the One-stop Center, the Office of Financial Aid, the Scholarship Committee Chairperson, and the Administrator of Student Services from the College of Architecture and Design. A printable version of the scholarship application form is available to students online at http://www.ltu.edu/financial_aid/scholarships_current_students.asp.

Scholarships Available at the College of Architecture and Design
The College of Architecture and Design Portfolio Scholarship. A student must be qualified for a scholarship at one of the current university scholarship levels (Lawrence Tech, Honor, Trustee, or Trustee Grant) in order to be considered for a supplemental portfolio-based scholarship. Eligibility is limited to students entering programs within the College of Architecture and Design as a first-year student (Architecture, Interior Architecture, Graphic Design, Digital Arts, and Game Art).

The Oscar and Lynn Freimann Scholarship Competition. An endowment has been created as an annual source of scholarship funds for the students of Lawrence Tech. Mr. Freimann, who devoted most of his life to the field of architecture as chief draftsman for several major Detroit firms, stipulated that the awards be made on the basis of architectural drafting skill, as well as student academic standing and general architectural achievement.

The Robert T. Hobson Memorial Scholarship Competition. Through the generosity of the Metropolitan Detroit Chapter of the Construction Specifications Institute (CSI) an annual grant is provided as a source of scholarship funds for LTU students. CSI has stipulated that the awards be made on the basis of a recognition by the student of the importance in preparing architecturally correct details and the incorporation of appropriate references to materials on the drawings and in the accompanying specifications.

Virginia North Upper-division Fellowship in Architecture and Design. In order to qualify, students must be enrolled either full or part time in either the M.Arch or Master of Interior Design program and maintain a minimum 3.0 GPA. The scholarship is intended to be based on financial need as well as merit based on incoming GPA, design portfolio, and record of achievement.

Architecture Alumni Traveling Fellowship in Honor of Earl Pellerin. The Architecture and Design Chapter of the Alumni Association of Lawrence Technological University (ADC AA LTU) funds a fellowship in honor of Earl W. Pellerin, FAIA, Hon.DArch'63, who was the founding Dean of the College of Architecture and Design. Dr. Pellerin firmly believed that travel was an important part of an architect's education. To honor his memory, the ADC AA LTU awards a travel and study

stipend annually to a meritorious upper-division student.

Masonry Institute of Michigan Scholarship Fund. The new MIM Scholarship Foundation has been formed to build an endowment to fund scholarships for architectural students at four colleges of architecture in Michigan.

Women's Architectural League Scholarship. This scholarship is open to both men and women. The applicant must be accepted into an accredited program leading to a degree in architecture or landscape architecture within the State of Michigan.

Alpha Rho Chi Medal. The purpose of the award is to encourage professional leadership by rewarding graduating, senior student accomplishments to promote the ideal of professional service.

Michigan Architectural Foundation President's Scholarship Fund. The purpose of the MAF is to recognize outstanding "leadership" in future architects and provide them financial support. Awards are made based on academic record and the submission of a paper.

Michigan Foundation for the Arts Scholarship. The student must be a Michigan resident with senior status. The student must demonstrate financial need and have an established record of academic excellence.

Henry Adams Medal and Certificate Program. Each year The American Institute of Architects awards an engraved medal and certificate of merit to the top-ranking graduating student in each architecture program accredited by the National Architectural Accrediting Board. LTU and the other programs present this award at the AIA Michigan Annual Design Awards program.

John Luttig Scholarship Fund. The mission of the John Luttig Scholarship Fund is to provide scholarships to deserving high school graduates from a Michigan school district who are pursuing an architectural degree at Lawrence Technological University.

The Motor City Mixed-Media Arts Competition. The Motor City Competition awards over $188,000 in merit-based scholarships and prizes to high school and entry-level college or community college students within the U.S. and Canada. It is the intent of the College that this program of several awards will attract students who have strong visual communications, art, and design talents, even if their records are less strong than applicants that receive premier academic scholarships, and that this will assist in enrolling a more diverse range of students in our architecture program. More information is available at the Motor City Competition website: http://tinyurl.com/kd63qw4.

Scholarships Outside the College of Architecture and Design

Architecture Traveling Fellowship Program. LTU students compete for this prize, which is sponsored by the Skidmore, Owings and Merrill Foundation. The traveling fellowships recognize the need to help young architects to broaden their education and take an enlightened view of society's need to improve the built and natural environments. Two fellowships are awarded annually to students in accredited architecture programs in the U.S.

ProNet David W. Lakamp Scholarship. Every year since 1990, The American Institute of Architects has awarded a scholarship to a student who best demonstrates a strong interest in risk and practice management. The scholarship is open to fourth year students of architecture pursuing a NAAB-accredited professional degree program.

Gensler Brinkmann Scholarship. The Brinkmann Scholarship recognizes students entering their final year of a CIDA-accredited interior design program. Finalists are considered for a paid

internship in a Gensler regional office for a summer, and selected winners also receive an academic scholarship paid directly to their college or university toward their final academic year. In 2011, Lawrence Tech fourth-year student Keith Marks, a dual major in architecture and interior design, won this scholarship, and worked in Gensler's Denver office.

LTU students are able to apply for the following scholarships, by using the Upperclass Scholarship Application, and submitting it to the LTU Scholarship Committee:

The Southeastern Michigan Building Officials and Inspectors Association (SEMBOIA)
Minoru Yamasaki Scholarship
Brian Mutnick Memorial Scholarship
Harley Ellis Endowed Architecture and Engineering Scholarship
McClure Charitable Fund Scholarship for Architecture
Frank Dioszegi Architectural Scholarship
IFMA Southeastern Detroit Chapter Facility Management Scholarship
Philip A. Nicholas AIA Memorial Endowed Scholarship
Elaine Rice Scholarship for Veterans
Adam Kavelman Memorial Scholarship

The College website has additional information on scholarships, including contact and application links; please refer to http://www.ltu.edu/architecture_and_design/art_Design/scholarships.asp.

Student Diversity and Equity Initiatives

Non-discrimination Policy. Lawrence Technological University adheres and conforms to all federal, state, and local civil rights regulations, statutes, and ordinances.

Financial Aid. Financial assistance at the university is granted without regard to an applicant's race, sex, color, age, handicap, marital status, or national or ethnic origin.

Disability Services. The Office of the Dean of Students coordinates Lawrence Technological University's compliance with Sections 503 and 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act. The University does not discriminate against students with disabilities in recruitment, admission, or treatment after admission. In addition, the University makes reasonable accommodations to permit students with disabilities to fulfill academic requirements and provides effective auxiliary aids to ensure that they are not excluded from programs because of their disabilities. Eligibility for accommodations is determined on an individual basis.

***Support Services*.** The Office of the Dean of Students coordinates Multicultural Student Support Services to advance the University's commitment to diversity in increasing the recruitment, retention, and graduation of all students, and particularly underrepresented groups (including racial, ethnic, women, and GLBT students). This area serves as a support and advocacy network through which students from under-represented groups are provided effective assistance during their academic tenure. Programs include welcome receptions, orientations, cultural programs, and advising.

Addressing the Issue of Diversity. Lawrence Technological University and College of Architecture and Design fundamentally believe in the concept of faculty and student body diversity. As an institution located just outside the city of Detroit—a city with an over 80% minority population—there is a desire to assume a leadership position in this area. Despite attempts to foster greater diversity, the College faces some fundamental hurdles. As a College with private school tuition, the cost of attending LTU is out of reach for many central city minority applicants. Scholarship aid, while generous, does not close the substantial gap between LTU and community

colleges or government supported universities. There are also not enough minority-based or female-based targeted scholarships at the University.

Nevertheless, the College works diligently to attract full-time and adjunct minority and women faculty members. Specific requests are made for women and minority applicants, and offers of employment have been made to both. The reality is that the percentage of African American architects in the United States now stands at approximately 2% of the national total, and the percentage of women architects is approximately 20%. Great strides have been made in ethnic diversity of both the faculty and student body at Lawrence Tech, but not in the established federal categories. New faculty hires at the College have included Indian, Asian, and Middle-Eastern professors. The College has also recently and historically hired female faculty members, as well as promoted women to responsible administrative and staff leadership positions.

The College can and should do better. It has developed a strong relationship with the National Organization of Minority Architects (NOMA) as evidenced by the College's recent co-hosting of the NOMA 2012 National Conference in Detroit (Michigan Chronicle online: http://tinyurl.com/or5c2qo), and the pending approval of a LTU student chapter. In the future, this relationship will be important in recruiting new faculty members and upper-division students. Calls for applications and nominations for faculty positions, as well as recruitment for upper-division students, will be posted at historically minority colleges.

The Detroit Center for Design and Technology, scheduled to open in 2014, will raise the College's visibility in Detroit and open up additional Detroit-based philanthropic support. Of greatest promise for the College and the diversity of our programs is that one proposed program at the Center will target Detroit's elementary and high schools (with high minority enrollment) for design and core knowledge education in English and math—subjects that will prepare students to succeed in college: at Lawrence Tech, it is hoped. Simultaneously, the program will assist students in developing art and design skills and their portfolios, as well as applying for college scholarship aid. Also, utilizing philanthropic contacts in Detroit, an appeal will be made for the development of more minority-based scholarships and fellowships at the College of Architecture and Design.

For more information on the new Detroit Center for Design and Technology, refer to *section I.2.3 Physical Resources* and *section I.1.3 Architectural Education and the Public Good*

Recruitment. Recruiters from the University's Office of Admissions visit the majority of the high schools in Michigan. In addition, the university recruits in the following states, Ohio, Indiana, Wisconsin, Pennsylvania, and all of the New England States. The university also has regional counselors in New York, New Jersey, Illinois and Texas. The College of Architecture and Design recruits in high schools, community colleges, Canadian colleges, and four-year colleges within a 250-mile radius, as well as 'targeted' locations throughout the U.S. Faculty and administrators from the Department of Architecture attend and recruit at National Portfolio Days and similar events across the country, in cities such as Los Angeles, San Francisco, Boston, Chicago, Toronto, and Miami.

Admissions
Architecture students come to Lawrence Tech from geographically diverse places. The 2013 College of Architecture and Design Upper-division Student Directory indexes the schools from which accepted 2012-2013 pre-professional and post-professional students received bachelor degrees:

LTU (continuation into upper division of direct-entry M Arch): 45 students

University of Michigan: five students

Two students each: Bowling Green, New York Institute of Technology, Ryerson University (Canada), Texas A&M, University for Business & Tech (Albania), and University of Detroit-Mercy.

One student each: Al-Wergeb University (Lebanon), Anna University (India), Ball State University, Bergen Architectural School (Norway), Boston Architectural College, Catholic University of USA, Dalian University of Technology, Damascus University, Guangzhou University, Iniversidad of Puerto Rico, Jeju National University (Korea), King Abdulaziz University (Saudi Arabia), King Khalid University (Saudi Arabia), Ohio State University, Temple University, Ti-an University of Architecture, Tripoli University, Universidad del Atlantico, Universidad of Tachira, Universite Mentouri de Constantine-Algeria, University of Mumbai, University of North Dakota, University of Pune, Visveseswaraiah Tech University (India), Washington University Missouri, Yildiz Technical University, Zhejiang University of Technology.

Students accepted for fall 2012 entry into the M Arch 3+ program hold degrees from: Adrian College, Alcorn State University, American University of Science & Tech, University of Cincinnati, Hillsdale College, Kendall College King Abdulaziz University (Saudi Arabia), King Faisal University, Loyola, Michigan State University (two students), and the University of Michigan.

Commitment to Student Achievement Inside and Outside the Classroom through Individual and Collective Learning Opportunities.

Inside the Classroom Our work with students and our commitment to achievement in the classroom setting is evidenced in the quality of work by our students as presented in the Team Room exhibition, a history of recognition in student design competitions, our very active AIAS chapter and other professional organizations, and the very high employment rate of our upper division students, even during the recent economic recession: student surveys in the fall of 2011 and 2012 showed that about 80% of our upper division students were employed and 80% of those were employed in architecture and related fields.

Outside the Classroom: Off Campus Learning and Public Initiatives Please refer to *section I.1.3 Architectural Education and the Public Good*, which provides evidence and descriptions of a range of research and course-related, but community-based project opportunities, and *section I.1.3 Architectural Education and the Students*, which documents our study abroad programs.

Support Services

Academic Advising. The University's Office of Academic Advising oversees academic advising, including the training of faculty and adjunct instructor advisors. Advisors help students with academic planning, course selection, academic majors and minors, career objectives, employment and graduate schools, and in seeking University support services. Advising takes into account all University options open to the student, including alternative programs for those interested in changing academic majors or concentrations. Students are required to have an advising session before the fall and spring semesters registrations begin. In addition, the Director of the Office of Advising and the Administrator of Student Services in the College are available for walk-in advising.

Academic Tutoring. The Academic Achievement Center (AAC) provides academic support for students at Lawrence Technological University. ACC services are free to all students. Services include online and in-person tutoring, pre-courses, testing services, self-directed study groups, and study skill programs. The AAC has instructional handouts to take home and miscellaneous learning aids to use at the AAC, including software, reference materials, and videos. Tutors are available for required technical and science courses including math and physics, and for technical courses required in the architecture curriculum such as structures. Tutoring is available weekdays, weekends, after hours, during finals week, and during the summer.

Clinical Counseling. Clinical Counseling Services are part of the University's Division of Student Affairs. Clinical Counseling Services are free to all students and include individual counseling and psychotherapy, assessment and screening, crisis intervention, referral services, educational outreach, and consultations. Psychologists help students deal with a variety of issues including depression, anxiety, stress management, relationship issues, cultural adjustment, substance use, family conflict, academic concerns, organizational and time management, grieving and personal loss, and emotional trauma.

***Career Guidance*.** In addition to the individual career counseling students receive from their academic advisors and the IDP coordinator, lifetime career assistance is offered to all students and alumni free of charge through the University's Office of Career Services. These services include career planning as well as resource materials and employment opportunities. Additional services include helping individuals choose a major or career, write a resume, conduct a job search, secure a co-op, internship, and first professional job; and transition to a new career. In addition, Career Services offers comprehensive services to help employers identify, recruit, and hire the right candidates.

The University's online career resource center, CareerQuest, lists opportunities for students and alumni. Through CareerQuest, students can also schedule on-campus interviews, register for career fairs and expos, and research employers. For more information on Career Quest services and opportunities see www.ltu.edu/career_services/careerquest.asp.

Members of the CoAD faculty and administration are often contacted by firms or individuals interested in hiring students for short-term and long-term employment. The CoAD maintains a job board, where such employment opportunities for students are posted and updated regularly. In addition, the many adjunct faculty who teach courses in the College, as well as the CoAD Alumni Association, help to form a network of references for students in search of employment.

Societies and Organizations, Professional and Educational Societies, Honorary Societies
The range of opportunities to participate in social, cultural, educational, and professional organizations at LTU are broad. For detailed information, refer to *section I.1.3 Architectural Education and the Students.*

Internship Placement
The Office of Career Services offers a range of services to help students. It promotes career development of Lawrence Tech students by providing them with the tools to make effective career-planning decisions. This office provides assistance with choosing a major or career, writing a resume, conducting a job search, securing a co-op/internship, or a first professional job. Career Fairs at Lawrence Tech are offered several times each year. Annually, in September, LTU hosts the Fall 2013 Career Fair featuring graduating seniors, students, and alumni. In October, the University offers the annual Co-op and Internship Expo. Most significantly for architecture students, the Office organizes a targeted career fair, the Architecture & Design Expo, generally scheduled in the spring semester. The Expo has often featured a portfolio review session for architecture students. These efforts are likely the reason for our high (89%) student intern placement rate. Please refer to the Career Services website,
http://www.ltu.edu/career_services/index.asp

Off Campus Learning
Section I.1.3.E, Architectural Education and the Public Good, provides evidence and descriptions of a range of research and course-related, community-based project opportunities, and *section I.1.3 Architectural Education and the Students.*

I.2.2. Administrative Structure & Governance

Introduction

The College of Architecture and Design is committed to full participation and equitable relationships among all constituencies of the College in the matter of governance. These have been incorporated in the College's organizational structure, as well as in its inclusion of faculty, staff and students in decision-making processes.

Lawrence Technological University: Administrative Structure and Governance

The University is a non-stock, non-profit, trusteeship educational corporation chartered in the State of Michigan. The corporation is governed by a Board of Trustees with Board members elected to staggered three-year terms so that one third of the terms expire each year. Trustees serve without compensation. The board may consist of no less than 15 and no more than 25 trustees. Currently there are 16 trustees and the University president, who serves ex officio with a vote.

The Board has the sole authority to amend the Articles of Incorporation and the Bylaws. The Board accomplishes its work through three standing committees: the Academic Affairs Committee, the Finance Committee, and the Executive Committee. In addition to the standing committees, there are two ad-hoc committees of the Board: the Nominating Committee and the Strategic Plan Implementation Review Committee. The Board may establish other standing or special committees as it deems appropriate.

The Board holds its regular meetings in September, January, and June. The college deans attend Board meetings. The committees meet once or twice between board meetings and the executive committee is empowered to act on behalf of the Board.

The function of the Board is to oversee all operations of the University, including approval of the annual budget, management of the endowment, authorization of bonds, promissory notes or other university borrowing, establishment and discontinuance of academic programs, rules and regulations, granting tenure, adoption of personnel practices, awarding of degrees, certificates, and diplomas upon recommendation by the faculty, and all other policy matters concerning the general interests of the corporation.

The Board is assisted in its work by an advisory body. Members of this advisory body are appointed by the Board and do not hold terms. Current members are distinguished representatives of the community, outstanding alumni, retired and/or emeritus trustees and industrial leaders. The members receive information on University activities and meet annually in June to consult with and advise the Board.

The president of the University is the chief executive officer and is appointed by and serves at the pleasure of the Board of Trustees. The provost, supported by an associate and assistant provost, is the chief academic officer, appointed by the president and confirmed by the Board of Trustees. The vice president for finance and administration is the chief financial officer, appointed by the president and confirmed by the board. The vice president of university advancement is the chief development officer.

Faculty Participation in University Governance

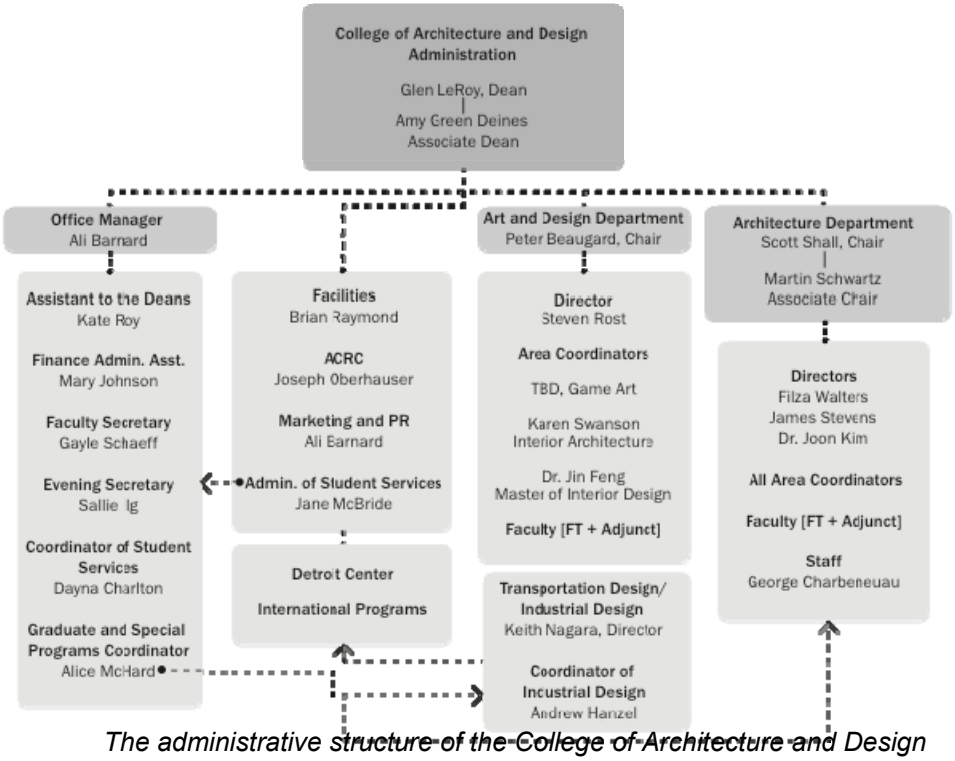
The university president, provost, trustees, and college deans receive advice from the faculty through the following bodies in keeping with the University's commitment to shared governance

Faculty Senate The Faculty Senate is the entity officially constituted to represent and promote University-wide faculty aims for the purpose of furthering academic excellence and contributing to the long-term success of the University. The Faculty Senate consists of full-time faculty, with three representatives elected by their peers from every College to a 3-year term. The Faculty Senate's bylaws are on file in the Provost's Office.

Graduate Council The Graduate Council consists of faculty members with program experience or interests at the graduate (or, at CoAD, the upper-division) level, as well as observers from academic-service functions. The Provost appoints all members on recommendation of the college deans. This group reviews and recommends pertinent policies and programs.

Academic Program Review Committee The APRC is made up of representatives from all colleges and other operational units to provide advice on potential new academic programs for their financial and operational viability. This committee supports collaboration between academic and other supporting operational units. APRC review is one of the initial steps in the approval process for adding new programs.

The College of Architecture and Design: Faculty, Staff and Student Governance



The administrative structure of the College of Architecture and Design

The College of Architecture and Design: Administrative Structure

The chief academic and administrative officer of CoAD is the Dean, Glen S. LeRoy, FAIA, FAICP. He is the primary liaison between the College and the University, communicating through the office of the Provost. There are also cooperative relationships with the President, the Department of Advancement, the Department of Admissions, the Department of Finance, and other units of the University. While these relationships are technically coordinated through the Dean's office, it is not unusual for other administrators, faculty, or staff to have direct contact with University departments or leaders.

Amy Green Deines, Associate AIA, serves as Associate Dean. She assists the Dean in administering the College and represents the Dean, when necessary, at University or community events. The Chair of the Department of Architecture is Scott Shall, AIA. He provides administrative leadership for all architectural programs from freshman year through the upper-division coursework, as well as allied programs, such as urban design and architectural studies. Martin Schwartz, AIA, is associate chair of the Department of Architecture, with responsibilities for student affairs; he represents the department chair at College and University events when needed. Peter Beaugard, MFA, serves as the Chair of the Department of Art and Design. A close cooperative partnership exists between the chairs of the departments of Architecture and Art and Design for the shared delivery of curriculum, as well as the provision of extra-curricular activities. A detailed description of the responsibilities of the full administrative staff of the College can be found in *section I.2.1 Human Resources and Resource Development*.

Faculty Governance Faculty members are directly engaged in administrative governance of the College. They serve as administrative directors or coordinators of specific programs and curriculum areas. In that capacity, they coordinate the work and participate in the hiring and performance reviews of adjunct faculty members. Through the College Faculty Council, the faculty maintains governance over all curriculum issues within the College. Also, several faculty members are directors of applied research components. They operate semi-autonomously in cooperation with College administration directing the makeLab (digital fabrication), studio[Ci] (urban research), detroitShop (community and public interest design), and Detroit Studio (urban outreach).

The faculty is directly responsible for the curriculum within the College. New courses and new academic programs are developed by a sponsoring faculty member. The College's Faculty Council and University's Graduate Council (for upper-division initiatives), and the full College faculty must approve any initiative before it is advanced to the University for final approval.

Staff Governance Each College staff member provides significant leadership in one or more areas, such as administration, budget, upper-division admissions, student services, recruitment, public relations and marketing, woodshop management, printing, and maintenance. This group is coordinated by Alexzandria Barnard, MBA, working with the Dean and Associate Dean. They meet regularly to coordinate responsibilities and cross-train staff for efficient delivery of services. Additionally, the staff is represented by the Staff Senate at the University level. Members of the College staff routinely serve as senators.

CoAD Faculty Council The College of Architecture and Design Faculty Council consists of five faculty members elected by College faculty to two-year terms. Individual terms are staggered so that the entire membership does not change in any one year. The LTU Faculty Handbook, adopted January 26, 2012, outlines the structure of Faculty Council in *section 6.2.2*:

"Organized to meet its own structural requirements, each college has a faculty council that advises the dean on academic and other matters. The councils are independent of administrative channels and may consider any issues they believe appropriate, but are particularly involved with faculty and curricular concerns within their colleges. Membership of the faculty councils consists of full-time college faculty. Advice of faculty councils is not binding on academic deans, but is considered significant to administrative decision-making."

The CoAD Faculty Council maintains standing committees on curriculum, faculty development, student development, College and University relations, and facilities. In addition, the Faculty Council may convene special subcommittees or task forces to advise the CoAD administration on specific matters of policy.

Curriculum Development Responsibility for review of College courses and curricula are shared. Curricula and course review are continuous with a specific area of focus addressed each year as indicated in the College Assessment Reports. The responsibility for curriculum planning and implementation is held by the faculty. The process by which courses and curricula are changed, or new courses and curricula are approved, is described in section II.2.3 Curriculum Review and Development.

The University administration reviews all aspects of curricula including enrollment trends, tuition, course fees, program interest, and faculty interest on an annual basis and, if necessary, communicates directly with the dean of each College about curriculum concerns. The administration is careful to research program development thoroughly before allowing a new degree program to become implemented.

Faculty Coordinators Faculty coordinators have been appointed for required subject areas in the professional curriculum in order to deliver the curriculum across many class sections in a consistent manner. Each coordinator is a full-time faculty member who oversees an area in which he or she teaches, such as the design studio sequences, technical course sequences, and other program support areas. These faculty coordinate both full-time and adjunct faculty in their area of responsibility. Duties include convening regular meetings with their faculty, developing consistent syllabus guidelines, giving faculty performance reports to the department chair, and assistance in identifying potential new faculty members in their area of responsibility.

Student Governance

Student participation and input by which courses and curricula are changed are recognized in several ways. First, the CoAD Faculty Council constitution provides for the optional participation of a student as a non-voting member. Students are invited to participate as members of the Faculty Council Curriculum Committee, on faculty search committees, and have been invited to serve as members of faculty committees including the Integrated Design Coordinators Committee, the Lecture Committee, and the Exhibitions Committee. Students have the prerogative of addressing the Faculty Council on matters of interest to them.

The Dean's Student Leadership Council, instituted in the fall of 2005, was created to act as a conduit for information between students and the Dean and administration of the College of Architecture and Design. The Student Leadership Council is convened several times each semester as a way to address student issues and to troubleshoot student problems. In addition to issues of curriculum, students have an opportunity to share their ideas, concerns, and suggestions about all aspects of College life with the Dean. In addition, council representatives are responsible for communicating with their organizations and with students across the College with reference to College activities. The Dean uses these meetings to update students on program changes, responses from past concerns, and any issues that need to be disseminated to the student body. With his hiring as he chair of the Department of Architecture in summer of 2012, Associate Professor Scott Shall instituted a series of 'Conversations with a Chair', in which he meets informally with students (and adjunct faculty) to solicit feedback and suggestions for strengthening the student experience within the program. He has also initiated a general student convocation at the beginning of each semester, for dissemination of information, and as a forum for student participation.

Additional avenues for student feedback include course evaluations and graduating student surveys. The University conducts graduating student surveys to gather information, such as employment statistics. The CoAD uses a separate survey of student opinions that address issues such as employment while attending school, student preferences for communication, student satisfaction with the curriculum in general and as regards specific courses. Mandatory course evaluations are conducted each semester for student input and faculty members have the option of conducting a mid-semester student survey.

The creation of a Studio Culture Policy also gives students the unique experience of responding to a studio culture survey. The first survey was conducted in 2007-2008, and resulted in the inaugural Studio Culture Policy. In 2012-2013, a follow-up survey of students sought input on students' perceived studio culture rights and responsibilities. This survey gave the College administration insight into the needs and concerns of students regarding their education, studio integration, communication, and facilities management. For more information on these policies and the participation of students in the formulation of these ideas, refer to *section I.1.2 Learning Culture and Social Equity.*

College and University Staff Governance
Staff governance is conducted primarily through the Staff Senate and the Staff Senate Board. The Staff Senate is comprised of all members of the University staff and holds open meetings monthly. Staff members are encouraged to attend and participate in regular Staff Senate meetings in an effort to insure fair representation throughout campus. Staff members are granted time away from their offices to attend Senate meetings.

Article IV, Section 1b of the Staff Senate bylaws states that:
"The Staff Senate Board, made up of nine staff elected University-wide, serves as the overseeing unit for the larger Staff Senate."

This body is the administrative arm of the Staff Senate, and represents the Senate to the University administration. Members of the Staff Senate Board serve either a one or a two-year term. Elected positions include the chairperson, vice-chairperson, and secretary.

Other Degree Programs in the Department of Architecture
In addition to the accredited Master of Architecture (M.Arch) degree, the Department of Architecture also delivers the following degree programs:

- Bachelor of Science in Architecture (BS Arch)
- Bachelor of Arts in Architectural Studies
- Master of Urban Design (mUD)

The Department also co-directs the Master of Architectural Engineering (MArE). Under a cross-College agreement governing this program, the College of Architecture shares the program development, administration, and student head count with the College of Engineering.

I.2.3. Physical Resources

Introduction: The Vision of the College of Architecture and Design
The College carries out its core teaching and administrative functions on the Southfield campus of Lawrence Technological University in two attached buildings, the Architecture Building and the University Technology and Learning Center (UTLC). As with other design academies, the College of Architecture and Design focuses on the studio environment and curriculum as the center of the program and community. The need for a strong studio culture—students and faculty actively engaged in learning, together--has had a profound impact on the physical environment of the architecture studios on the Southfield campus, as well as the College's venues in Detroit and abroad. This need guides much of the current work on the College's facilities and ideas about future facilities. Buildings are very much works in progress and the College works with them so that they reflect the intentions and mission of the architecture program.

The College has devised new spaces for new activities since the last NAAB team visit. These spaces include the makeLab (digital fabrication lab) and its adjacent work space, which houses more specific and custom fabrication tools than the College's woodshop; Studio[ci] (the applied urban research lab); and a lighting lab. The CoAD looks forward to dedicated and cross-College

upper-division studio spaces, the integration of online and on campus studio space, and a building performance lab, which are in the planning stages.

The future of the College calls for the creation of a variety of “micro-campuses” that enable the program and the studio content to have a direct relationship with contextual, political, and social and intellectual landscapes, sometimes electronically. The primary micro-campus will be the Detroit Design and Technology Center, a multi-function location for academic, research, outreach, and community works. The Center is expected to be available for occupancy in the fall of 2014 at its central Detroit location. More information on this venture, and its relationship to our ongoing Detroit programs, is provided later in this section.

As for the future of Lawrence Technological University’s campus plans as they influence the College of Architecture and Design, the University recently selected internationally recognized architect, and 2013 AIA Gold Medalist, Thom Mayne FAIA and his firm, Morphosis Architects, to design the A. Alfred Taubman Engineering, Life Sciences, and Architecture Complex (TELSA). The concept guiding the design of the new building is interdisciplinary cooperation between LTU’s College of Engineering, College of Arts and Sciences, and College of Architecture and Design. The first phase of 30,000 square feet is expected to include a new home for Lawrence Tech’s robotics program, science labs, biomedical engineering labs, and space for multidisciplinary student collaboration. The project is in the pre-design and fund-raising phase and the implementation schedule has not yet been firmly established. Refer to http://tinyurl.com/kwzv8qy and to section I.1.4 Long Range Planning for additional information.

The Southfield Main Campus of Lawrence Tech
The primary uses of the Architecture Building, as well as the immediately adjacent University Technology and Learning Center, are for assigned, academic and support spaces that serve the College of Architecture and Design, including programs within architecture, art and design. The College also conducts classes, almost exclusively from the Department of Art and Design, in a smaller, separate, north campus building, the Art and Design Center.

The **Architecture Building** (designed by founding Dean Earl Pellerin FAIA) was built in 1962 and originally housed the College of Architecture and the University Library. The College of Architecture space needs were then satisfied by one large open studio, today referred to as the “freshman wing.” The building also housed, as it does today, classrooms for general instruction and faculty offices. The former library wing is now studio space, used principally for the Art and Design program. The Architecture Building also houses the Dean’s Office and the associated series of administrative offices for the College of Architecture and Design.

The **University Technology and Learning Complex** (UTLC), the largest academic building the University has ever constructed, provides state-of-the-art learning facilities and a monumental "front door" breezeway entrance for the 115-acre campus. It further serves to define, for the first time, a real campus quadrangle. The UTLC was designed by the noted architecture firm, Gwathmey Siegel & Associates Architects, and was completed in 2000. The new UTLC permitted the College to make badly needed improvements in space assignments. The woodshop was enlarged and relocated to the Engineering Building adjacent to the metal fabricating shop; computer labs were expanded and moved to the new building. These moves enabled the College to create lab spaces for photography and sculpture. The UTLC also provided design studio spaces filled with daylight, dedicated critique and seminar rooms, an appropriate entry lobby, a gallery, a student lounge, printing facilities, classrooms, and office spaces.

In general, the UTLC contains 24 semi-open design studios, three dedicated critique and seminar rooms, a 124-seat fully equipped lecture auditorium, general classrooms and upper-division studios or research areas, open computer labs and computer instruction classrooms, and the new lighting lab. The bridge space on the fourth floor holds faculty and staff offices.

The main floor entry to the UTLC includes an open area used to host events and acts as the entry to the Gallery. The gallery and open area are used for exhibitions of student work from the architecture, interior architecture, graphic design, transportation and industrial design programs. Although the Gallery is the site of many University events, it is often used by the College. The College's Facilities Coordinator, working with the department chairs and faculty, handles reconfigurations of the space for different events. The lobby includes a lounge and study area for students; a small food and coffee service area were inserted into the lobby in 2011.

Also on the main floor of the UTLC, the College provides a full-service plotting and printing office with extended hours of operation at the end of each term. This service, the Architecture Computing Resource Center (ACRC), primarily serves the students and faculty within the College. It also offers services to the three other colleges within Lawrence Tech. The ACRC is fronted by a reception desk and includes spaces for a variety of plotters, laser printers, and equipment that supports these activities. The remainder of this level contains upper-division architecture studios, as well as a dedicated research space for Studio[Ci]. This wing of the building is eventually intended to be specifically dedicated to work spaces for upper-division students throughout the College.

The lower level of the building houses an upper-division studio and the makeLab. The College of Architecture and Design currently is negotiating with the University for access to a two-story-high space, accessed at the lower level, for a building performance lab that will include makeLab. It is intended to encourage the full-scale building, assemblage, testing, and display of architectural elements in this space. The exterior space directly adjacent to the two-story volume would then fulfill its potential as an outside work, display, and lab access area.

Recent Improvements
Recently, a number of renovations were made to provide space for programs and ideas that are somewhat different from when the building was erected. Fortunately, both of the CoAD's buildings are highly flexible. The College is attempting, in this process, to recognize the quality and character of the older, Architecture Building.

- The "freshman wing" in the Architecture Building has long been the location for foundation design teaching. This space has just been renovated, with new flooring, furniture, fixtures, and equipment including, dedicated desks and lockable storage, as well as movable and pin-able partitions. This refreshed studio environment supports the College's commitment to its studio culture and collaborative learning space.
- On the two upper floors of the UTLC, an exhibition corridor was created on the public side of the design studios. Homasote and track lighting (to supplement excellent daylight) were installed to allow design students to pin-up work and critique studio projects adjacent to studio environment.
- Among the dedicated spaces, a Macintosh Computer Lab has recently been incorporated. This lab is open 24 hours each day and houses PC and Macintosh platforms and embedded technology for presentations and discussions.
- The Architecture Gallery, room A210, and the surrounding public spaces have received new track lighting and vertical surfaces better suited to the mounting and display of student, faculty, and alumni work. These renovated spaces will also host public exhibitions, critiques and juries, and the occasional discussion or lecture.
- The College recently hired three new faculty members (two of them in the architecture program) and, as a result, three new offices have been constructed.
- A new screen-printing space has been constructed within the Architecture Building. This space will support both architecture and art and design students.
- The College has converted two UTLC classrooms into a new lighting lab. The lab is intended for use by students and faculty in architecture, interior architecture, and engineering.

Images of recent Improvements

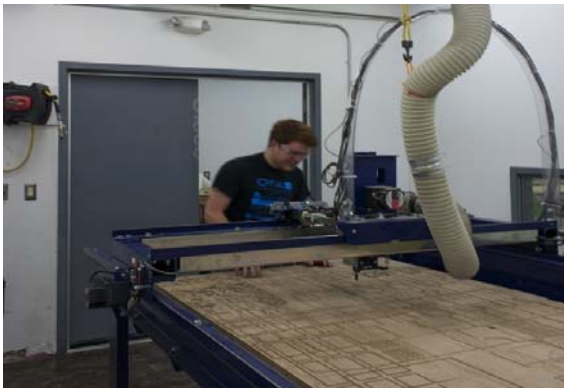
Brick Gallery

Freshman Studio Space

Gallery Space

Level Gallery

makeLab



makeLab Gallery

Studio Ci

Micro-Campuses: Detroit
In addition to the information in this section, more about the Detroit locations and their activities can be found in section I.1.3.E. Architectural Education and the Public Good and in section I.1.3A Architectural Education and the Academic Community.

Detroit Studio
The College of Architecture and Design has maintained an urban studio in the heart of the New Center Area on West Grand Boulevard in Detroit for some years. The first floor, storefront studio accommodated 16 students using drafting tables and stools. The second floor studio accommodated as many as twelve students. The spaces were inadequate and for this reason, the Studio will be relocated to the Federal Reserve Building at 160 West Fort Street in Detroit in the fall of 2013. A one to two-year lease on this space will allow community-based programs to operate, then the Studio will move to the new Detroit Center for Design and Technology as outlined below.

- Square footage: 4,000 SF
- Occupancy load: 36 students

DetroitShop
Since 2011, the College of Architecture and Design has maintained a multi-disciplinary studio in the heart of the Detroit's Central Business District in the Chrysler House (formerly known as The Dime Building) on Griswold Street. The Shop will relocate to the Federal Reserve Building at 160

West Fort Street in Detroit beginning in the fall of 2013. In fall of 2014, the DetroitShop to move to the new Detroit Center for Design and Technology. This academic space has a studio, a conference and seminar room, and exhibition space.

- Chrysler House (former location)
- Square footage: 1800 SF
- Occupancy load: 18 students

- Federal Reserve Building (2013-2014 location)
- Square footage: 3500 SF
- Occupancy load: 32 students

Studio Couture
Studio Couture is a multi-purpose arts incubator with a gallery, student-directed design studio, and community arts space, located at 1433 Woodward Avenue in Detroit, in a storefront space rented on a monthly basis. For more information, refer to I.1.3A Architectural Education and the Academic Community

- Square footage: 2300 SF
- Occupancy load: 230

Ponyride
Ponyride leases studio space to artists and entrepreneurs who engage the citizens of Detroit in their creative practices. By providing the residents with subsidized spaces, participants at Ponyride are able to focus on their art and public works. The Ponyride Studio and Seminar Space is located at 1401 Vermont, Detroit MI 48216. The space is provided by an in-kind donation. The College of Architecture and Design has a permanent classrooms space at Ponyride to support our community based efforts.

- Square footage: 360 SF
- Occupancy load: 12

DetroitShop

Detroit Studio

Studio Couture

Detroit Design and Technology Center
The new Detroit micro-campus location will be a vibrant destination for design thinking, serving college and high school students, young and seasoned professionals, architects, artists, designers, innovators, entrepreneurs, and visiting professionals. It will be a place where they can collaborate with the broader community. The Center will be a catalyst to validate and fulfill the objectives of new economies within Detroit. To this end, as of the 2014-2015 academic year, all Detroit based programs (including the Detroit Studio and DetroitShop), studios, exhibition spaces, offices, and applied research programs will be consolidated in this facility. The lease arrangement is for five years with an option to extend the lease for an additional five years.

As the Detroit Center is a new venture for the College, it is appropriate to articulate the amenities and objectives of this new location:

- Detroit-based Design Studios serving neighborhoods, community development groups, and urban artistic endeavors with insights as to how they might influence the future of the city and region.
- Detroit "Think Tank" bringing together key partners, leaders, and constituents to envision the 21st century future of the city and the region.
- Applied Research Institute that will seek and undertake funded research projects that examine the future of Detroit and other metropolitan locations, basic design and planning research that serves community clients, and projects that expand our knowledge of Detroit and the urban condition in general.
- Design Incubator for Sustainable and Social Practice that will engage with entrepreneurial students and faculty to help them integrate sustainability into business practices. These businesses range across the design, architecture, and urban planning fields to social entrepreneurship activities and clean technology businesses.
- K-12 Educational Outreach Program that will seek opportunities to partner with urban schools and students to improve education in science, technology, engineering, and mathematics areas, and to develop design and technological themes.
- Exhibition Gallery intended to exhibit the Center's studio and research findings, professional art and design works, and to host traveling exhibitions. The gallery will also host educational symposia and lectures on Detroit, design, and emerging technologies for the broader community.
- Woodward Avenue and Willis Street, Detroit, MI 48201
- Square footage: 8000 SF
  Occupancy load: 250
- Expected occupancy date, Fall 2014

Detroit Center for Design and Technology

Micro-Campuses: International Program Spaces

Paris, France
Lawrence Tech's College of Architecture and Design maintains a studio presence during the summer semester in Paris. The program provides a full-time semester of study for the participating students. A typical semester evolves one Allied Studio (4 credit hours) along with one Art and Design elective and the required literature elective. The students first prepare with research and design assignments at Lawrence Tech. The studio travels together to Paris for the final 4 weeks of residency and study in Paris. While in Paris the students reside in the American Dormitory at the Cite International University of Paris (CIUP). Located in Paris' 14th Arrondissement the CIUP provides an academic campus for Lawrence Tech in Paris. The campus includes dormitories, student dining, Library, lecture halls, auditorium and athletic fields. The facilities, course offerings and length of stay are intended to immerse the students into the city of Paris while providing rigors academic experience. See http://www.ciup.fr/en/node.

Typical Paris Studio Coursework:

- ARC 4264 Allied Design
- ART 3023 Photography
- LLT 3613 Literature and Art

La Paz, Bolivia
The Universite Catolica provides studio space and computer facilities to support the studio. Beyond that, work spaces are found within a loose network of locations in and around the cities of La Paz and El Alto. The studio also borrows time and facilities from cafes with wireless internet, local metalworking shops, public plazas, and the street. Participants stay in large groups with local families for the duration of the program. The homes also provide dedicated spaces for gathering and meetings.

Equipment to support the work, including a digital projector, nine digital cameras, two portable scanners and two portable printers, is provided by the International Design Clinic (refer to section I.1.3.E. Architectural Education and the Public Good.). The library is created in a 'pot-luck' style, with each participant bringing four to seven books of their own that links their research and background to the anticipated focus of the work to be undertaken in Bolivia.

Shanghai, China
Each summer Lawrence Tech conducts a design workshop in Shanghai, China. A typical workshop will be framed around a specific design challenge or competition. The workshops are hosted by the Shanghai University of Engineering and Science (SUES). During the workshop students and visiting faculty stay in the University housing for a period of 3 weeks and work in a dedicated studio (approximately 2,000 sq. ft.). All students work in groups and are paired with local Chinese students and are led by one Lawrence Tech faculty and one SUES faculty. The students have access to the studio 24 hours a day and faculty work with students 10 hours per day in a continuous design charette. The workshop finishes with a design critique at Tsinghua University in Beijing.

Shanghai

Support Functions in the College

Architecture Computer Resource Center (ACRC)
The ACRC oversees a plotting and printing operation that charges for plotting and printing on a low profit basis, with proceeds invested in equipment upgrades. The Center is overseen by a manager who hires proficient student proctors to assist in the day to day business. Although the entire campus is on a wireless network, the studios and computer labs are limited due to the high volume of data generated by graphics software. As a result, the ACRC has a wired infrastructure direct to its servers, as well as a wired path to the EDCC servers. The management of the ACRC is discussed in section I.2.1.A Human Resources and Resource Development—Faculty and Staff.

Woodshop
The Woodshop is equipped with essential woodworking equipment for models, furniture and sculpture projects and includes a table saw, miter saw, band saw, jointer, router table, stationary sanders, scroll saw, vacuum press, air compressor, laser cutter and a 2-stage dust collector. In 2013, the Trotec laser saw – a popular tool amongst students –was updated with a Speedy 300. In the interest of user safety, and to allow greater access to the table saw, a Sawstop 52" cabinet saw was purchased in 2012. In 2013, an LTU board member donated a 20" Grizzly surface sander to the woodshop. In addition to hand held power tools such as drills, sanders, routers, jig saws and a plate jointer, the shop has hand tools and supplies, such as clamps, fasteners, sandpaper, chisels, files, and planes. All tools are kept in the shop and are available to students and faculty. Workbenches equipped with vises provide work areas for eight students at a time. Students are expected to furnish construction materials. The management of the Woodshop is discussed in section I.2.1.A Human Resources and Resource Development—Faculty and Staff.

Materials Resource Library
The Materials Resource Library consists of a large collection of catalogs of contract furniture, as well as samples of fabrics, floor coverings, wall coverings, paint, mica, wood, stone, tile, metals, etc. This facility is discussed further in section 1.2.5 Information Resources.

Planned Facility Expansion

The University has embarked on a $55M dollar construction program that will be implemented over the next several years. Nearly all of the funds for the construction will come from philanthropy. The expansion of new facilities and the alteration of existing facilities will be implemented in phases based on degree of need and available funding. Construction of Phase 1 of the expansion is scheduled for 4Q 2014.

The first phase of construction is a new 30,900gsf building that will add over 18,000sf of assignable space to the campus. The building, named the A. Alfred Taubman Engineering, Life Sciences and Architecture Complex, has been designed by Thom Mayne, FAIA (Morphosis) in partnership with Albert Kahn Associates. Although the initial occupants of this first phase will basically come from Engineering and the Life Sciences Complex, it is expected to free up space in existing buildings. Initial programs housed in the first phase are Robotics, Bio-Mechanics, and Bio-Medical Engineering.

Subsequent phases are more specifically intended to deal with the needs of the College of Architecture and Design at that time. Eventually the College would benefit from the addition of nearly 21,000sf of additional space on the Southfield campus. This is exclusive of the expansion currently underway in downtown Detroit.

Added spaces are expected to include addition of two Design studios, two Environmental Graphics studios, two Media Advertising studios, two Film/Photography studios, and additional exhibit space.

Architecture Building Room Descriptions

First Floor

Mech 1	Mechanical/Boiler Room	A130	MakeLab Studio
Mech 2	Fan Room	A131	ARC
A102	Architecture Project Storage	A132	ARC Equipment and Storage
A105	Facilities Coordinator	A133	Building Systems Studio Capacity: 16 Students (tables/chairs)
A110	Digital Fabrication Lab [MakeLab]	A134	Building Systems Studio Capacity: 16 Students (tables/chairs)
A110a-b	Digital Fabrication Office Equipment storage	A135	Lecture Classroom Capacity: 28 Students (tables/chairs)
A111	Office - Staff	A136	Lecture Classroom Capacity: 28 Students (tables/chairs)
A112	Faculty Office	A140	Supply Storage
A113	Faculty Office	A141	Lecture Classroom Capacity: 28 Students (tables/chairs)
A114	Faculty Office	A142	Faculty Mailroom
A115	Faculty Office	A145	Faculty Copy/Supply Room
A116	Office – Student Services	A147	Media Presentation Classroom Capacity: 48 Students (tiered tables/chairs)
A117	Faculty Conference Room	A150	Office – Adjunct Shared desks and Files
A118	Workroom/Copier/Storage A121 Photography Studio A123 Drawing Studio	A151	Faculty Office
A124	Office – VITRC Staff Relocates in 2008-2009	A152	Faculty Office
A129	Secretary/Student Assistant	A153	Faculty Office
A129a	Office – Dean	A154	Faculty Office
A129b	Office – Executive Assistant to Deans	A155	Faculty Office
A129c	Office – Associate Dean	A156	Faculty Office
A 129d	Department Chair Architecture	A157	Faculty Office
A 129e	Department Chair Art and Design	A158	Faculty Office
A 129f	Office Manager – Marketing and Support	A159	Projection Booth
A129g	Admin Conference Room		

Second Floor

A200	Auditorium Capacity: 300 seats	A234	AD5 Studio Capacity:16 Students (drafting tables/chairs/lockers)
A201	Projection Booth	A235	AD5 Studio Capacity:16 Students (drafting tables/chairs/lockers)
A202	Faculty Conference Room	A236	Macintosh Computer Lab
A203a-b	Office – Student Organizations	A238	Allied Studio Capacity:16 Students (drafting tables/chairs/lockers)
A205	Toilet Room	A240	Critique Room
A210	Architecture Gallery	A241	Screen Printing Room
A211 – A218	Offices – Full Time Faculty	A243	Interior Architecture Studio Capacity:16 Students (drafting tables/chairs/lockers)
A221	Critique Room	A244	Interior Architecture Studio Capacity:16 Students (drafting tables/chairs/lockers)
A223	Freshman Studio Capacity:18 students (drafting tables/chairs)	A245	Interior Architecture Studio Capacity:16 Students (drafting tables/chairs/lockers)
A225	Freshman Studio Capacity:18 Students (drafting tables/chairs)	A246	Interior Architecture Studio Capacity:16 Students (drafting tables/chairs/lockers)
A227	Freshman Studio Capacity:18 Students (drafting tables/chairs)	A246a	Material Library
A229	Freshman Studio Capacity:18 Students (drafting tables/chairs)	A247	Faculty Office
A231	Open Studio Capacity:18 Students (drafting tables/chairs/storage)	A248	Faculty Office
A232	Allied Studio Capacity:16 Students (drafting tables/chairs/lockers)	A249	Faculty Office
A233	AD5 Studio Capacity:16 Students (drafting tables/chairs/lockers)		

University Technology and Learning Center (UTLC) Room Descriptions

First Floor

T104	Women's Restroom	T130	makeLab Digital Fabrication Storage and Office
T105	Men's Restroom	T131a-b	makeLab 2 Digital Fabrication Model shop
T111	Mech. Equip. Room	T131c-d	Studio/Research/makeLab Capacity: 8 Students

Second Floor

T201	Reception - Elevator Lobby	T218	Arch Upper-division Research Capacity: 8 Students (tables/chairs/storage)
T204	Women's Restroom	T219	Computer Graphics Lab/Classroom Capacity: 28 Students (tables/chairs/desktop computers)
T205	Men's Restroom	T220	Arch Upper-division Studio Capacity: 12 students (tables/chairs/storage)
T210	Gallery Capacity: Dependent on use and setup)	T221	Computer Laboratory PC and Macintosh Laboratory Capacity 30 Students (tables/chairs/desktop computers)
T212	Student Study Area Capacity: 21 Students (study/lounge furniture)	T224	Classroom Capacity: 24 Students (tables/chairs)
T213	Coat Room	T225	Classroom Capacity: 24 Students (tables/chairs)
T215	ACRC Admin / Copy Center	T226	Classroom Capacity: 24 Students (tables/chairs)
T216	Copy Center		
T217	Computer Graphics Lab/Classroom Capacity: 28 Students (tables/chairs/desktop computers)		

Third Floor

T304	Women's Restroom	T318	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T305	Men's Restroom	T319	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T309	Gallery Balcony	T320	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T310	Crit. Room	T321	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T311	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T322	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T312	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T326	Student Commons
T313	Architecture IDS Studio	T327/328	Lighting Lab

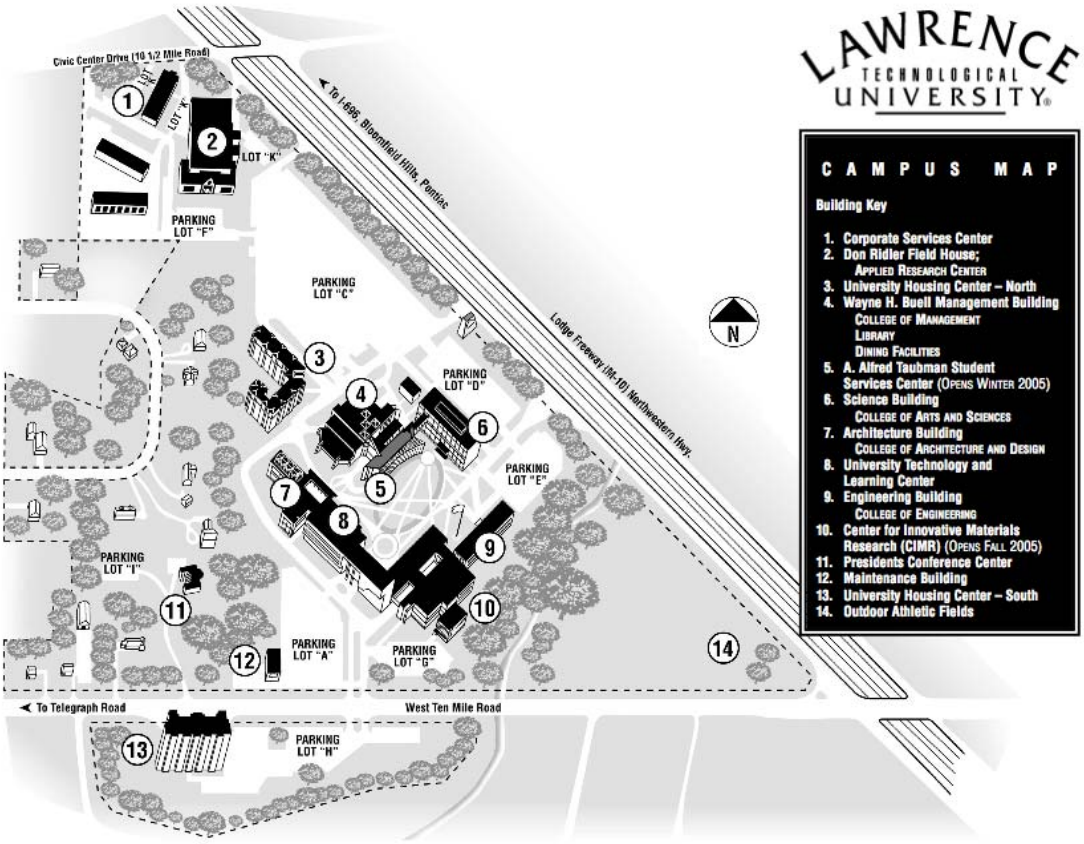
	Capacity: 16 Students (drafting tables/chairs/lockers)		Capacity: 24 Students (tables/chairs)
T314	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T330	Interior Architecture IDS sample room annex
T315	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T331	Adjunct Faculty Office
T316	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)		
T317	Architecture IDS Studio Capacity: 16 Students (drafting tables/chairs/lockers)		

Fourth Floor

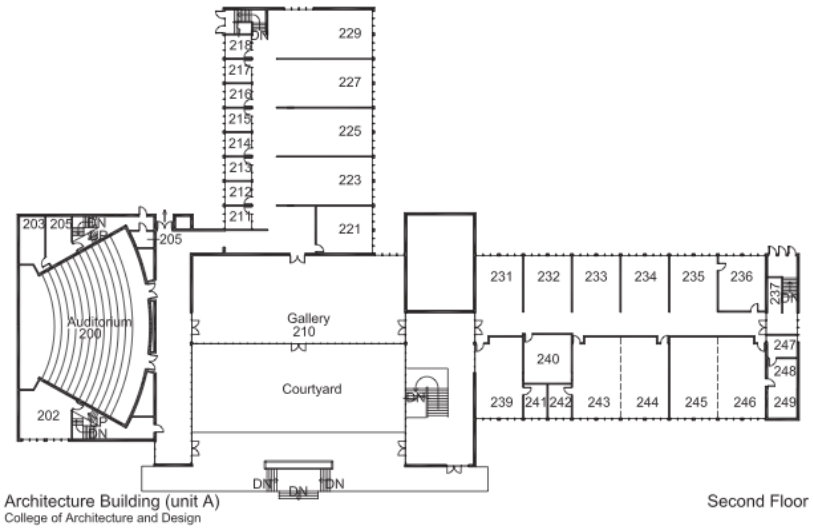
T404	Women's Restroom	T420	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T405	Men's Restroom	T421	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T409	Crit. Room	T422	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)
T410	Critique Room	T427	Classroom Capacity: 12 Students (tables/chairs)
T411	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T428	Classroom Capacity: 12 Students (tables/chairs)
T412	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T429	Auditorium Lecture Classroom Capacity: 124 Students (Electronic whiteboard; audio system; projection room; power and data at each seat)
T413	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T430	Evening Secretary Staff Faculty & Adjunct support
T414	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T431A	Faculty Office
T415	Architecture Studio Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T431B	Faculty Office
T416	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T432A	Faculty Office
T417	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T432B	Faculty Office
T418	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T433A	Faculty Office

T419	Architecture Studio Capacity: 16 Students (drafting tables/chairs/lockers)	T433B	Faculty Office

Campus Plan and Building Plans

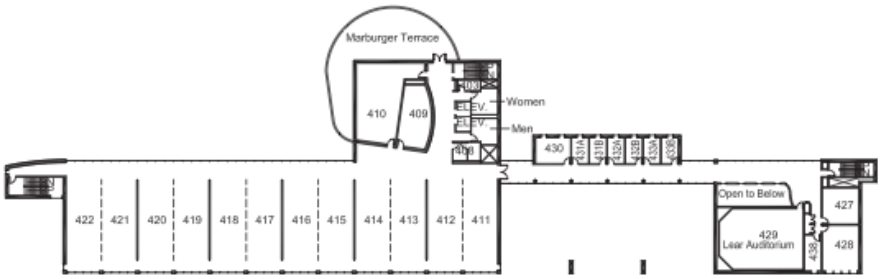


Lawrence Technological University Campus Plan



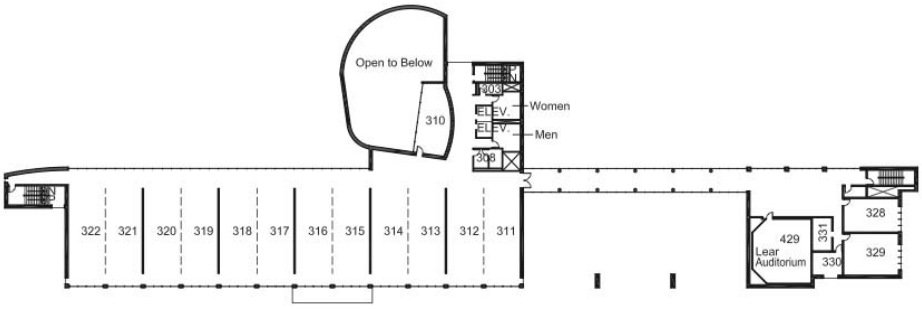
Architecture Building (unit A)
College of Architecture and Design

First Floor



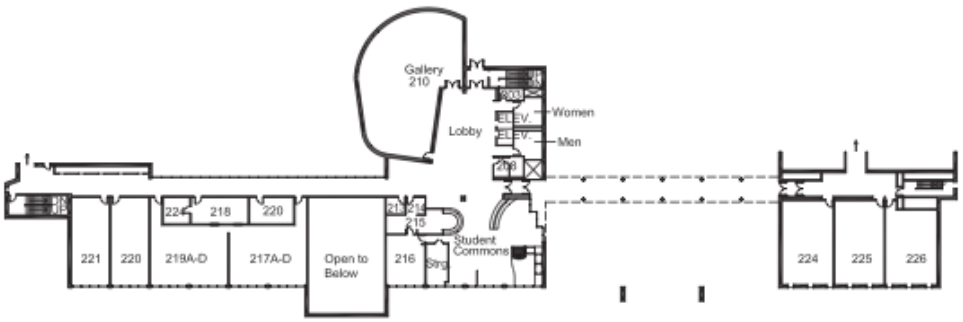
University Technology and Learning Center (Unit T)
College of Architecture and Design

Fourth Floor



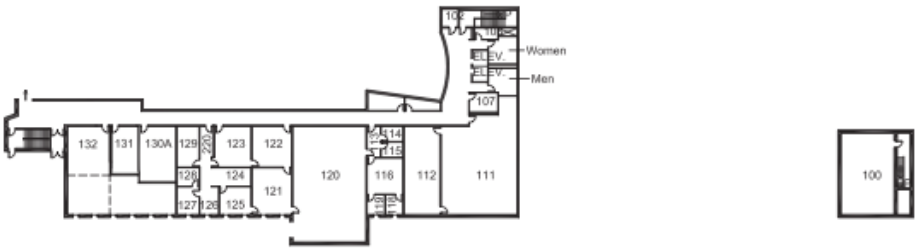
University Technology and Learning Center (Unit T)
College of Architecture and Design

Third Floor



University Technology and Learning Center (Unit T)
College of Architecture and Design

Second Floor



University Technology and Learning Center (Unit T) First Floor
College of Architecture and Design

Community College Studio Space

Lansing Community College [LCC] Lansing Community College and Lawrence Tech have created a partnership to offer bachelor degree completion programs at the LCC University Center. Students can study within a studio space on the LCC campus that supports the degree program at LTU.

Grand Rapids Community College [GRCC] Integrated Design Studio being offered by LTU at GRCC. This studio is offered in conjunction with the new Architectural Design Associate degree offered by GRCC. The partnership allows a student taking both the Integrated Design Studio and the Architectural Design Associate degree to transfer to Junior status at Lawrence Tech and complete the Master of Architecture program. This studio takes place on the campus of GRCC.

Computer Resources

IT Governance and Organization Every student in the College of Architecture and Design receives a laptop computer with a full suite of all software needed for their coursework. Please refer to the list below for details.

IT Planning The University has developed a governance structure to prioritize and manage the IT services, and it is comprised of:

- IT Strategic Committee - Consists of the Provost, VP of Finance, Executive Director of IT and several faculty members. The group, which includes an Architecture representative, meets periodically to set the high level direction and prioritization.
- IT Advisory Group – Working level committee formed with representatives from the various college and operational departments to coordinate the various IT related initiatives on campus.
- Student Technology Advisory Group – Student group which reports to Student Government on IT and technology related issues.

Specific meetings are also held with various student groups, deans, college faculty and key vendors to communicate IT related projects and gather input on specific issues. Architecture is currently active in the one-on-one laptop program (LTuZone) equipment evaluation.

IT Technical Infrastructure The College of Architecture has access to all IT technical resources on campus plus remote connections. The campus network, internet access, campus wide wireless access, centralized server-based applications and LTU student laptop program applications are all available for Architecture use both on campus, in University housing and remotely. Improvements in all these areas have been recently made and more are planned in order to meet increasing demand.

The Edward Donley Computer Center (EDCC) houses most of the IT infrastructure equipment used throughout the university. The network backbone, core system servers, storage area network (SAN) and telecommunications equipment are located in this closely monitored computer room with physical security measures, environmental controls and fire suppression system. IT controls and processes are reviewed each year as part of the campus financial audit.

The campus buildings are all connected via fiber-based backbones between the buildings and network closets back to the network core in the EDCC. The internet access is available from the Merit Network in Michigan and has been upgraded to provide 250mb connection to the Internet and Internet 2. Remote connections are available to all students and faculty via web based services and VPN connections.

The campus wireless system covers the entire campus and housing units with coverage utilizing 801.a, b, g and n protocols. Off site Architecture offices in the Detroit Studio, Chrysler House and Federal Reserve building will also have internet access. Off campus remote access is also available to students for the core Banner and Blackboard systems. Remote VPN access also gives students access to services. All IT technical components are consistently under life cycle evaluation and studied for areas of improvement.

Centralized Information Systems The core institutional system for admissions, registration, class scheduling and degree tracking is provided by the SungardHE Banner system. Student and University financial matters are also maintained in Banner. The system is continuously updated with supported versions and various efforts are underway to enhance its functionality and use.

Lawrence Tech's comprehensive e-Learning and services portal, my.ltu.edu, offers an expanding variety of resources and conveniences. Among them is Blackboard, a comprehensive and flexible e-learning software platform that delivers the University's course management system, customized institution-wide portals, on-line communities, and an advanced architecture providing Web-based integration with the University's administrative systems.

Blackboard offers students the 24/7 access to professors and fellow students not available in the typical classroom environment. Professors can post their syllabi online, as well as class lectures and assignments, for immediate retrieval by students with an Internet connection.
Other features available through Blackboard are discussion boards for posting questions and receiving answers to and from other students and the professor in the class, advising, virtual chat room capabilities for asynchronous communication with the entire class, and the ability for students to submit assignments online. Video streaming, synching with Facebook, Wimba and other add-ons are also available via links to Blackboard. Google Hangout technology is also used to teach and supplement various Architecture classes.

Architecture students and faculty are also provided LTU administered Google Apps for Education accounts for email, calendaring documents and website creation. Google Hangout technology is also used to teach and supplement various Architecture classes offered both on campus and online. Each student also has allotted network disk space. A centralized room scheduling system is also in place for use.

Architecture specific processing such as rendering are also supplemented via equipment loaners, rendering farms and cloud based options. Rapid changes in this area cause it to be constantly re-evaluated.

LTuZone Laptop Program The University started the student laptop initiative in 2000. This program gives all students and faculty access to personal use of a laptop for the academic year with specific applications installed depending on their academic program. The recently rebranded "LTuZone" laptop initiative program is developed with input from administration, faculty, staff and students and will be continued for at least the next 4 years. The LTuZone environment basically places all the equipment and software of a "lab" with each student at all times. Incoming lower-division Architecture students including direct entry masters as are eligible to receive the LTuZone hardware and software environment as part of tuition with just a security deposit. Upper-division students are also eligible for the program but pay a per credit fee. A new cycle of equipment will be purchased for the fall of 2014. Representatives from the various Architecture departments constantly evaluate and make recommendations on the required software needed for each program. Input is also received from industry representatives so that the software reflects what is being used in industry. For example, the Architecture college students currently receive a Lenovo workstation level laptop with the following software preloaded:

Software Available on Laptops

Adobe
CS6 Master Collection
Adobe Creative Cloud access
Reader
Air
Shockwave
Flash

Microsoft
Endpoint Protection
Access
Excel
InfoPath Designer
InfoPath Filler
OneNote
Outlook
Powerpoint
Publisher
Word
Project Professional
Visio Professional 2013
Silverlight
Calc Plus
Visual Studio.NET Premium

Specialty Software
Abaqus (CD)
ArcGIS
B2 Spice A/D Pro
Catia
ChemDraw Pro
Chempad
CityEngine
CrazyBump
CulvertMaster v3.3
DataStudio
FlowMaster v8.11
Grasshopper
Hammer V8i
InterVideoWinDVD
LabVIEW
Logger Pro
Maple
MapleSim
Mathcad
MicroCap
Mind Walk
Minitab
PDF Creator
Pond Pack v8i

Learning Tools
Blackboard Wimba
Panopto Recorder
PDF Annotator
UW Classroom Presenter 3
NOOK Study

Utilities
Browsers - Various
CD Burner XP
7-Zip
K2 software
mySQL Installer
Printer and Plotter drivers
Quicktime
Realplayer
Safe Connect Policy Key
VLC Media Player
VPN Client
WinSCP

Google
Google Apps for Education
Google Earth (Free Version)
Google Drive

Autodesk Education Master Suite	PsychoPy
Revit	Ram Structural Systems
AutoCAD	Rhinoceros
Navisworks Manage	RISA-3D
3DS Max Design	RTT Delta Gen (cd)
Architecture	SAP 2000 (y CD)
MudBox (Lenovo only)	Scientific Viewer
Autocad Civil 3D	SewerCADv8i
Inventor Fusion	SewerGEMS v8i
Alias Automotive	SketchUp Pro
Maya	Spartan
MotionBuilder (Lenovo only)	StormCAD v8i
	Structure Point
	Syntax2D
	UCL Depthmap
	WaterCad V8i
	WaterGEMS v8i

For special needs and certain program requirements, other software is also loaded on the student and faculty laptops. Problems with hardware or software issues with university-supplied laptops are resolved on site by the Computer Help Desk at no charge, unless there is unusual equipment abuse.

Services available to assist students and faculty

Information Services Support Structure Information Services support is provided to the university through coordinated efforts of the centralized IT department and eLearning Services. The IT department consists of the Edward Donley Computer Center (EDCC) and the Computer Help Desk.

The EDCC provides IT support to the entire Lawrence Tech community by offering an expanding variety of educational technology resources and enhancing the IT infrastructure. EDCC provides access to and support for computing systems and software, email accounts, laptops and personal computers, the Internet, printer access, access to network drives, university telephones, and internal and external data networks.

The Computer Help Desk is the first point of contact for students, faculty and staff to assist them in resolving problems with software, network connectivity issues, laptop issues, and other computer related problems. Walk-in support is available at no charge for problem diagnosis, laptop distribution and repair, password resets, software installation, wireless network configuration, email setup, and instruction and training. The Help Desk also provides first level support for eLearning issues.

eLearning Services provides support for LTU Online, course development, media production, online evaluation and assessment, and classroom technologies. eLearning provides documentation, instruction, and support to students, faculty and staff for enterprise applications via my.ltu.edu eLearning also works with faculty for course integration of enterprise and discipline-specific applications into courses.

IT and eLearning have also developed web-based support documentation via the LTU eHelp link to supply general computer system information, training documents and FAQs. This support mechanism is evolving and continuously being expanded to cover additional systems.

Accessibility of the computer facilities and services to students and faculty and how students' access to these facilities is provided and monitored

The LTuZone laptop initiative along with the supporting IT infrastructure allows Architecture students and faculty access to services anywhere on campus and in university housing. Each student also has the ability to log into Banner, Blackboard and other services, including library resources, remotely via the Web or LTU Virtual Private Network (VPN).

Approved Architecture users are given network and application ID's based on their role, along with a LTU based Google Apps for Education email account at no charge. Black and white printing is also available at no charge without quotas to students at various public locations throughout the campus.
Various computer laboratories throughout campus also allow both general and specific function computer access to Architecture students.

Architecture Labs
- 236 – iMac classroom and individual use
- 221- iMacs and Windows workstations

Other
- E152–Windows workstations with Google Earth Pro
- Library – iMacs and Windows Workstations

Student versions of software and equipment is also available for free or purchase at discounts using LTU agreements with companies such as Abaqus, Adobe, Autodesk, Maple Soft, Microsoft and Minitab. Periodic vendor promotions to LTU are also offered to students and faculty.

Method of payment for instructional computing services
All computer related equipment maintenance and consultation services are provided by University funds. Equipment and software acquisition is supported by college funds, grants and donations. Budgets, workload balance and new initiatives are defined and prioritized through the IT Governance structure.

Lower-division students participate in the laptop program as part of tuition only by paying a security deposits on the laptops they receive. The deposit is refunded to the student once the unit is returned. Faculty members also have access to the laptop program. Upper-division students may also receive a University issued laptop but pay a set amount per credit hour.

Plotters and Printers
Architecture students are able to print B&W materials for free at 7 public student printers across campus. Color printing is available for a nominal cost in the Library and at the ACRC. Letter size color prints are $0.50 and 11 x 17 costs $1.00. Plotting is available at the ACRC at a nominal cost determined to cover the annual plotting expenses and is dependent on the size of the plot and paper used.

The Architecture Computer Resource Center (ACRC) Print Desk provides printing, scanning, and computer-related services. Services such as color printing, large-format printing and plotting, scanning, and report binding are available throughout the school year during operating hours. Specialized printers produce large-format CAD plots, as well as photo-quality prints and posters. After hours, 24/7 self-service black-and-white printing is available on the public printer by the Print

Desk, as well as color laser printing and scanning to the Hotspot printer in the lobby adjacent to the Print Desk. Scanners are also available for student use.

Ricoh HotSpot printers are available to allow printing directly from laptops and mobile devices. These are located in the library (pay at the desk or use PayPal), in the Architecture Resource Center (A131), and in the atrium of the Buell Management Building. Black-and-white prints are free on these devices.

The current Detroit Studio also has printing and plotting capabilities. Those services will be migrated to the Detroit Federal Reserve building space, which is currently under construction.

Measurement of usage by faculty and students
From a network perspective, routine attempts to monitor or measure individual computer usage is not done. Monitoring and investigation is performed if there is reasonable cause to determine inappropriate usage or resolve technical issues. The only type of internet traffic which is usually blocked is peer-to-peer protocols which could be used for the illegal downloading of copyrighted materials.

Aggregate measures of traffic, data storage and usage is captured in various ways to plan and modify systems for performance or planning purposes. Internet traffic is also monitored in the same way to better route and use campus bandwidth. Print volumes are also measured to determine if the proper devices are deployed in a cost effective manner. Academic system usage of Blackboard is beginning to be analyzed for usage patterns to better utilize the system and set usage standards.

Self-assessment of any limitations of the education of Architecture students resulting from the current computer facilities.
The available computing facilities are appropriate to the mission of the College of Architecture. Continued infrastructure and upgrades of hardware and software are planned with input from various the University IT governance groups.

I.2.4. Financial Resources

Introduction

This section demonstrates that the College of Architecture and Design and its Department of Architecture have access to institutional and financial resources appropriate and necessary to support student learning, and achievement.

Please refer to the following pages for spreadsheets.

Institutional Financial Issues
Enrollment and Funding and ***Pending reductions or increases in funding and plans for addressing these changes*** Over the last five years, those of economic recession, the architecture program and the University have experienced reductions in enrollment. To address the decrease in enrollment and the consequent decrease in tuition revenue, the University has restricted hiring somewhat and dramatically reduced discretionary funding. The University has also enforced a minimum section size for every course. The program is required to have a minimum of at least six students for lower division courses and seven students for upper division courses.

The College has addressed the decrease in enrollment through the reduction of discretionary funding and by minimizing the number of sections open for each course without increasing any section beyond 16 total students for studios or 20 total students for lectures. However, the

program was rather large prior to this time and the smaller student cohort has allowed the department to clarify its curriculum and create a more supportive learning environment. The program is now embarking on a much more strategic recruiting effort to increase the student enrollment in architecture. The College has initiated several new programs in the Art and Design department and the Department of Architecture is investigating several new degree programs as well. The architecture program has been able to make several new faculty appointments during this period and feels confident that it can support and increased student population in the future.

The new recruiting efforts are more targeted than before. The department has identified a five-hour travel radius around Detroit as an ideal, working recruitment area for the direct-entry M.Arch track. We still plan to carry out national recruiting on a modest basis and aimed at the M.Arch 36 credit and M.Arch 3+ degree tracks.

Changes in funding models for faculty, instruction, overhead, or facilities since the last visit and plans for addressing these changes (include tables if appropriate).
No changes.

Any other financial issues the program and/or the institution may be facing.
There are no other issues.

Report Dated 8.1.13

	for NAAB FY 2013
NAAB #1 and #2	
Expenditures - Instruction	
Wages	
Full Time Faculty	1,672,778
Adjunct	1,023,425
1/2 of Student Assistant Wages in FY 2011 of $206,256	
Student Assistants for Faculty = Estimated at 1/2 of Student Wages for FY 2013 of $146,516	73,258
Ford Grant Spent	18,446
Grant Expenses from Below that were spent	25,400
Total - Expenditures Instruction	2,813,307
Total Revenue in Total Operating Budget	4,706,313
Endowments - Virginia North	20,000
Rainy Hamilton - Endowment	25,000
Howard Simms - Endowment	20,000
Capital for Make Lab Added to Revenue	0
	4,771,313
Ford Grant Money for Scholarships and Program Expenses	120,166
Coleman - Instruction - Amy Deines	5,400
Coleman - Instruction - Constance Bodurow	3,000
ARCC Research Awad - Jim Stevens	1,200
Coleman - E-Barista Award - Steve Coy	2,000
Joon Kim - NCARB Grant	13,800
Added Revenue	145,566

Total Revenue from All Sources	4,916,879
Total Revenue from All Sources	4,916,879
Minus Expenditures - Instruction/Wages above	2,813,307
TOTAL OVERHEAD	2,103,572

NAAB #2 - At the time this report was prepared, the fiscal year 2014 budget was not finalized

Forecast of Revenue and Expenses for FY 14 & 15
All Sources (000's Omitted)

Organization	**FY 2014** Revenue	Expenses	**FY 2015** Revenue	Expenses	**FY 2016** Revenue
College of A&D	4,850	4,825	4,905	4,915	5,005
Dean's Office					
Architecture					
Art & Design					
Graduate Studies					

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	**FY 2013**
EXPENSES						
Expenditures - Instruction						
Wages						
Full Time Faculty	1,420,994	1,377,379	1,398,925	1,598,000	1,497,783	1,672,778
Adjunct	1,191,243	1,225,248	1,182,666	1,183,000	1,059,136	1,023,425
1/2 Student Wages for FY 2008 - $135,968	67,984					
1/2 Student Wages for FY 2009 - $161,002		80,501				
1/2 Student Wages for FY 2010 - $202152			101,076			
1/2 Student Wages in FY 2011 of $206,256	0			103,128		
Student Assistants for Faculty = Estimated at 1/2 of Student Wages for FY 2012 of $181,536	0				90,768	73,258
Other Expenditures:						
Ford Grant Spent	102,346	122,553	52,519	29,217	51,173	18,446
Grant Expenses from Below that were spent = $1,500, $1,800, $10,000 $5,000	0				18,300	25,400
Total - Expenditures Instruction	2,782,567	2,805,681	2,735,186	2,913,345	2,717,160	2,813,307

REVENUE						
Total Revenue in Total Operating Budget	4,530,163	4,790,809	4,607,396	4,564,035	4,871,165	4,706,313
Endowments - Virginia North	0	0	0	17,000	20,000	20,000
Rainy Hamilton - Endowment	0	25,000	25,000	25,000	25,000	25,000
Howard Simms - Endowment	0	20,000	20,000	20,000	20,000	20,000
Capital for Make Lab Added to Revenue	0	0	0	33,000	0	0
	4,530,163	4,835,809	4,652,396	4,659,035	4,936,165	4,771,313
Ford Grant Money for Scholarships and Program Expenses	357,174	272,329	191,275	170,256	171,339	120,166
Coleman - Instruction - Amy Deines						5,400
Coleman - Instruction - Constance Bodurow						3,000
ARCC Research Awad - Jim Stevens						1,200
Coleman - E-Barister Award - Steve Coy						2,000
Joon Kim - NCARB Grant						13,800
Coleman - Instruction - Jim Stevens					1,500	
Kern Grant - Filza Walters - Jim Stevens					1,800	
Knight Foundation Grant - Steve Coy					10,000	
Coleman - New Program Instruction - Steve Coy					5,000	
Coleman - Instruction - Peter Beaugard			5,000	1,000		
Jim Stevens - Coleman				5,000		
Kern Grant - Filza Walters - Jim Stevens			1,800			
Grant Money Applied to Instruction				42	0	
Added Revenue	357,174	272,329	198,075	176,298	189,639	145,566
Total Revenue from All Sources	4,887,337	5,108,138	4,850,471	4,835,333	5,125,804	4,916,879
Total Revenue from All Sources	4,887,337	5,108,138	4,850,471	4,835,333	5,125,804	4,916,879
Minus Expenditures - Instruction - Wages above	2,782,567	2,805,681	2,735,186	2,913,345	2,666,987	2,813,307
TOTAL OVERHEAD	2,104,770	2,302,457	2,115,285	1,921,988	2,458,817	2,103,572

Organization		Amount Budgeted	Students	Budget/ Student	Amount Spent	Spent/ Student
2007-2008 (FY 2008)						
College of Architecture and Design						
Dean's Office						
	Expense	$1,305,633	1,093	$1,195	$1,017,580	$931
	Capital	$87,000	1,093	$80	$89,465	$82
Architecture						
	Expense	$2,059,234	910	$2,263	$2,491,216	$2,738
	Capital	$0			$0	
Art & Design						
	Expense	$1,078,296	175	$6,162	$1,186,390	$6,779
	Capital	$0			$0	
		$4,530,163	$1,093	$4,145	$4,784,651	$4,378

Organization		Amount Budgeted	Students	Budget/ Student	Amount Spent	Spent/ Student
2008-2009 (FY 2009)						
College of Architecture and Design						
Dean's Office						
	Expense	$931,674	1,107	$842	$929,636	$840
	Capital	$74,000	1,107	$67	$8,684	$8
Architecture						
	Expense	$2,428,749	926	$2,623	$2,720,054	$2,937
	Capital	$0			$0	
Art & Design						
	Expense	$1,273,936	181	$7,038	$1,121,457	$6,196
	Capital	$0			$0	
Graduate Studies						
	Expense	$82,450	1,107	$74	$70,511	$64
	Capital	$0			$0	
		$4,790,809	1,107	$4,328	$4,850,342	$4,382

Organization		Amount Budgeted	Students	Budget/ Student	Amount Spent	Spent/ Student
2009-2010 (FY 2010)						
College of Architecture and Design						
Dean's Office						
	Expense	$916,832	1,103	$831	$1,010,225	$916
	Capital	$2,250			$3,778	
Architecture						
	Expense	$2,403,012	910	$2,641	$2,486,958	$2,733
	Capital	$0			$0	
Art & Design						
	Expense	$1,220,452	193	$6,324	$1,167,575	$6,050
	Capital	$0			$0	
Graduate Studies						
	Expense	$64,850	1,103	$59	$50,638	$46
	Capital	$0			$0	
		$4,607,396	1,103	$4,177	$4,719,174	$4,278

2010-2011 (FY 2011)

Organization		Amount Budgeted	Students	Budget/ Student	Amount Spent	Spent/ Student
College of Architecture and Design						
Dean's Office						
	Expense	$951,190	1,074	$886	$980,684	$913
	Capital	$23,036	1,074	$21	$23,501	$22
Architecture						
	Expense	$2,310,511	880	$2,626	$2,532,789	$2,878
	Capital	$0			$0	
Art & Design						
	Expense	$1,200,348	194	$6,187	$1,147,074	$5,913
	Capital	$0			$0	
Graduate Studies						
	Expense	$78,950	1,074	$74	$64,421	$60
	Capital	$0			$0	
		$4,564,035	1,074	$4,250	$4,748,469	$4,421

2011-2012 (FY 2012)

Organization		Amount Budgeted	Students	Budget/ Student	Amount Spent	Spent/ Student
College of Architecture and Design						
Dean's Office						
	Expense	$1,058,016	1,058	$1,000	$1,095,565	$1,036
	Capital	$0			$0	
Architecture						
	Expense	$2,467,223	872	$2,829	$2,359,688	$2,706
	Capital	$0			$0	
Art & Design						
	Expense	$1,278,829	186	$6,875	$1,219,960	$6,559
	Capital	$0			$0	
Graduate Studies						
	Expense	$67,097	1,058	$63	$57,021	$54
	Capital	$0			$0	
		$4,871,165	1,058	$4,604	$4,732,234	$4,473

2012-2013 (FY 2013)

Organization		Amount Budgeted	Students	Budget/ Student	Amount Spent	Spent/ Student
College of Architecture and Design						
Dean's Office						
	Expense	$929,588	1,010	$920	$876,047	$867
	Capital	$0			$0	
Architecture						
	Expense	$2,428,414	810	$2,998	$2,457,088	$3,033
	Capital	$0			$0	
Art & Design						
	Expense	$1,227,278	200	$6,136	$1,316,080	$6,580
	Capital	$0			$0	
Graduate Studies						
	Expense	$59,850	1,010	$59	$57,085	$57
	Capital	$0			$0	
		$4,645,130	1,010	$4,599	$4,706,300	$4,660

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
COLLEGE OF ENGINEERING						
BUDGET	$ 5,997,066	$ 6,365,484	$ 6,118,935	$ 6,366,439	$ 5,884,857	$ 6,150,521
BUDGET CAPITAL	$ 75,290	$ 107,131	$ -	$ -	$ 50,000	$ 60,000
ACTUAL	$ 6,293,918	$ 6,392,835	$ 6,013,646	$ 5,754,922	$ 5,826,827	$ 5,756,890
ACTUAL CAPITAL	$ 70,228	$ 73,439	$ 3,646	$ 65,005	$ 78,005	$ 72,752
STUDENT COUNT	**1,788**	**1,604**	**1,514**	**1,379**	**1,317**	**1,251**
BUDGET PER STUDENT	$ 3,354	$ 3,969	$ 4,042	$ 4,617	$ 4,468	$ 4,916
BUDGET CAPITAL PER STUDENT	$ 42	$ 67	$ -	$ -	$ 38	$ 48
ACTUAL PER STUDENT	$ 3,520	$ 3,986	$ 3,972	$ 4,173	$ 4,424	$ 4,602
ACTUAL CAPITAL PER STUDENT	$ 39	$ 46	$ 2	$ 47	$ 59	$ 58

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
COLLEGE OF MANAGEMENT						
BUDGET	$ 4,521,804	$ 3,945,335	$ 3,690,128	$ 2,959,644	$ 2,728,964	$ 2,558,432
BUDGET CAPITAL	$ -	$ 25,000	$ -	$ -	$ -	$ -
ACTUAL	$ 4,033,814	$ 3,257,791	$ 2,988,488	$ 2,608,191	$ 2,634,633	$ 2,329,216
ACTUAL CAPITAL	$ 7,161	$ -	$ -	$ -	$ -	$ -
STUDENT COUNT	**1,192**	**1,062**	**919**	**855**	**763**	**679**
BUDGET PER STUDENT	$ 3,793	$ 3,715	$ 4,015	$ 3,462	$ 3,577	$ 3,768
BUDGET CAPITAL PER STUDENT	$ -	$ 24	$ -	$ -	$ -	$ -
ACTUAL PER STUDENT	$ 3,384	$ 3,068	$ 3,252	$ 3,051	$ 3,453	$ 3,430
ACTUAL CAPITAL PER STUDENT	$ 6	$ -	$ -	$ -	$ -	$ -

	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
COLLEGE OF ARTS AND SCIENCES						
BUDGET	$ 5,885,897	$ 5,701,387	$ 5,520,121	$ 5,263,541	$ 5,218,627	$ 4,987,136
BUDGET CAPITAL	$ 68,000	$ 50,000	$ -	$ 96,000	$ 52,000	$ -
ACTUAL	$ 5,639,614	$ 5,282,108	$ 5,087,029	$ 4,778,146	$ 4,721,958	$ 4,835,088
ACTUAL CAPITAL	$ 126,481	$ 74,879	$ 5,083	$ 105,118	$ 51,385	$ 9,455
STUDENT COUNT	**682**	**616**	**638**	**589**	**562**	**561**
BUDGET PER STUDENT	$ 8,630	$ 9,255	$ 8,652	$ 8,936	$ 9,286	$ 8,890
BUDGET CAPITAL PER STUDENT	$ 100	$ 81	$ -	$ 163	$ 93	$ -
ACTUAL PER STUDENT	$ 8,269	$ 8,575	$ 7,973	$ 8,112	$ 8,402	$ 8,619
ACTUAL CAPITAL PER STUDENT	$ 185	$ 122	$ 8	$ 178	$ 91	$ 17

I.2.5. Information Resources

Introduction

The University Library is located at the center of campus, on the lower level of the Buell Management Building, a short walk from the College of Architecture and Design. The Library is complemented by the Architectural Resource Center (ARC), located on the lower level of the Architecture building. The ARC specializes in the visual presentation needs of the College of Architecture and Design, as well as providing support for classroom presentations. The ARC also has an extensive section of books and other printed resources. The manager of the ARC, the Digital Projects Librarian, is funded through the Library and reports to the Library director. Funding for Library services is divided: the Library's budget for staff, collections, and all operations is supported through the Provost's office; funding for the majority of ARC's daily operations is from the College of Architecture and Design.

The Library

The Library was formally established in 1937 and is in its fifth facility at LTU. The current location was opened in 1982 and is under consideration for renovations in 2014. These renovations will freshen the look, improve comfort, and create a more inviting entrance for patrons. The Library also offers a computer lab for students. Although most students at LTU have a laptop computer provided by the University, the Library has ten PC's and two Mac computers available for student use during Library hours. These computers are fully loaded with software and students may print from these stations at no cost. The Library staff offers support and assistance when there are problems using the machines.

The Library collection is broad in its scope, with about 20% of the books and bound volumes dedicated to architecture. The total Library holdings consist of 213,260 items, including 108,000 electronic books, according to the Online Computer Library Center (OCLC, the worldwide Library cooperative of which the Library is a member). In addition, there are 111,000 unique online journal titles. Within the Library is a separate, special collection, the 3,000-book personal Library of the celebrated early twentieth-century architect Albert Kahn. It is a room that fully recreates Kahn's Library as it appeared when he worked at his office in Detroit. These materials are included in the Library catalog and are available for student and faculty use.

The Library maintains current and holds extensive back issues of 70 major periodical titles supporting architecture and design, some of which are also available online. There are more than 175 titles overall, some in bound volumes and no longer published, and some in monographic serials. At least 42 are on the 54-item Association of Architecture School Librarians (AASL) Core List. Campus budget issues during the recent recession have slowed book and serial acquisitions, but a large majority of the books purchased have supported architecture and related curricula. The Library maintains print copies of the Master of Architecture theses from the Department of Architecture; these are cataloged in WorldCat and can be discovered worldwide. Areas that need improvement include works covering new technologies, particularly in programs such as game design and subjects such as digital fabrication. The library intends to remedy this in the near future as funds are available and these subject areas expand.

The Library subscribes online to the two major indexing services for architecture, the *Avery Index to Architectural Periodicals* and the *Art Abstracts.* It also has a major finding source, WorldCat Local, which covers a variety of disciplines and item types, including full-text online. WorldCat Local, dubbed "TechCat+" is the Library's main online catalog. All online resources are available to faculty and students both on and off-campus. A greatly expanded version of the *Art Abstracts*, *ArtSource*, is under consideration for acquisition in the next fiscal year. *ArtSource* adds additional full-text resource access and indexes a larger number of titles in architecture, design, and related subject areas. There are more than 134 individual databases available for students and faculty

with architectural information available in a variety of them. The number of databases grows annually, including services that provide full-text access, which is a boon for regular students working off-campus as well as online students. Some unusual online databases include *Materials Connection* and *MADCAD* (codes and standards).

The Architectural Resource Center hosts 23,564 images in a specially created database for LTU users and accessible via online, along with many specialty items such as still and video cameras, measuring tools (light and sound meters), digital projectors, a heliodon, and sound equipment. The ARC also provides the space and the equipment to photograph two-dimensional and three-dimensional work. There is a full set of customized library guides, including those for architecture, design, and art history, that organize resources to help users find and research information items. Plans are underway to migrate these images to an easier-to-use database system, as described below. For more information, refer to http://libguides.ltu.edu/.

The Library has a variety of ways to extend access to resources and assure that students and faculty can get what they seek, almost always without charge. These include:

1. MelCat: Approximately 400 libraries in Michigan share holdings information and ship books to the student or faculty member on request.
2. InterLibrary Loan: The LTU Library may obtain materials for students and faculty from libraries throughout North America and on occasion, from overseas. Books or articles may be ordered directly through TechCat+ online.
3. Reciprocal Borrowing: LTU students and faculty automatically gain borrowing privileges in many academic and public libraries locally and statewide.

Library Staff

The Library has a staff of 5.5 FTE librarians, and the ARC has 1 FTE librarian. There are a total of two part-time staff and eight student assistants. All of the librarians hold a Master of Science degree in Library Science from accredited American Library Association programs, with experience ranging from two to 38 years in Libraries. The support staff have either associate or bachelor degrees. There is a librarian on duty all hours that the Library is open, and the ARC librarian provides service at both the ARC and the Library. Librarian assistance is available in person, by telephone, by email, and via online chat reference twenty-four hours each day, seven days a week.

The goal of LTU librarians is to assist users in accessing and interpreting the collections in a variety of formats. They assist users in developing search strategies, evaluating content, and accessing content in whatever format it may appear. This educational effort takes place in several different ways. The librarians work one-on-one with users or provide in-classroom instruction upon request. Classes may also receive instruction within the Library. Instruction for students and faculty in the use of the Library may be general or specific. Often it is assignment- or project-driven. Faculty are invited to include a Library visit in their class syllabi to support research-based projects or to have a librarian visit the class to provide overviews or in-depth instruction on Library resources.

Another service provided by the Library staff is to assist all master and doctoral candidates with the binding and finalization of their theses. The printed theses and dissertations are cataloged in the national OCLC database and archived in the Library.

The Library Director is the ex-officio Chair of the University's Library Committee. Both the ARC Digital Projects Librarian and a faculty member from the College of Architecture and Design serve on this committee to advise the Director on policies and provide updates on new programs and future planning in the College.

Library Space and Funding
Funding for the Library is dependent on overall campus income, but ideally it hovers around $1,000,000 annually for the entire operation including personnel, electronic resources, equipment, and acquisitions of books and serials. This figure has dropped in recent years due to the recession, and the most current fiscal year (2012-13) the overall approved budget is $923,018. The book and print serials budget is approximately $100,000, requiring that the Library be very selective in acquiring books. Faculty are encouraged to recommend book titles for purchase, and the Library always attempts to acquire such books depending on funds available. The number of new books added to the collection has slowed greatly in the last three years, and this will not increase unless funding is improved. This is a major challenge for the librarians, because in the architecture and design fields, print is still king. The Library seeks budget increases in the future.

Physical space is at a premium on the campus, and the physical expansion of the Library and the ARC will not be possible at least until a new building is constructed that could accommodate a library or free space for the library's expansion in its current location. In the meantime, proposed renovations of the existing space will do much to make the best use of the square footage available. Plans for improvements in decor, seating, and the interior arrangement will be carried out in stages.

Currently, the Library is planning for a new service provider for the database of LTU's images. It has been determined that a "cloud-based solution" for image storage and discovery would simplify access for users; the new system should be operating in late 2013. The Library has agreed to provide seed money to fund this improved service.

The Library is also looking at the establishment of an institutional digital repository for faculty research and student project materials. The scholarship and projects produced by the College of Architecture and Design would be easier to access from outside the University with this system. Funding for this project is expected to come initially from the Provost's Office, and be administered by the Library, which will offer training and assistance in the system's set-up and use.

Materials Resource Library
The Materials Resource Library consists of a large collection of catalogs of contract furniture, as well as samples of fabrics, floor coverings, wall coverings, paint, mica, wood, stone, tile, metals, etc. The workroom is monitored and maintained by a teaching assistant who continually adds new samples. Current catalogs, pricing and materials are all available online and LTU subscribes to CAP software that includes updated catalogs and pricing for non-residential furniture. The materials room is open during design hours; students and faculty may gain access at other times by obtaining a key from the Resource Room in the building. Because of the remoteness of the sample library from the studios in the UTLC, it has been supplemented with a small room on the UTLC third floor with samples provided for the convenience of the students.

Digital and Online Information Tools

Collaborative Tools
Wimba is a synchronous meeting tool within Blackboard. Faculty may use it for office hours, meeting with students to review their work, studio reviews, guest speakers, etc.

Google Hangout is a synchronous meeting tool within LTU's Google suite. Faculty use it for office hours, meeting with students to review their work, studio sessions, guest speakers, etc. HangOuts is becoming the preferred meeting tool because of its ease of use and availability.

Document Sharing Tools
Google Drive is a cloud-based file storage application with LTU's Google suite. Faculty and Students store their drawings, documents, and other files there and can share them to promote collaboration.

Dropbox is a cloud-based file storage application available free to users. Faculty and Students store their drawings, documents, and other files there and can share them to promote collaboration.

Course Management and Learning Management System
Blackboard (Bb) is a Learning Management System provided by LTU. Faulty use Bb to present course materials, assess student learning trough assignments, tests and portfolios. Feedback and grades are provided via the Blackboard Grade Center. In online courses, Blackboard is the mechanism though which courses are presented and students are engaged.

Lecture Capture/Presentation Recording
Panopto is a recording tool that allows faculty and students to record themselves giving presentations. Faculty and students can also record their computer screen. Currently Panopto is used by faculty to record their lectures and post them in Blackboard for students to view. Faculty also use Panopto to record their computers as they demo software applications or work though calculations.

Computer Resources
A full accounting of computer and software available to faculty, students, and staff is included in *section I.2.3 Physical Resources.*

I.3. Institutional Characteristics

I.3.1. Statistical Reports

I.3.1 Statistical Reports

Comparative Data for Students

In this section of the APR, the program provides statistical data in support of activities and policies that support social equity in the professional degree program as well as other data points that demonstrate student success and faculty development.

I. Total Enrollment Compared to the Time of the Last Visit (full academic year)

	As Reported in the 2011 ARS									As reported for the academic year in which the last visit took place								
Ethnicity	**Full Time Male Total**	**Full Time Female Total**	**Full Time Total**	**Part Time Male Total**	**Part Time Female Total**	**Part Time Total**	**Male Total**	**Female Total**	**Grand Total**	**Full Time Male Total**	**Full Time Female Total**	**Full Time Total**	**Part Time Male Total**	**Part Time Female Total**	**Part Time Total**	**Male Total**	**Female Total**	**Grand Total**
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	1	0	1	8	6	14	9	6	15	0	1	1	1	3	4	1	3	5
Native Hawaiian or other Pacific Islander	0	0	0	1	0	1	0	0	1	0	1	1	1	3	4	1	4	5
Black or African American	0	0	0	4	7	11	4	7	11	0	0	0	0	4	4	0	4	4
Hispanic/Latino	0	0	0	3	2	5	3	2	5	0	0	0	3	2	5	3	2	5
White	6	1	0	111	60	171	116	61	177	5	9	14	51	34	85	56	43	99
Two or more races	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	3	0	3	0	0	3	3	1	4	9	6	15	12	7	57
TOTAL	7	1	1	130	75	205	132	76	212	8	12	20	65	52	117	73	63	175

II. Qualifications of Students Admitted	As reported in the 2011 ARS	As reported for the academic year in which the last visit took place				
SAT:						
Critical Reading						
25th percentile SAT score						
75th percentile SAT score						
Mathematics						
25th percentile SAT score						
75th percentile SAT score						
Writing						
25th percentile SAT score						
75th percentile SAT score						
ACT:						
25th percentile ACT score				22	20	21
75th percentile ACT score				28	27	27
Graduate Record Examiniation						
Verbal (200-800)						
Quantitative (200-800)						
Analytical (0.0-6.0)						

III. Time to Graduation	As reported in the 2011 ARS			As reported for the academic year in which the last visit took place		
Normal Time to Completion: (number of quarters or semesters in which students are expected to complete all requirements for the NAAB-accredited degree						
Percentage of students who completed in normal time	21.0%	9.0%	33.9%	27.3%	22.7%	
Percentage of students who completed in 150% of normal time.	17.7%	22.6%	40.3%	22.7%	13.6%	

Information not available

I. Full-time Instructional Faculty Compared to the Time of the Last Visit (full academic year)

As reported in the 2011 ARS

Ethnicity	Professor - Male	Professor - Female	Professor - TOTAL	Assoc. Professor - Male	Assoc. Professor - Female	Assoc. Professor - TOTAL	Assis. Professor - Male	Assis. Professor - Female	Assis. Professor - TOTAL	Instructor - Male	Instructor - Female	Instructor - TOTAL	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0		0
Asian	0	0	0	2	0	2	1	0	1	1	0	0	7
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0	0	0	0	0
White	2	1	3	6	2	8	4	1	5	0	0	0	32
Two or more races	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	2	1	3	8	2	10	5	1	6	1	0	1	40

ıcademic year in which the last visit took place 2008

Ethnicity	Professor - Male	Professor - Female	Professor - TOTAL	Assoc. Professor - Male	Assoc. Professor - Female	Assoc. Professor - TOTAL	Assis. Professor - Male	Assis. Professor - Female	Assis. Professor - TOTAL	Instructor - Male	Instructor - Female	Instructor - TOTAL	GRAND TOTAL
American Indian or Alaska Native	0	0	0	0	0	0	0	0	0	0	0	0	0
Asian	0	0	0	2	0	2	0	0	0	0	0	0	4
Native Hawaiian or other Pacific Islander	0	0	0	0	0	0	0	0	0	0	0	0	0
Black or African American	0	0	0	0	0	0	0	0	0	0	0	0	0
Hispanic/Latino	0	0	0	0	0	0	0	0	0	1	0	1	2
White	2	1	3	5	2	7	3	1	4	4	3	7	42
Two or more races	0	0	0	0	0	0	0	0	0	0	0	0	0
Nonresident alien	0	0	0	0	0	0	0	0	0	0	0	0	0
Race and ethnicity unknown	0	0	0	0	0	0	1	0	1	0	0	0	2

II. Faculty Promotions	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Faculty in the accredited program					
Assistant to Associate Professor	1	0	0	2	2
Associate to Full Professor	0	0	1	0	0
Faculty in the institution					
Assistant to Associate Professor	3	2	2	2	2
Associate to Full Professor	0	0	1	0	0

III. Faculty Receiving Tenure	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Faculty in the accredited program	1	0	0	2	2
Faculty in the institution	4	2	3	4	4

IV. Registration in U.S. Jurisdictions	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011
Faculty receiving 1st time licenses	0	0	0	0	0
Faculty receiving reciprocal licenses	1	0	1	0	1
Faculty renewing licenses	2	3	5	5	7
Faculty receiving NCARB Certificates	0	0	0	0	1
Foreign-educated	5	5	5	5	5
Foreign-licensed	1	1	1	1	1
Broadly Experienced Architects	3	4	5	6	6

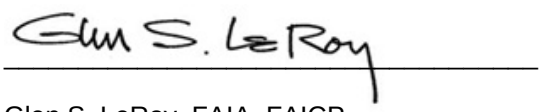
I.3.2. Annual Reports

Access to Documentation

In order to promote transparency in the process of accreditation in architectural education, LTU makes all *Annual Reports*, including the narrative, and all NAAB responses to the *Annual Report,* available at the following website:
http://www.ltu.edu/architecture_and_design/accreditation.asp

Statement of Submittal

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



Glen S. LeRoy, FAIA, FAICP
Dean, College of Architecture and Design

I.3.3. Faculty Credentials

The following is an overview of the credentials of full-time CoAD faculty teaching in the M.Arch program, including courses taught in the last two years. A full description of educational, academic, and scholarly experience for each full-time faculty member can be found in *section IV.2 Faculty Resumes*. The full matrix of faculty credentials (full-time and adjunct) and courses taught since fall 2011 can be found at https://www.ltu.edu/architecture_and_design/_faculty_matrices.asp and in the Team Room in spring 2014. Resumes for adjunct faculty will also be included in the team room.

Anirban Adhya PhD focuses on everyday architecture, sustainable placemaking, and the public realm. Recent publications include his projects in Detroit Studio, on research methods, and Jane Jacobs. *Courses taught: ARC3117: Integrated Design Studio 3, ARC3126: Integrated Design Studio 4, ARC5013: Research Methods, ARC5682: History of Urban Form, ARC5752: Quantitative Methods in Urban Design, ARC5782: Urban Theory, ARC6514: Thesis 1, ARC6524: Thesis 2, ARC3012: Directed Study, ARC6883: Independent Study*

William Allen is a registered landscape architect in Michigan, who received his degree from the University of Michigan in 1971. He has practiced since 1975. *Courses taught: ARC 2117: Integrated Design 1, ARC 1213: Visual Communications 2, ARC 4244: Allied Design Studio: Landscape, ARC 5423: Ecological Issues.*

Peter Beaugard (Chair, Department of Art and Design) is a brand strategist and designer with 7 years of teaching experience; he has presented on topics relating to innovation strategy, interaction design, and contemporary design criticism. *Courses taught: ART 3343: New Media, ARC 4324: Allied Design Studio: Multidisciplinary*

Constance Bodurow is an urban designer investigating the role of density in sustainable [transdisciplinary] urbanism, working at the scale of the building, site, city and associated ecosystem. *Courses taught: ARC3117: Integrated Design Studio 3, ARC3126: Integrated Design Studio 4, ARC5824: Advanced Design Studio 2: Transdisciplinary Urbanism, ARC5804: Critical Practice Studio, ARC 5724/4224: Urban Studio II/Allied Urban, ARC6514/6524: Thesis I/Thesis II, ARC5693: Sustainable Urbanism, ARC5742: Urban Design Methods, ARC5912: Principles and Practices of Urban Design, ARC5762: Urban Design Policy and Implementation, ARC5822: Visualization of Urban Density, ARC 6883: Independent/Directed Study*

Steven Coy is a visual artist with six years teaching experience; his work with the Hygenic Dress League includes digital media, motion graphics and work in the public realm. *Courses taught: ART 3213: Sculpture, ART 2993: Special Topics (Community Art Entrepreneurship), ART 3043: Video Imaging, ART 2993: Detroit-Berlin Connection, ART 2993: Special Topics (Art History-Berlin)*

Amy Deines (Associate Dean, CoAD) has 15 years of teaching/practice experience. Her work ranges in scale, from industrial to architectural and urban design and is considered an expert in multidisciplinary education. *Courses taught: ARC 4224, 4234 and 4634: Allied Design Studio: Multidisciplinary, ART 3993: DetroitSHOP*

Daniel Faoro has been selected to present papers on sustainability and structural systems at one international conference, regional conferences, and contribute a chapter revision to an engineering guide published by a professional society. *Courses taught: ARC2514: Structures 1, ARC 4224: Allied Design Studio: Sustainable Architecture, ARC4543: Structures 4, ARC5543: Advanced Structures, ARC 5824: Advanced Design Studio 2, ARC 6514: Thesis 1, ARC 6524: Thesis 2*

Jin Feng is a design educator with 30 years cross-cultural and cross-disciplinary experience, in history of designed environment, interior architecture, lighting design simulation, parametric design, and urban interior design. *Courses taught: ARC2126: Integrated Design Studio 2, ARI5143: Lighting Design and Research, ARI4113: History of Interiors and Furniture, ARI5622: Current Issues of Interior Design*

Dale Allen Gyure PhD is an expert in American and Modern architectural history. He has published on Frank Lloyd Wright and various topics regarding educational architecture. *Courses taught: ARC 3613: History of the Designed Environment I, ARC 3623: History of the Designed Environment II, ARC 4183: Twentieth Century Architecture & Theory, ARC 4173: Frank Lloyd Wright and His Times*

Deirdre Hennebury is an architectural historian with 15 years of teaching experience; she has curated exhibitions, written, and presented on diverse topics in Architecture, Urban Planning, and Museum Studies. *Courses taught: ARC 2117: Integrated Design Studio 1, ARC 5643: Design Theory, ARC 5882: Special Topics: Adaptive Reuse and Rehabilitation*

Ayohd Kamath is a licensed architect in India with experience in architecture, installation art, and teaching. He has presented and published papers on topics from computation to adaptive-reuse. *New hire, fall 2013.*

Joongsub Kim PhD is engaged in teaching, research and services in public interest design, socially responsive design, sustainable urbanism, sustainable community revitalization, design review, service learning, healthy/smart city, and environmental psychology. *Courses taught: ARC 3117: Integrated Design Studio 3, ARC 3126: Integrated Design Studio 4, ARC 5814: Advanced Design Studio 1, ARC 4264: Allied Design Studio: Urban, ARC 6514: Thesis 1, ARC 6524: Thesis 2, ARC 4993 / 6002: Public Interest Design Practices and Research Workshop, ARC 6732: Comprehensive Urban Exam, ARI 4123: Environmental Psychology, ARC 5013: Research Methods, ARC 5743: Current Issues in Urban Design*

Glen LeRoy FAIA (Dean, CoAD)is a nationally recognized urban designer and teaches primarily in that area. His research includes issues associated with climate change and architectural education. *Courses taught: ARC 4264: Allied Design Studio: Urban, ARC 5882: Environmental Graphics Design Studio, ARC 5732: Real Estate Practice, ARC 3011, 3012, 3013, 3014: Directed Studies*

Gretchen Maricak is a licensed architect, professional architectural illustrator and artist whose research specialty is college student development and socialization. She is involved in planning commission work and Historic District Study Committees. *Courses taught: ARC1213: Visual Communications 1, ARC 1223: Visual Communications 2, ARC 2117: Integrated Design Studio 1, ARC 2126: Integrated Design Studio 2*

Janice Means PE has brought sustainability into her classrooms through semester-long energy analysis projects and building monitoring grants for analyzing high performance buildings for real clients. *Courses taught: ARC 4423: Environmental System II (renamed ARC 3423 HVAC & Water Systems), ARC 3993/CHM 3993: Junior Honors Project, ARC4224: Allied Design Studio: Sustainable Architecture (as technical advisor), ARC 5594: Sustainability Studio (co-taught), ARC3013/ARC6882: (Direct. Study/Indep. Study) Energy Analysis of Elem. School/Solar Energy Semiotics, ARC 4993/ARC6002: (Directed Study/Independent Study) Affleck Applied Study, ARC 6514: Thesis 1*

Thomas Nashlen is a licensed architect with over 30 years teaching and professional practice experience. His expertise is in computers and 3D / graphic and rendering programs. *Courses taught: ARC 4114: Architectural Design Studio 5, ART 1133: Basic Design 2*

Ralph K. Nelson is a licensed architect who has taught for 20 years, focused on the nature of design from a systems, material and ethical perspective with emphasis on elegant integration. *Courses taught: ARC 5804: Critical Practice Studio, ARC 5884: Environmental Graphic Design Studio 1, ARI 5824: Advanced Interior Architecture Design Studio 2, ARC 5882: Special Topics: Defining Digital Vernacular*

Edward Orlowski is a licensed architect and LEED accredited professional with 19 years of teaching experience; he has presented papers on topics relating to sustainability and public-interest design activism. *Courses taught: ARC 2117: Integrated Design Studio 1, ARC 2126: Integrated Design Studio 2, ARC 4224: Allied Design Studio: Sustainable Architecture, ARC 5804: Critical Practice Studio, ARC 5824: Advanced Design Studio 2: Activist Architecture and Design, ARC 6002: Special Topics: Adapt, Reclaim, Reuse, ARC 6112: Thesis Praxis, ARC 6514: Thesis 1, ARC 6524: Thesis 2, ARC 6881 / 6883 Independent Study*

Phillip Plowright has expertise is in design theory, methodology, cognitive frameworks, and issues of meaning in architectural design: including knowledge transfer, decision making (heuristics) and hermeneutics. *Courses taught: ARC6514: Thesis 1, ARC 6524: Thesis 2, ARC5992: Special Topics: Examining Metaphor – Theory and Methodology, ARC6103: Critical Practice Studio, ARC5643: Design Theory ARC5016: Architectural Foundation Studio II, ARC4274: Allied Design Studio: Theory/Competitions, ARC3126: Integrated Design Studio 4*

Ashraf Ragheb PhD is a licensed architect and engineer with 17 years of teaching and research experience. He is the author of numerous papers in quantitative methods of sustainability, life cycle assessment, renewable energy systems, and sustainable construction materials and methods. *Courses taught: ARC 2313: Building Systems 1, ARC 2321: Building Systems 2 Global, ARC 2323: Building Systems 2, ARC 5592: Sustainable Architecture and Building Systems, ARC 5882: Special Topics: Computer Application in Building Technology, ARC 6883: Independent Study*

Steven Rost is an educator/artist/designer with 32 years of teaching. His artistic and design work is urban focused searching for a personal place in the grand arena of the city. *Courses taught: ART 3013: Introduction to Photography, ART 1113: Basic Design 1, ART 1123: Basic Design 2*

Gretchen Rudy has been a Senior Lecturer for over twenty years. Her recent art history research is focused on images of war and race in the mid-twentieth century. *Courses taught: ARC 1021: Art & Design Awareness, ART 1133: Basic Design 2, ART 3633: Traditions of Art 1, ART 3643: Traditions of Art 2, ART 4113: Twentieth Century American Art, ART 4133: Paris: Revolution to Modernism, ART 3653: Twentieth Century Art*

Martin Schwartz (Associate Chair, Department of Architecture) is a licensed architect with 30 years' experience, who has taught architecture at seven universities in the U.S. and England, and is the author of the book, *Gunnar Birkerts, Metaphoric Modernist. Courses taught: ARC 2117: Integrated Design Studio 1, ARC 2126: Integrated Design Studio 2, Advanced Design Studio 1, Advanced Design Studio 2*

Scott Shall (Chair, Department of Architecture) is an architect and educator whose research focuses upon developing effective socially-responsive design and pedagogic practices for architects, planners and others working within so-called informal environments. *Courses taught: ARC4224 Allied Design Studio: Sustainable Architecture*

Douglas Skidmore teaches and researches building component design, challenging normative layered assemblies and transforming an aesthetic of expressed parts into one of holistic architectural compositions. *Courses taught: ARC 6002: Special Topics: Architecture of the*

Organic, ARC 2117: Integrated Design Studio 1, ARC 2126: Integrated Design Studio 2, ARC 5824: Advanced Design Studio 2: Space Stuff

James Stevens is a licensed architect and NCARB Certified professional with 9 years of teaching experience; he has presented papers on topics relating to digital fabrication. *Courses taught: ARC 5824: Advanced Design Studio 2, ARC 5814: Advanced Design Studio 1, ARC 5882: Special Topics, Digital Vernacular, ARC 4882-2011: Applied Digital Fabrication & Enterprise, ARC 4882 / 4993: Digital Fabrication, ARC 4264: Allied Design Studio: Urban, ARC 2117: Integrated Design Studio 1, ARC 2126: Integrated Design Studio 2, ARC 5882: Special Topics: Defining Digital Vernacular*

Karen Swanson is a licensed architect with 8 years of cumulated teaching experience; she has lectured on and involved students in sustainable design-build fundraising efforts and public awareness. *Courses taught: ARC 2126: Integrated Design Studio 2, ARI 5612: Interior Design Issues*

I.4. Policy Review

Introduction
The following documents, referred to extensively in the body of this APR, will be provided for review in the Team Room during the accreditation visit.

Studio Culture Policy. This shall be illustrated by:
Studio Culture Rights and Responsibilities (to include notes on drafting procedures)
Studio Code of Conduct

Self-Assessment Policies and Objectives. This shall be illustrated by:
CoAD Assessment Reports (2008-2013)
Assessment Day agendas (2008-2013)
LTU Strategic Plan 2012
CoAD Strategic Plan 2011
2013 Student Survey
2013 Department of Architecture annual performance report: Masters of Architecture
2010 HLC Self-Study Report
Grade Comparison Report

Personnel Policies. This shall be illustrated by:
Faculty Handbook
Employee Handbook

Student-to-Faculty ratios for all components of the curriculum (i.e., studio, classroom/lecture, seminar)

Square feet per student for space designated for studio-based learning

Square feet per faculty member for space designated for support of all faculty activities and responsibilities

Admissions Requirements. This shall be illustrated by:
LTU Catalogs
CoAD Portfolio Review Policy
Transfer Student Assessment Document

Advising Policies. This shall be illustrated by:
LTU Introduction to Academic Advising
LTU Student Handbook

Policies on use and integration of digital media in architecture curriculum. This shall include:
Tools Used in Online Architecture Curriculum

Policies on academic integrity for students (e.g., dishonesty and plagiarism). This shall be illustrated by:
Academic Honor Code
LTU Student Code of Conduct

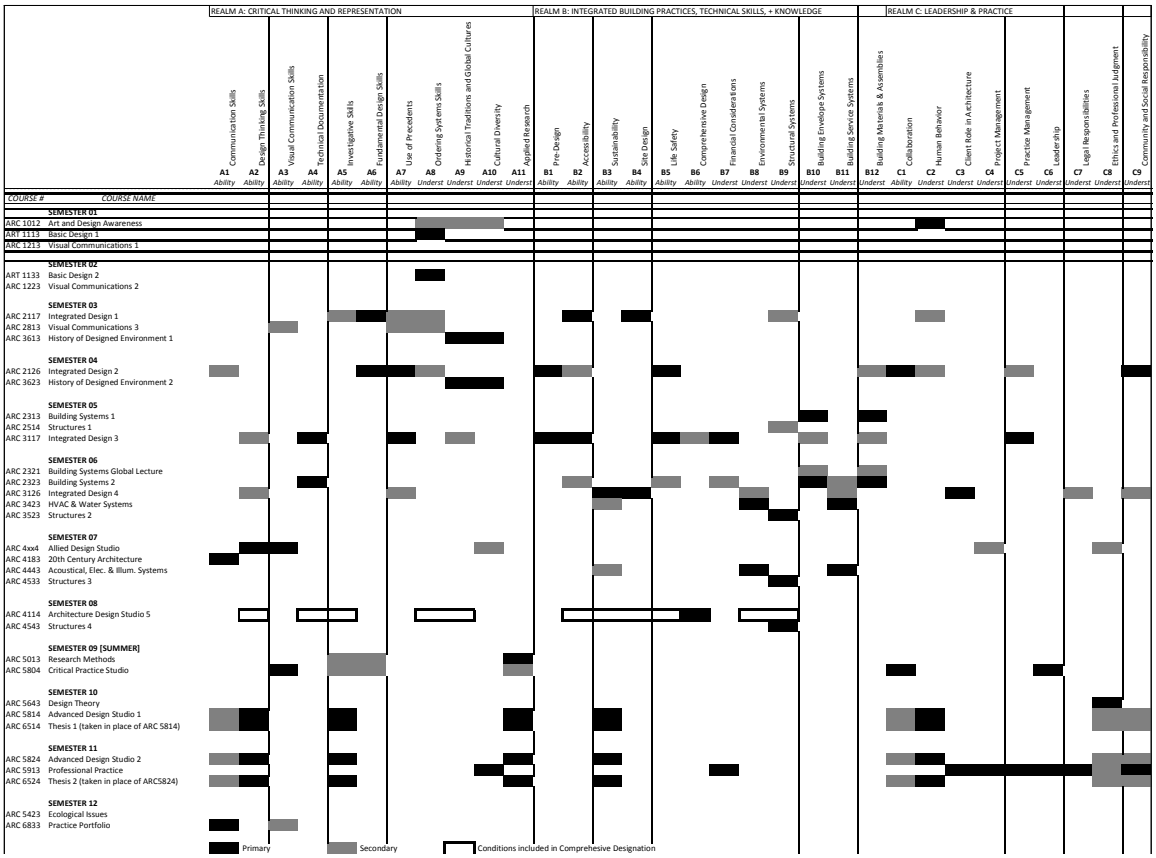
Policies on library and information resources collection development

A description of the information literacy program and how it is integrated with the Curriculum

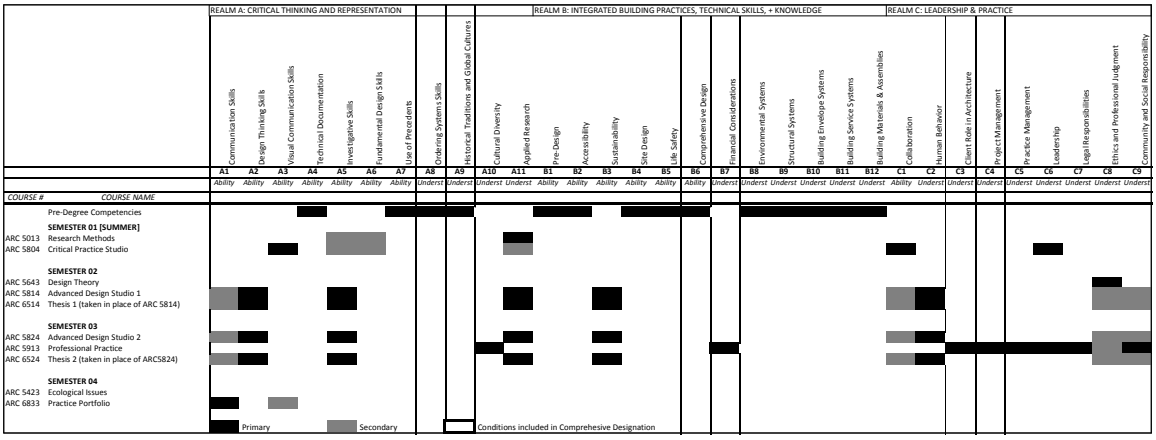
Additional Documents to be included in Team Room
Updated Faculty Credential Matrix
Representative Meeting Minutes: Architecture Advisory Board, Student Leadership Council, CoAD Administration Meeting, CoAD Faculty Meeting, CoAD Faculty Council Meeting, Conversations with a Chair
IDP student advising log
Design Thinking Committee Report

Part Two (II). Educational Outcomes and Curriculum

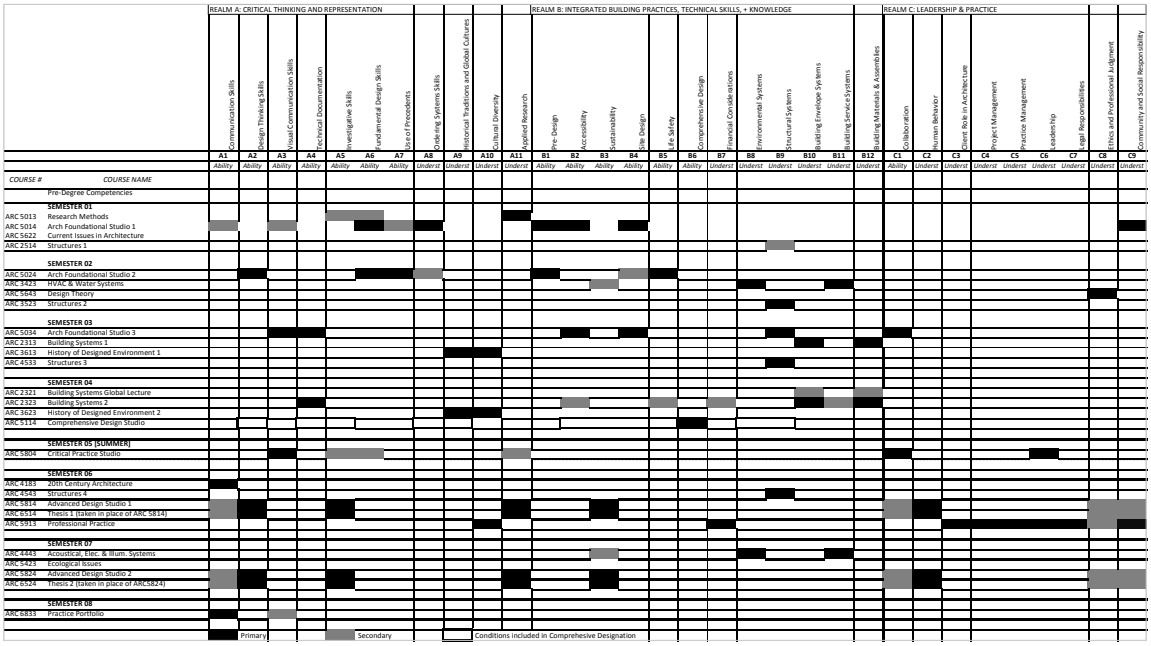
II.1.1. Student Performance Criteria



M.Arch Direct Entry Track



M.Arch 36 Track



M.Arch 3+ Track

I.2. Curricular Framework

II.2.1. Regional Accreditation

Lawrence Technological University is accredited by the Higher Learning Commission (HLC Institution ID # 1339) and is a member of the North Central Association of Colleges and Schools (NCA). The institution's original accreditation date is 1967.

The NCA's last recorded comprehensive visit to Lawrence Technological University was in October 2010. At that time the HLC stipulated that accreditation at the doctoral level shall be limited to the Doctor of Business Administration, Doctor of Engineering, Doctor of Engineering Manufacturing Systems, Doctor of Management in Information Technology, Ph.D. in Engineering and Ph.D. in Management. In addition, the institution was approved under commission policy to offer up to 20% of its total degree programs through distance education.

The next scheduled visit by NCA is scheduled for the 2020-2021 academic year.

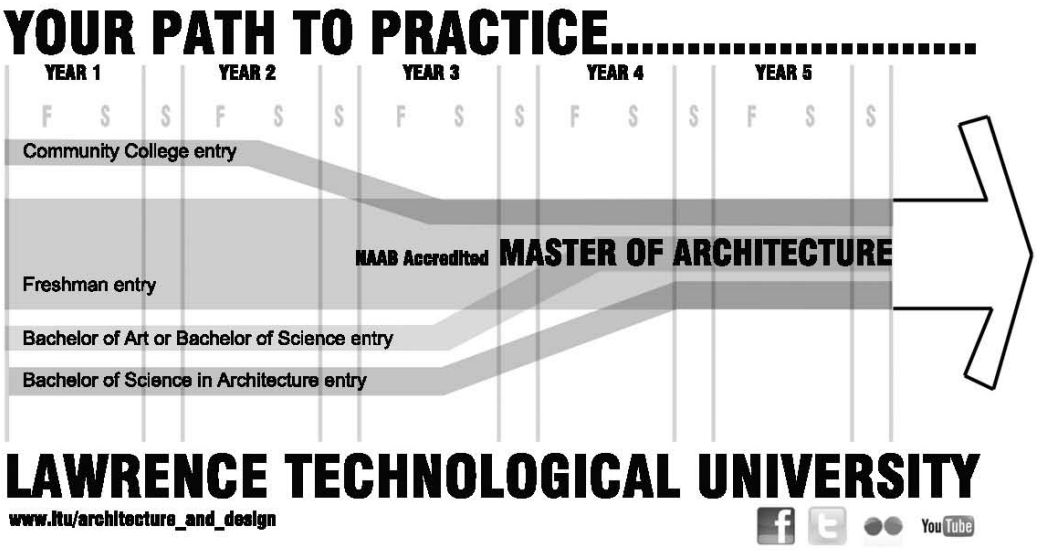
The Higher Learning Commission does not issue formal letters of accreditation; complete information about the Commission's October 2010 re-accreditation visit can be found at the Commission's website at:
http://www.ncahlc.org/?%20option=com_directory&Action=ShowBasic&instid=1339

A copy of the 2010 LTU HLC Self-study Report may be found in the Team Room.

II.2.2. Professional Degrees and Curriculum

Introduction
Lawrence Technological University offers the Master of Architecture (M.Arch) as its accredited professional degree. There are three course tracks leading to the degree; they are described below. All three tracks include pre-professional lower division and upper division (formerly

"graduate") credit hours. **All paths require a minimum of 36 upper division credit hours as required by NAAB.**



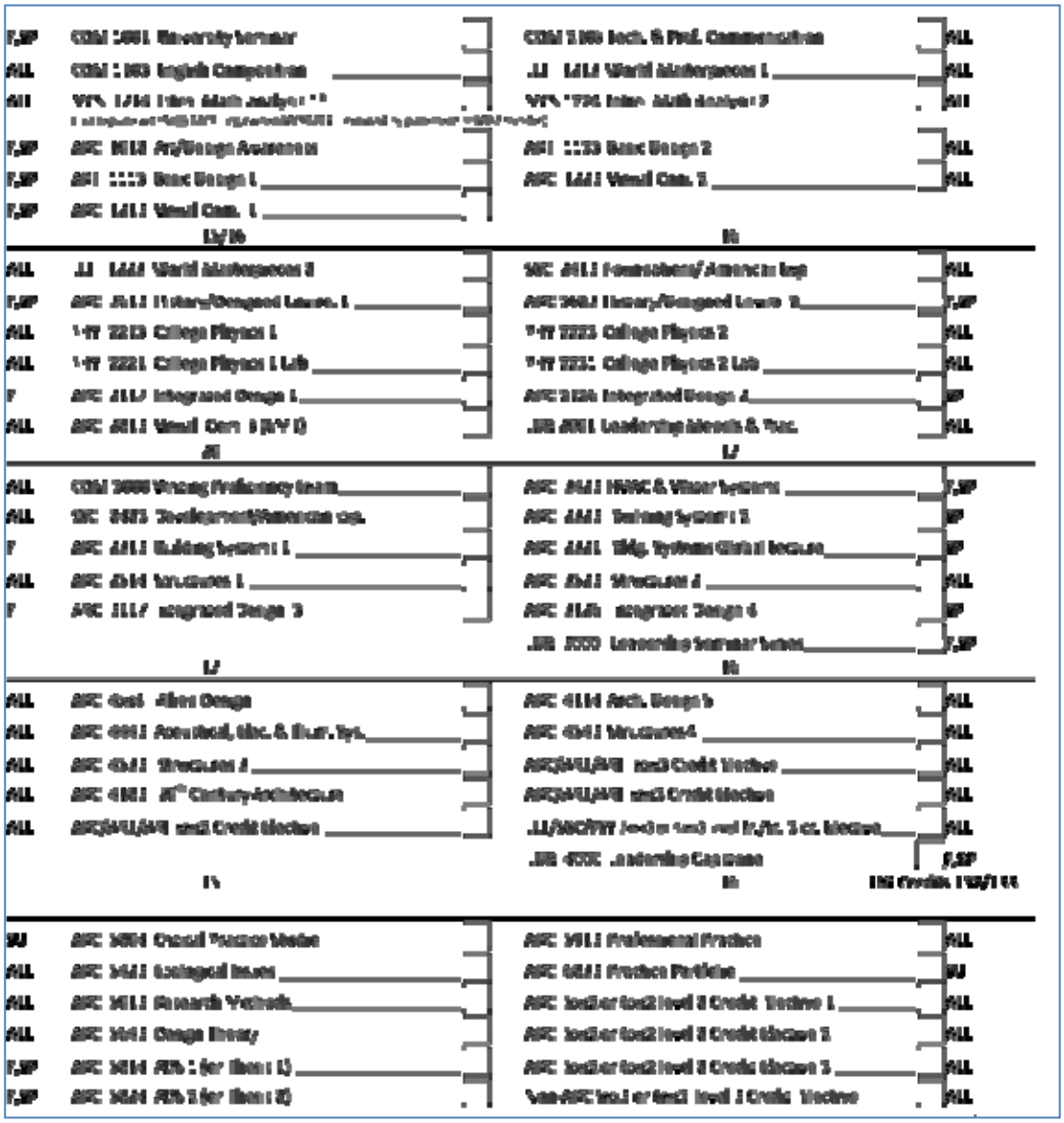
M.Arch Professional Accredited Degree Paths
College of Architecture and Design

Degree Track and Credit Hours	Description	General Studies Credit Hours		Professional Studies Credit Hours		Credit Hours Total
M.Arch CE **168 / 192* credits**	**M.Arch Direct-Entry** The degree for students entering LTU the lower division will* the selection of courses the professional degree. 168 / 192* lower division credits 36 upper division credits 168 / 168 total program credits	**General Studies** Required Credits Elective Credits Total General	42 6 48	**Professional Studies** Required Credits 107 Required Credits 14 Total Professional 121		**Credit Total** 48 + 121 = 169
M.Arch 36 **36 credits**	**M.Arch graduate curriculum** A program for students who have a pre-professional degree from another institution and who will to earn the professional degree. 36 graduate credits	**General Studies** Required Credits Elective Credits Total General	0 3 3	**Professional Studies** Required Credits 27 Elective Credits 6 Total Professional 33		**Credit Total** 3 + 33 = 36
M.Arch 3+ **93 credits**	**M.Arch for students with a previous baccalaureate degree** A program for students who have previous degrees in subjects other than architecture.* 36 lower division credits 84 upper division credits	**General Studies** Required Credits Elective Credits Total General	0 0 0	**Professional Studies** Required Credits 83 Elective Credits 10 Total Professional 93		**Credit Total** 93

M.Arch Direct Entry Track

The direct-entry Master of Architecture track provides students the opportunity to work toward the accredited professional architecture degree beginning immediately from the freshman year in college at Lawrence Tech or by transferring lower division college credits earned at other schools into the Lawrence Tech M.Arch DE program.

Students enrolled in the direct-entry Master of Architecture track must maintain specific academic standards to complete the program with the accredited architecture degree. If students cannot or choose not to enter the upper division (the last 36 credit hours), they can elect to receive the Bachelor of Science in Architecture upon successful completion of all lower-division credits.



M.Arch 36 Track

The Master of Architecture 36 track is a 36-credit hour path intended for students with pre-professional degrees completed at other institutions, which leads to the accredited M.Arch degree. This track combines a core of required professional courses with elective courses. Courses includes upper division design studios taught by LTU faculty and the Critical Practice studio, led by nationally recognized practitioners with LTU faculty. Core and elective courses cover theory, research, practice, and management.

SU	ARC 5804 Critical Practice Studio	☐	ARC 5913 Professional Practice	☐	ALL
ALL	ARC 5423 Ecological Issues	☐	ARC 6833 Practice Portfolio	☐	SU
ALL	ARC 5013 Research Methods	☐	ARC 5xx2 or 6xx2 level 2 Credit Elective 1	☐	ALL
ALL	ARC 5643 Design Theory	☐	ARC 5xx2 or 6xx2 level 2 Credit Elective 2	☐	ALL
F,SP	ARC 5814 ADS 1 (or Thesis 1)	☐	ARC 5xx2 or 6xx2 level 2 Credit Elective 3	☐	ALL
F,SP	ARC 5824 ADS 2 (or Thesis 2)	☐	Non-ARC 5xx3 or 6xx3 level 3 Credit Elective	☐	ALL

M.Arch 3+ Track

The Master of Architecture 3+ track is intended for students who hold a baccalaureate degree in a field other than architecture. It is a seven-semester program leading to the professional, accredited M.Arch degree. This program is for students with a strong desire to pursue architecture as a career and for mature or alternative students who have been out of school for longer than a standard break between degrees. The program consists of two phases: (1) foundational content; and (2) advanced (upper division) coursework. The first two years of the curriculum consist of a core sequence of architectural design studios with appropriate lower and upper division courses. The last four semesters are fully integrated into the 36-credit M.Arch program. A total of 90 professional and elective architecture credit hours are required to complete the M.Arch 3+ track. Non-architecture courses previously completed by the student and required as part of the 168/169-credit accredited M.Arch DE degree are counted toward the M.Arch 3+ degree path.

Preliminary Courses:
ART 1115 Design Elements Principles; ART 1225 Visualization Tech; ARC 2813 Electronic Methods 1; MCS 1224 Math Analysis 2 or MCS 1414 Calculus 1; PHY 2213 College Physics 1w/lab; PHY 2223 College Physics 2w/lab

Semester 1		**Semester 2**	
Architectural Foundation Studio 1	ARC 5014	Architectural Foundation Studio 2	ARC 5024
Research Methods	ARC 5013	HVAC and Water Systems	ARC 3423
Current Issues in Arch.	ARC 5622	Design Theory	ARC 5643
Structures 1	ARC 2514	Structures 2	ARC 3523
	13 credits		13 credit
Semester 3		**Semester 4**	
Architectural Foundation Studio 3	ARC 5034	Architectural Design: Comprehensive	ARC 5114
Building Systems 1	ARC 2313	Building Systems 2	ARC 2323
History/Designed Environment 1	ARC 3613	Building Systems 2 Global	ARC 2321
Structures 3	ARC 4533	History/Designed Environment 2	ARC 3623
	13 credits	ARC Elective	ARC xxx2
			13 credits
Summer Studio			
Critical Practice Studio	ARC5804		
ARC Elective	ARC xxx2		
	6 credits		
Semester 5		**Semester 6**	
Advanced Design Studio 1	ARC 5814	Advanced Design Studio 2	ARC 5824
Twentieth Century Arch.	ARC 4163	Ecological Issues	ARC 5423
Professional Practice	ARC 5913	Acoustic, Electrical & Illumination Systems	ARC 3413
Structures 4	ARC 4543	ARC Elective	ARC xxx2
	13 credits		12 credits
Semester 7			
Practice Portfolio	ARC 6833		
ARC Elective	ARC xxx2		
ARC Elective	ARC xxx2		
	7 credits		

The process for determining whether SPC expected to have been met in preparatory/pre-professional education have been met.
This information is covered in detail in *section II.3 Evaluation of Preparatory / Pre-Professional Education*.

Study Profiles: Developing Areas of Concentration in the M.Arch Program
The upper-division faculty established professional and educational "Profiles" as a way of addressing the desire for the acquisition of specialized knowledge in the generalized field of architecture along with the M.Arch degree. This program, still in progress, is intended to help students mold their own educational areas of concentration. Students are encouraged to focus on series of interest areas derived from professional architectural practice and inquiry. The idea is that, from this series of interest areas, upper-division students may combine required and elective coursework to stake out a position of their own, but still within the professional world of architecture. As part of the ongoing refinement and devlopments in coursework, this idea will be reviewed and offered to students in a definitive form in the next year. The text below is a recounting of the program thus far.

Five areas have been identified in which opportunities are offered to gain special expertise and insight based on current practice, human need, and the specific interests and expertise of the CoAD faculty. Some students may wish to take advantage of courses in more than one area such that subject matter overlaps to create a personalized "Profile." For example, some students might elect to take coursework in both sustainable design and practice management to create a particular view of these subjects through the lens of architectural practice. In this way, students may create their own Profiles by charting their own paths through the given interest areas. The Profile is not a concentration or a minor, but rather an indication of as student's growing interest and a career and academic direction that supplements their M.Arch experience. A student's identification of a Profile upon entry to the program would enable the department to assign students to advisors with those interests and to plan their coursework. The profile and interest areas addressed include the following:

Ecology examines the complex, interdependent relationships of organic and inorganic systems and the way in which people and designed environments are inextricably linked to these systems. The principles of ecology provide a solid foundation for defining sustainability in design education and practice. Faculty at LTU define ecology through research, design and practice activities including exploration of green, grey, and blue infrastructure, climate-defined design, inter-scalar investigations, networks of flow, urban vacancy, information ecologies, organic architectures, bio-mimicry, emergent systems, low-carbon energy systems, urban farming, watershed regeneration and preservation, ecological philosophies, and urban, rural, and suburban contexts.

Health is concerned with thriving in a physically and psychologically nurturing environment. Health is a primary driver and indicator of sustainability. Well-being is a fundamental need and desire, personified in natural and designed environments. Faculty at LTU define health through their research, design and practice activities including exploration of environmental psychology, accessibility and mobility, food and farm networks, community well-being, evidence-based design, air and water quality networks, low-carbon emission, pollution control, thermal comfort, educational architecture, daylighting in space, ethics and philosophies of health, and healthcare design.

Culture explores shared meanings of particular people and places. Its foundation is set on the positive expression of human intellectual and artistic achievements. Sustainability is woven into cultural ethics and community desires, expressed through dynamic values of diversity, equity, and justice. Faculty at LTU define culture through their research, design and practice activities including engagement with cultural theory, social density and forces, social contracts and

constructions, social and design activism, the common and monumental, fashion, science fiction, civic and political structure, continuity with change, ethnography, anthropology and folklore, Detroit-focused projects, and cross-disciplinary collaboration.

Technology examines and utilizes practical application of knowledge in a specific area and accomplishes tasks using specific processes and methods. Faculty at LTU embrace technologies, both high and low, vernacular and emergent, appropriate to specific context. The faculty define technology through research, design and practice activities including exploration of energy, infrastructure, fabrication and pre-fab, parametric and geo-spatial modeling, net-zero design, time-based representation, cultural critique, qualitative and quantitative evaluation of air, heat and light, open-sourcing, the digital divide, material and building systems, reclamation and re-use, design methodologies, and database applications.

Management organizes and guides relationships to produce positive outcomes, utilizing judicious means to accomplish constructive ends. These relationships are between people, places and things. Sound management embraces conventions and innovations to handle a manifold of complex content. Faculty at LTU define management through their research, design and practice activities including best-practices in construction management, firm and practice management, project management, facility management, explorations in thinking styles, personal interactions, conflicts and cohesion, teamwork and leadership models and processes, trans-disciplinary practice, criteria-driven design, smart urbanism, Reasonable Person Model (RPM), and Public Interest Design practices and research.

Off-Campus Programs
For information about off-campus programs refer to section *I.2.3 Physical Resources*.

II.2.3. Curriculum Review and Development

Introduction

As noted in section I.2.2, the responsibility of curriculum planning and implementation is held by the faculty. The College of Architecture and Design faculty carriy out its continuous assessment responsibilities and the endorsement of its degree programs by initiating changes as needed. Changes to curriculum, changes to courses, and the initiation of new courses are conducted by a procedure initiated in October of 2007.

Curriculum Revision Procedure

Individual or groups of faculty members compose formal proposals for curriculum changes including new courses, certificate programs, and degree programs and submit them for review and approval as described below. An LTU course Catalog Authorization form is prepared for each individual new or revised course by the proposer(s) of the course or course changes. This form is signed by a faculty member, and submitted for review and signature by the program director, department chair and dean. Differences in the process for lower division and upper division course changes are outlined below:

Lower Division Course Submission and Approval Process

1. Proposals, including Catalog Authorization forms for new courses, are submitted to the CoAD Faculty Council.
2. The Faculty Council reviews the proposal(s) and takes one or more of the following actions: requests additional information from the proposer(s); recommends changes to the proposal; approves the proposal; and/or denies the proposed curriculum change.
3. Once the Faculty Council approves a curriculum change, the proposal is brought to the CoAD faculty for review and approval at a Faculty Meeting.

4. Upon approval by the CoAD faculty, the proposal is reviewed by the Associate Provost.
5. Upon approval by the Associate Provost, the proposal is taken to the Dean's Council by the Associate Provost, where it is reviewed by the Deans of all of the Colleges, and the Provost. Revised or inactivated courses will be approved by the Associate Provost, and the Deans' Council will be informed of the decision.
6. If it is approved by the Dean's Council, the Provost signs the form and sends it to the Registrar's office. The Registrar is responsible for putting the new course or curriculum into the Banner (online registration) system and adding it to the University's official catalog, and submitting a signed Course Authorization form to the CoAD Dean.

Upper Division Course Submission and Approval Process

1. Proposals, including Catalog Authorization forms for new courses, are submitted to the CoAD upper division faculty committee.
2. The upper division faculty reviews the proposal(s) and takes one or more of the following actions: requests additional information from the proposer(s); recommends changes to the proposal; approves the proposal; and/or denies the proposed curriculum change.
3. Once the Upper division Faculty committee approves a curriculum change, the proposal is brought to the CoAD faculty for review and approval at a Faculty Meeting.
4. Approved submissions are then forwarded to the LTU Graduate Council for their review. The Graduate Council is made up of representatives from all of the academic colleges at LTU.
5. If approved by the Graduate Council, then the proposal is reviewed by the Associate Provost.
6. Upon approval by the Associate Provost, the proposal is taken to the Dean's Council by the Associate Provost, where it is reviewed by the Deans of all of the Colleges, and the Provost. Revised or inactivated courses will be approved by the Associate Provost, and the Deans' Council will be informed of the decision.
7. If the Dean's Council approves the proposal, it is signed by the Provost and sent to the Registrar's office.
8. The Registrar is responsible for putting the new course or curriculum into the Banner (online registration) system and adding it to the University's official catalog, and submitting a signed Course Authorization form to the CoAD Dean.

Special Topics Courses

Any faculty member may introduce a Special Topics course as an elective to test a new subject and to gauge student interest. Special Topics courses do not require approval of the CoAD faculty at large, but are submitted to the Faculty Council or upper division faculty committee (depending on the course level), for review. If, after three semesters, the faculty member wishes to continue the course, it must be presented to Faculty Council to begin the approval process and be entered into the University catalog. Recent courses include: Public Interest Design, Adaptive Reuse, Defining Digital Vernacular, Exhibit Graphics and Design, Examining Metaphor, Applied Digital Fabrication, and Creative Processes of Design.

Degree or Certificate Programs

All new degree or certificate programs must also be reviewed by the LTU Board of Trustees and officially approved by this body prior to launch of the program. The university maintains a standard proposal form for all new programs. The process for approval of new Academic Degree program is as follows:

1. All new program proposals are submitted to the Academic Program Review Committee
2. (APRC) for consultation. The APRC uses a New Academic Program Proposal Checklist to ensure that all program proposals are complete and have been vetted by appropriate University academic and administrative units.
3. Any new courses required to support a new academic program must follow the New Course Approval Process discussed above.

4. All new academic programs are approved by the department chair, college faculty council, and dean
5. All new graduate (CoAD upper division) programs must also be reviewed and approved by the University Graduate Council and Associate Provost.
6. All new program proposals should be submitted to the Academic Program Review Committee for consultation.
7. The College Dean submits new programs for review by the University Deans' Council using the New Academic Program Proposal Template.

The process for approval of new certificates, concentrations, or minors is as follows:

1. Proposals for new academic certificate programs follow the same procedures used for proposing new academic programs.
2. New academic certificate programs must be comprised of courses used in support of existing academic degree programs.
3. Any new courses required to support a new academic program must follow the New Course Approval Process discussed below. New courses must be associated with a full degree program.
4. Academic certificate programs may be offered to graduate (CoAD upper division) students and senior undergraduate (CoAD lower division) students by using 5000 level courses and ensuring that lower division students meet appropriate academic requirements.

Faculty Council Curriculum Committee
The CoAD Curriculum Committee is a standing arm of the Faculty Council. Section 6.3.1 of the CoAD Faculty Council constitution outlines the responsibilities of the Curriculum Committee:

"The Curriculum Committee shall be concerned with issues relating to and affecting directly the content and quality of all academic programs in the College. All proposals for changes, additions, deletions, etc. that affect the curriculum shall be addressed by the Curriculum Committee and recommendations made to the Faculty Council for subsequent resolution. To help insure a comprehensive vision, committee members shall include person(s) such as professionals and students."

In the 2011-12 and 2012-13 academic years, the Curriculum Committee was chaired by Associate Professor Edward Orlowski AIA, who in 2012-13 was also the Chair of the CoAD Faculty Council. During this period of time, the primary task of the Curriculum Committee was to review the architectural design studio sequence and to propose revisions. A subcommittee was also formed to review the Visual Communication and Electronic Methodologies coursework. Reviews of both subcommittees are provided here.

Design Studio Review Subcommittee: Integrated Design 1 through 4
ARC 2117- Integrated Design 1
ARC 2126- Integrated Design 2
ARC 3117- Integrated Design 3
ARC 3126- Integrated Design 4

Anirban Adhya, PhD
Edward Orlowski, AIA
Martin Schwartz, AIA
Scott Shall, AIA (ex officio)
Douglas Skidmore, AIA
James Stevens, AIA
Joy Sportel (student)

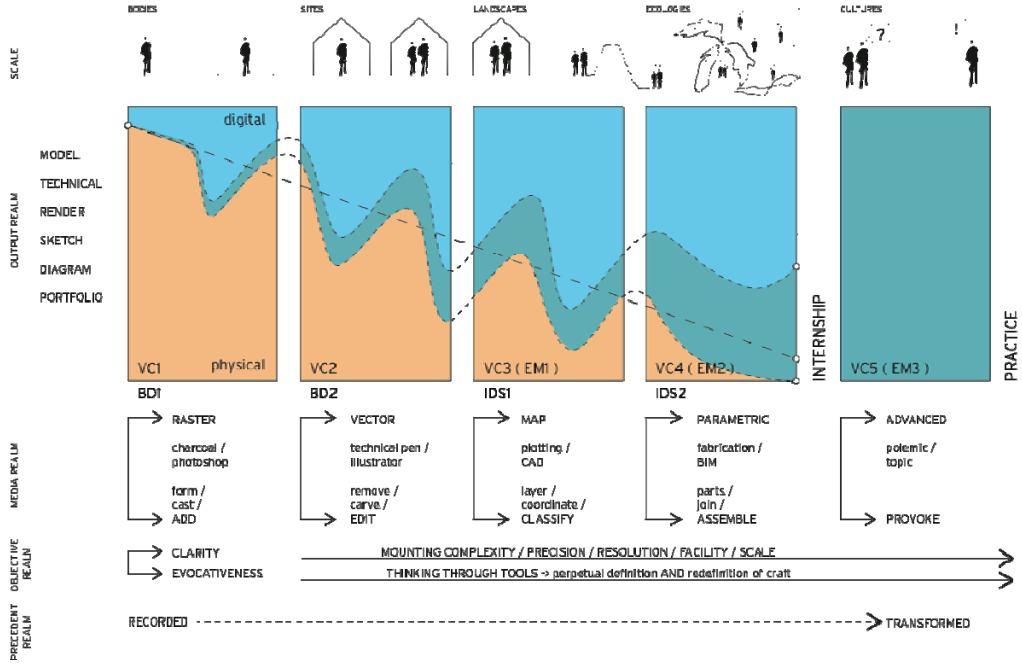
As part of the College's commitment to "the advancement of the discipline and toward ensuring that students are exposed to current issues in practice," Professors Orlowski, Schwartz, and Stevens hold licensure in the State of Michigan. Professor Skidmore is licensed in the state of Washington. Professor Shall is licensed in Pennsylvania. Professor Adhya is licensed in India.

The Design Studio Review Subcommittee worked together in the 2012-2013 school year to revise the critical first four semesters of architectural design learning. The following objectives are goals for achievement:

1. To be more articulate in CoAD teaching
2. To provide more clarity in student and faculty accountability for the assessment of student work
3. To provide more time between studio meetings so that students can be more productive
4. To organize studio time so that it coordinates with our early evening public lecture series and with lectures associated with the studios
5. To provide clear distinctions between the courses with regard to the subject matter and learning objectives of each of the four courses.
6. To establish a more suitable course structure for team teaching and the integration of architectural subjects and the subject matter of related design disciplines

These program improvements will be instituted and assessed in the fall semester 2013.

Visual Communication Review Subcommittee: Visual Communications 1 through 5
ARC 1213 - Visual Communication 1
ARC 1223 - Visual Communication 2
ARC 2813 - Visual Communication 3
ARC 3823 - Visual Communication 4
ARC 4833 - Visual Communication 5



The Visual Communications Course Sequence

A second subcommittee investigated updates to the Visual Communication sequence. This group is focused upon the relationship between manual and digital representation techniques. The membership of the committee at the time of this writing is:

Janice Grant Baum (adjunct faculty)
Constance Bodurow, Assoc. AIA
Aaron Jones, RA (adjunct faculty)
Gretchen Maricak
Thomas Nashlen, AIA
Ralph Nelson, AIA (ex officio)
Scott Shall, AIA (ex officio)
James Stevens, AIA
Joshua Thornton (student)
Paul Wang

As part of the College's commitment to "the advancement of the discipline and toward ensuring that students are exposed to current issues in practice," Professors Maricak, Nashlen, and Stevens hold licenses in the state of Michigan. Professor Nelson is licensed in Minnesota. Professor Shall is licensed in Pennsylvania. Professor Jones is licensed in Michigan and Texas.

The Visual Communication Review Subcommittee worked together in the 2012-2013 school year to revise and integrate the critical five semesters of learning in the spectrum of hand drawing and drafting to digital and electronic media to digital fabrication and design. The following material is taken from the subcommittee's notes and reflects changes that are currently being instituted. The committee worked to achieve the following objectives:

1. Sequence Renaming

The current naming of the two sequences (Visual Communication and Electronic Methods) reinforces the divide between techniques of the hand *("physical")* and techniques of the computer *("digital").* This divide is not congruent with best practices of learning and is at odds with contemporary practice. Therefore, the following revisions are proposed:

Current Name	**New Name**
Visual Communication 1	Visual Communication 1
Visual Communication 2	Visual Communication 2
Electronic Methods 1	Visual Communication 3
Electronic Methods 2	Visual Communication 4
Advanced Revit	Visual Communication 5: Topics*

* Visual Communication 5 is considered an optional capstone, similar an Allied Design Studio, in which a student might pursue a specific area of inquiry related to Visual Communication. Advanced Revit may be one such example, although topics that foreground the judicious use of hybridized techniques in the pursuit of a clear research agenda are preferred.

2. Articulate shared objectives, documents and measures

Currently, only Visual Communication 1 and 2 have a coordinated series of objectives, documents and metrics. To better coordinate all five courses, the coordinators established a framework of objectives, documents and measures that can be adjusted to each course. The coordinators moved to establish the following objectives, documents, and metrics:

CORE OBJECTIVE 01: Students will investigate, analyze and judiciously apply the visual communication techniques covered in this course to analyze existing works of architecture, hypothesize new constructs and instigate new positions.

CORE OBJECTIVE 02: Students will experiment with the visual communication techniques covered to uncover the potential held by hybridized techniques and propose new modes of working.

CORE DOCUMENT 01: 3-dimensional model
CORE DOCUMENT 02: technical document
CORE DOCUMENT 03: rendering
CORE DOCUMENT 04: sketch
CORE DOCUMENT 05: diagram
CORE DOCUMENT 06: portfolio

CORE METRIC 01: The consistent and rigorous engagement of course content through risk-centered acts of experimentation, analysis, and reapplication.

After articulating both shared and distinct objectives, documents, and measures for all five courses, the coordinators will review and, if necessary, revise the course descriptions for each course. The coordinators will submit said revisions to the curriculum committee and faculty council for discussion and adoption.

3. Articulate connected learning
The coordinators seek to position the Visual Communication sequence as a critical hinge between studio and history courses. To accomplish this, all Visual Communication courses cover the course content by using it to analyze existing works of architecture, hypothesize new constructs and instigate new positions.

4. Articulate scaffolded learning
The scale of inquiry, the precedents engaged, the techniques applied and the metrics applied to outputs will scaffold across all five courses, as outlined within the attached diagram. The accumulation of these toolsets naturally emphasize the utility of hybridized visual techniques as the student advances in the sequence.

5. Eliminate the tutorial model of teaching
Tutorial models of teaching, which generally focus upon a single software type and prioritize the correct utilization of toolsets over the thoughtful reapplication of the potentials offered therein, are at odds with optimal learning environments, rigorous design processes and the profession at large. To bring the sequence into alignment with best practices in each of these realms, all visual communication courses have moved from a tutorial model to one that prioritizes acts of experimentation and hybridization, encouraging a continuing redefinition of craft and making within the practice of architecture.

6. Curriculum Subcommittees for 2013-2014
In the 2013-2014 academic year, the Department of Architecture will examine two additional course sequences and review them with reference to NAAB student performance criteria, the mission of the department, the learning objectives of the University, and the demands of the profession:

ARC 2313 and ARC 2323 Building Systems 1 and 2
ARC 1113 and ARC 1133 Basic Design 1 and 2

Institution of the portfolio review
Beginning in 2013, transfer students admitted to the architecture program will be required to submit portfolios of their creative work as a component of the application process. This includes transfer students from other pre-professional programs including, but not limited to those with whom the College has articulation agreements and applicants to the M.Arch 36 credit program. Our articulation agreements are being revised to incorporate the portfolio requirement, students

will be advised early to start portfolios, and examples of good portfolios will be posted on the CoAD Department of Architecture website for reference and inspiration. For student applicants, portfolios will be reviewed with specific reference to the NAAB performance criteria assigned to those courses and the learning objectives of the coursework. A portfolio review is also to be initiated for students completing the third year in the program (ARC 3117 Integrated Design 3 and ARC 3126 Integrated Design 4). Students will be required to achieve a minimum level of competence in those defined abilities according to scales specifically created to evaluate the portfolios. These portfolio protocols will be available in the Team Room.

The Fine Grain Program
The Fine Grain exhibitions program was instituted at the end of the fall 2012 semester so that faculty and students could view and discuss individual progress and the progress of the program. The exhibition covered student work from ID 2, ID 4, AD5, Allied Design, Advanced Design, Basic Design and Visual Communications courses.

Discussion Points:
1. What does the assembled work say about the state of excellence at CoAD? In what specific ways is our curriculum demonstrating excellence? Where do we fall short of this mark?

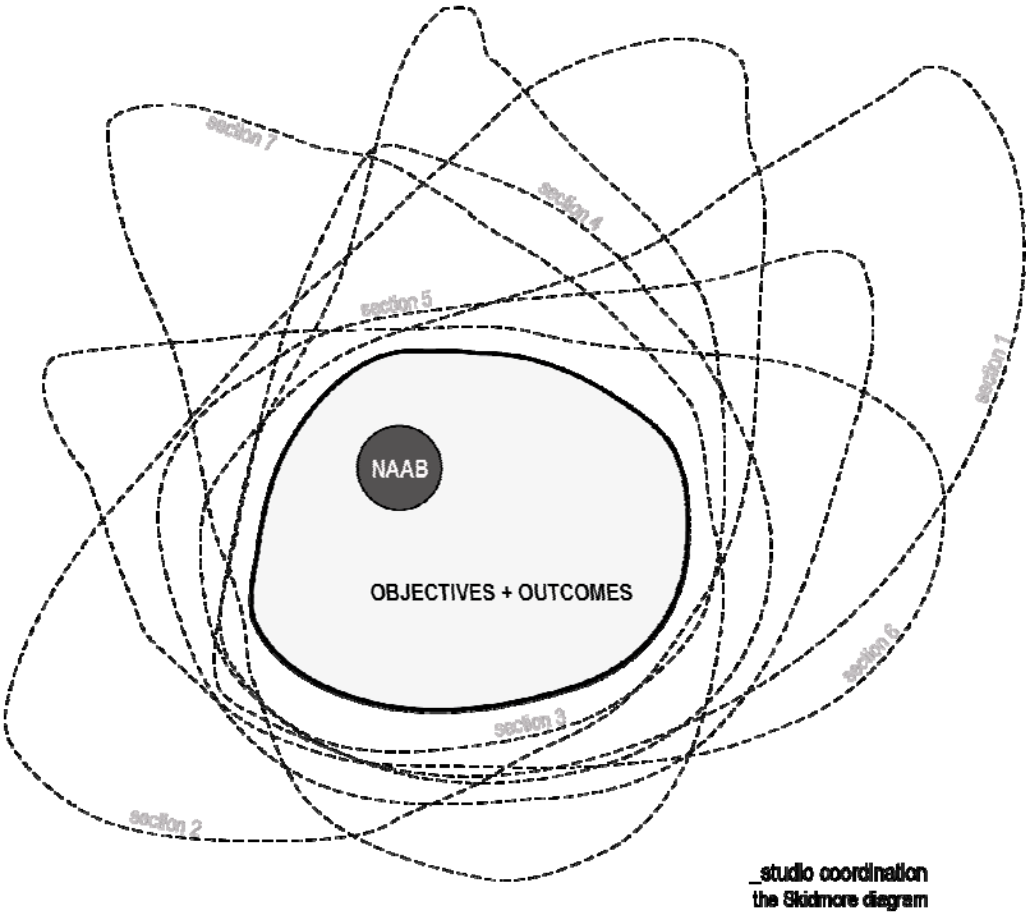
2. Review each course objective. In what ways did the work align with these objectives? In what ways did it misalign? How might we improve the alignment between the work and the stated objectives of the course? (i.e. provide students with a more specific framework/details for the assignment … adjust timing … offer additional support in the form of lectures, discussion, etc)

3. Review each NAAB condition covered by the course. In what ways did the work successfully demonstrate the achievement of these conditions? In what ways did it fail to do so? How might we improve the alignment between the work and the stated NAAB conditions?

4. As the NAAB team will likely visit a few weeks into the spring semester, do you intend to shift any projects for this course forward that will allow students to successfully demonstrate achievement of NAAB conditions not currently demonstrated? If so which conditions do you intend to address in this way?

5. Do we need to adjust the NAAB matrix to either: (a) ask that a second course, to be run in the fall, to cover a NAAB condition unsuccessfully demonstrated in this course or (b) add a NAAB condition successfully demonstrated in this course that is not currently listed?

6. What specific ways would you change Fine Grain in the next semester?



Use of the NAAB Criteria to Help Update the Curriculum

Recent changes to the criteria were noted, and have provided the background to an ongoing study of the design studio sequence since the fall of 2010. At that point, the Faculty Council Curriculum Committee began a study of the design studio sequence with the intent of strengthening a curricular 'flow' which would logically build a student skill set and avoid the danger of studio courses performing in isolation from one another.

This investigation culminated in the 2012-13 academic year, when a set of subcommittees analyzed the revised NAAB criteria and made proposals to realign course content in the Integrated Design and Visual Communications courses to more clearly address the student learning criteria as well as the demands of the profession. Recognizing that the design studio is the place of experimentation and integration at the heart of architectural education, one of the goals of the curriculum committee was to address each criterion (even if only in a secondary manner) in a studio. Student coursework will be exhibited in the Team Room to illustrate this compliance. In addition, documentation of these curricular reviews will also be included in the Team Room; there is further discussion of these activities in *Part 3: Progress since Last Site Visit.*

II.3. Evaluation of Preparatory/Pre-professional Education

Introduction

The architecture program thoroughly evaluates the preparatory or pre-professional education an experience of all individuals that apply for admission to the NAAB-accredited degree program at Lawrence Technologial University. The program has established standards for ensuring that NAAB Student Performance criteria are met.

The process for determining whether SPC have been met in preparatory/pre-professional education

Applicants to the M.Arch 36-credit hour program (the upper division of our direct entry M.Arch DE program) must submit complete educational transcripts from a pre-professional architecture program that demonstrate the applicant's acquisition of NAAB competencies in subject areas covered by LTU's lower division coursework. These NAAB competencies include skills and abilities in the following areas:

A4 Technical Documentation
A7 Use of Precedents
A8 Ordering Systems
A9 Historical Traditions and Global Cultures
B1 Pre Design
B2 Accessibility
B4 Site Design
B5 Life Safety
B6 Comprehensive Design
B8 Environmental Design
B9 Structural Systems
B10 Building Envelope Systems
B11 Building Service Systems
B12 Building Materials and Assemblies

Note that these SPC are documented in the top line of the SPC matrix as requested. We also regularly ask for course descriptions for courses taken in pre-professional programs at other institutions and, when necessary, we require a submittal of course syllabi. We further reserve the right to request a student's coursework. These materials are reviewed by the associate chair of the Department of Architecture in consultation with faculty who coordinate subject area courses that satisfy the required competencies.

Coursework, course descriptions, syllabi, and student work (as needed; see the portfolio requirement described below) are compared with the course curricula and SPC's met by the M.Arch lower division courses in the architecture program to identify any deficiencies. Applicants whose pre-professional education and other materials otherwise qualify them for admission but who are deficient in NAAB Student Performance Criteria may be conditionally admitted to the program but required to make up the deficiencies with specific additional coursework. This supplemental coursework may be acquired at Lawrence Tech or at other institutions but the Department of Architecture will review coursework from other institutions as it is added to the applicant's transcript. The program further review transcripts for general education credits (45 minimum). Advanced standing may be recognized in the form of transfer credits awarded to students who have taken coursework that satisfies SPC's covered by M.Arch level coursework. However, students are still required to successfully complete 36 credit hours of M.Arch coursework at Lawrence Tech; the program grants no more that 6 credit hours of transfer credit to any one student.

All such coursework is in addition to the 36 credit hours required for satisfaction of the M.Arch degree at Lawrence Technologial University.

The program also requires the following documents for admission:

- A resume, including a record of work experience and extracurricular activities
- Three letters of recommendation: two from faculty members and one work reference (preferably from an immediate supervisor at the student's current place of employment)

Institution of the Portfolio Review
Applicants must also submit a portfolio that includes creative, academic work and may include professional work with a clear statement of the applicant's contribution. The work displayed in a portfolio may also be considered as evidence of having acquired the skills, abilities, and understandings delineated in the 14 student performance criteria listed above and in the top line of the SPC matrix.

This includes transfer students from other pre-professional programs including, but not limited to those with whom the College has articulation agreements and applicants to the M.Arch 36 credit program.

Our articulation agreements are being revised to incorporate the portfolio requirement as of 2013 and students will be advised early to start portfolios as part of their plans to transition to Lawrence Tech. Examples of good portfolios will be posted on the Department of Architecture website for reference and inspiration. For student applicants, portfolios will be reviewed with specific reference to the NAAB student performance criteria assigned to those courses and the learning objectives of the coursework. Students will be required to achieve a minimum level of competence in those competencies according to scales specifically created to evaluate the portfolios. These portfolio protocols are available in the Team Room.

II.4. Public Information

Introduction
The College of Architecture and Design makes the following information available to current and prospective students, faculty, staff, parents, and the general public on its website.

II.4.1. Statement on NAAB-Accredited Degrees

In order to promote an understanding of the accredited professional degree by prospective students, parents, and the public, the College provides the *exact language* found in the *NAAB Conditions for Accreditation*, Appendix 5 at the following webpage:
http://www.ltu.edu/architecture_and_design/accreditation.asp

II.4.2. Access to NAAB Conditions and Procedures

In order to assist parents, students, and others as they seek to develop an understanding of the body of knowledge and skills that constitute a professional education in architecture, LTU provides access to *The 2009 NAAB Conditions for Accreditation, and The 2012 NAAB Procedures for Accreditation* at the following webpage:
http://www.ltu.edu/architecture_and_design/accreditation.asp

II.4.3. Access to Career Development Information

In order to assist students, parents, and others as they seek to develop an understanding of the larger context for architecture education and the career pathways available to graduates of accredited degree programs, LTU makes the following resources available to all students, parents, staff, and faculty:

www.ARCHCareers.org
The NCARB Handbook for Interns and Architects
Toward an Evolution of Studio Culture

The Emerging Professional's Companion
www.NCARB.org
www.aia.org
www.aias.org
www.acsa-arch.org

This information is found at the following website:
http://www.ltu.edu/architecture_and_design/careerdevelopmentinfo.asp

II.4.4. Public Access to APRs and VTRs

In order to promote transparency in the process of accreditation in architectural education, LTU makes all *Annual Reports*, including the narrative, all NAAB responses to the *Annual Report,* the final decision letter from the NAAB, the most recent *APR,* and the final edition of the most recent *Visiting Team Report*, including attachments and addenda, available at the following website:
http://www.ltu.edu/architecture_and_design/accreditation.asp

II.4.5. ARE Pass Rates

LTU makes ARE pass rates for its graduates available to current and prospective students and their parents at the following website:
http://www.ltu.edu/architecture_and_design/careerdevelopmentinfo.asp

Part Three. Progress since Last Site Visit

1. Summary of Responses to the Team Findings [Year]

A. Responses to Conditions Not Met

13.14 Accessibility

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

Comment from previous Visiting Team Report (VTR) [2008] Even though this criterion was introduced in the early design studios, the projects in ARC 4114 Architecture Design Studio 5 and graduate level studios consistently lacked accessible parking spaces.

Response from Program [2013] *Since 2008, special care has been taken to insure that all students in ARC 4114 Architectural Design Studio 5 (AD5) have demonstrated the ability to accommodate movement of an individual with a disability from an accessible (and visibly designated) parking space to an accessible building entry and throughout a building.*

More importantly, since the 2008 visit, the Department has expanded both the conception of this topic – moving from concerns of accessibility to the more encompassing definition offered by universal design – and the number of times it is investigated within the curriculum. In so doing, it is the Department's intent that students do not simply provide the minimum supports needed by the differently abled and mandated by the ADA and other acts, but seek to understand the myriad ways that the built environment is engaged – including how it is engaged by those with physical, sensory, and cognitive delays. Currently, the primary satisfaction of the accessibility criteria have been targeted for ARC2117 Integrated Design 1 – the first architectural studio taken by students - and ARC3117 Integrated Design 3. Student work from these courses (and AD5) will be exhibited in the Team Room in the spring of 2014 to demonstrate satisfaction of these criteria.

13.34 Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment in architectural design and practice

Comment from previous VTR [2008] The team found only cursory references to professional ethics in the professional practice lecture series, and no evidence of understanding in the student work presented. The team encountered students who had taken ethics classes offered by other programs as part of dual majors; it appears that the architectural offerings in this subject are not on par with other courses in the university.

Response from Program [2013] *Since 2008, Ethics and Professional Judgment has been a topic of focused concern and investigation both within the CoAD, and the larger University. Leadership and Professional Ethics has been identified by the University as one of ten undergraduate (lower division) learning objectives for all LTU graduates. Each Department is required to assess success in these areas. Discussion of the assessment of ethics is included in* section I.1.5 Program Self Assessment *of this APR, as well as CoAD and University Assessment reports to be included in the team room in Spring 2014.*

A CoAD faculty committee formed in 2009 investigated a framework for ethics integration into existing courses versus the creation of a new course dedicated specifically to design ethics. Eventually it was determined that it was less beneficial to add a required course in design ethics, and more beneficial to develop a focused integration of ethics into the professional practice courses and design studios.

ARC 5643 Design Theory has been identified as a course to contain specific ethics content in the contexts of philosophical ethics, social equality and aesthetics. Documentation of lectures, readings, and student evidences will be exhibited in the team room in spring of 2014 to demonstrate satisfaction of these criteria.

In addition, other courses in the required curriculum are noted to include ethics and professional judgment content, as secondary satisfiers of these criteria:

ARC 4xx4 Allied Design Studio (ethics as a framework for value-driven decision making)
ARC 5814 Advanced Design Studio 1, ARC 5824 Advanced Design Studio 2, ARC 6514 Thesis 1, and ARC 6524 Thesis 2 (ethics in research and design application)
ARC 5913 Professional Practice (ethics in professional practice)
Student work from these courses will be exhibited in the team room in spring of 2014 to demonstrate satisfaction of this criteria.

It should also be noted that section I.1.3E Architectural Education and the Public Good *identifies a number of academic and research initiatives which engage students in areas of professional ethics and judgment, leadership, and teamwork.*

B. Responses to Causes of Concern

Growth of Student Body Beyond Facility Capacity

Comment from previous VTR [2008]: Undergraduate enrollment in the architecture program has grown about 5% per year and now numbers over 700 students, with an additional 125 graduate students. The occupancy of the space allotted to the college has reached capacity to the point where additional students would jeopardize the dedication of individual studio space. The team believes the program has reached a point where it could consider options either for capping enrollment in the undergraduate architecture program with higher admission standards at various levels or pursuing additional space for the program.

Response from Program [2013]*: Since the last VTR, enrollment in the College of Architecture and Design has decreased in both student headcount and credit hours due to the economic recession, which has particularly impacted the metropolitan Detroit area adversely. While this has temporarily eased the pressure upon the existing facilities, the University and the CoAD prefer to look optimistically towards renewed growth in our enrollment numbers, and has undertaken several measures to assure adequate space in the future:*

1. Admission and enrollment are being managed by the CoAD in a number of ways. The required grade point average for admission to the College is the highest in the University, which has slightly lowered the number of students entering the architectural programs, while raising the caliber of incoming freshman students.

2. The CoAD has prioritized the growth of upper division entry and enrollment, while stabilizing lower division entry and enrollment. The intended shift to expanded upper

division enrollment is less space intensive, because fewer studios are required at that level of study in the program.

3. A further layer of relief upon facilities brought about by enhanced upper-division enrollment is the expansion of online course offerings in the upper division. Online enrollment and study allows the College to expand its reach to a global audience of upper division students, while not requiring physical facilities to accommodate their learning needs.

4. Carefully developed management of articulation agreements with community colleges has led to fewer students in the College during the first two years of the curriculum. This has temporarily reduced the need for studio space. The "freshman studio wing" has also been redesigned in a manner that makes more efficient use of the available space, while allowing students in the Visual Communications and Basic Design sequences to have dedicated work stations, an accommodation previously not afforded to them. This allows incoming students to engage in a meaningful student culture upon their entry into the institution.

5. The development of the new Detroit Design and Technology Center (discussed in section I.2.3 Physical Resources*) will consolidate and expand the studio, classroom, and gallery space available for components of the curriculum focusing on the rebirth of the city of Detroit and reduce the need for studio space on the main Southfield campus.*

6. Construction of the new A. Alfred Taubman Engineering, Life Sciences and Architecture Complex (discussed in section I.2.3 Physical Resources*) will provide additional classroom, and laboratory space on the main Southfield campus, allowing for continued growth of programs and enrollment.*

7. A greater number of study-abroad options now exist that have studio components. This has somewhat lessened the need for design studio space on the main Southfield campus.

History Sequence

Comment from previous VTR [2008]: This team has identified a common thread of concerns that may be symptomatic of a larger issue with the faculty resources for the architectural history sequence. Because so many NAAB Criteria rely on a strong foundation in history, including writing skills, critical thinking, research methods, human behaviors, and western and non-western traditions, the team believes this issue warrants strong and immediate attention.

Specifically, the large class size and the lack of teaching assistants seem to create an undue burden on the instructors, which, in turn, prevent the introduction of more rigorous coursework such as essay responses within exams, research papers, and focused discussion groups. While the team understands that core university lecture classes are capped at a class size of 25 and other architectural lecture classes are of a similar size, the history lectures are enrolled with upwards of 95 students. Full-time staffing levels for the sequence appear inadequate, especially since this is a subject area that can be extremely difficult to cover with adjunct professors.

Faculty resources and focus on electives in history of theory and contemporary criticism appear to be increasing, and the team is optimistic that rigor will increase as the graduate concentration in criticism gains strength.

Response from Program [2013]*: Since receipt of the last VTR, the Department of Architecture has made much progress in the history sequence, which is the subject of this cause for concern.*

Class size for required history survey courses has been reduced to an average of 40-45 students, and additional adjunct faculty have been retained to teach additional sections of these courses.

Where enrollment necessitates it, an adjunct grader (with a PhD. in history) has been retained, thus, relieving some of the grading burden for classroom teachers. This allowed for the incorporation of more essay assignments and test questions in architectural history courses. Most significantly, in the spring of 2013 a new full-time history and theory faculty appointment was made, and Assistant Professor Deirdre Hennebury joined the faculty in the fall of 2013.

ARC 4183 20th Century Architecture was added as a required course in the spring of 2011. In addition to allowing more rigorous focus on the canons of history in both western and non-western traditions, a cap of 20 students per section allows instructors to assign more essays to assess student achievement more thoroughly.

Human Resources

Comment from previous VTR [2008]: The Department of Architecture is the largest department in the university with over 825 students. It is headed by a chair, who is assisted by faculty coordinators. The university might consider whether it has reached a point in the development of the program where the creation of an associate chair to assist in the managing of the department and providing additional support for coordinators might be appropriate.

Response from Program [2013]: *As of fall semester 2012 the Department of Architecture has 647 students. This drop in enrollment poses a short-term solution to this are of concern, but measures have been taken in anticipation of renewed enrollment growth.*

In the four years following the last VTR, the role of Department Chair staffed through an interim appointment as the result of one failed search and a University freeze on hiring. That situation was alleviated when the College conducted a national search for a new chair for the Department of Architecture. The department identified Professor Scott Shall AIA, who was hired and started in his new position, as chair, in July 2012.

In the spring of 2013, Associate Professor Martin Schwartz AIA was appointed Associate Chair, to provide support to Department Chair Scott Shall. The division of duties between the two of them is primarily along the lines of faculty leadership and advocacy (Shall), and student services and advocacy (Schwartz).

Advising

Comment from previous VTR [2008]: There is a disconnect between the administration's view of the advising program and the reality experienced by students. The more mature students had little difficulty in charting their own path through the progression flowchart of classes required. Transfer students and some others had difficulty in meeting their advisors face to face and determining the best path of study. Many students mentioned as troublesome the practice of advisors being reassigned every year.

Response from Program [2013]: *Since the last VTR, a number of actions have been taken to improve the quality of the student advising experience:*

1. Advising ratios have been lowered (fewer students per advisor), with a targeted cap being 20-25 students per advisor. To help meet this objective, experienced adjuncts familiar with the curriculum have been retained to bolster the ranks of full-time advisors.

2. The Dean or Department Chair advise all students who are on academic probation or who have an unusually high number of withdrawals from courses. This allows for more focused attention to be paid at a high level to students who face greater academic challenges. Other specialty advising assignments include dedicated advisors for students who are dual enrolled in Architecture and Civil Engineering, dual majors in Architecture and Construction Management, and transfer students from Chinese schools.

3. The period of time dedicated to formal advising prior to course registration for upcoming semesters has been expanded from one week to typically three or four weeks. This allows multiple opportunities for students to meet with their advisors, and promotes great meeting flexibility and less time pressure. Use of an online advising scheduler has facilitated easier tracking of advising meetings. Faculty advisers are always available for student consultations; every faculty member has his or her office hours posted at his or her office door.

4. In the fall of 2012, the University created a new position, the University Director of Advising. The Director, the former Administrator of Student Services in the College, is fully familiar with the needs of the Department of Architecture and its students. She is now working with all Colleges to implement sound advising practices. The quality and effectiveness of student advising is monitored by the CoAD Administrator of Student Services and the Department Chair, and advising quality is a factor in evaluating faculty performance.

Writing Skills

Comment from previous VTR [2008]: While the team finds that this criterion is met, the team is concerned with the generally low level of writing skills among the student work presented.

The team recognizes that the university has made a focused and aggressive effort at the university level to address writing skills and requires a writing test at the junior level prior to advancement. The team has reviewed samples from these classes as well as architectural coursework. However, written material from all sources has serious shortcomings and the overall impression of student writing skills is not compelling.

Basic grammar and spelling errors within both graphic presentations and papers are endemic and seriously undercut the professionalism of the students' work. Written material on boards does not appear to have been written or edited with the same degree of care as the design and technical content. Given the professional nature of the program and the importance of communicating ideas as well as an impression of competence in practice, the team feels that writing skills merit attention in the studio environment.

Written material from the graduate level courses was minimally acceptable but not at a level commensurate with expectations for advanced students. There are notable exceptions, and examples of competent writing among students were found, especially in the theory and criticism coursework.

At the undergraduate level, the lack of written exam questions and required papers in the history sequence compounded the team's difficulty in evaluating students' writing skills. The team has addressed concerns specifically with resources for the architectural history sequence above.

Response from Program [2013] *Since 2008, student writing skills have been the subject of focused concern and investigation both within the CoAD and the larger University. The University Assessment Committee has led an assessment of student writing and feedback in various curricula. Discussion of the assessment of writing is included in section I.1.5 Program Self Assessment in this APR, as well as in the CoAD and University Assessment reports to be included in the Team Room in the spring 2014.*

Within the College, a committee on writing was formed by the Faculty Council in 2009. Members of this committee have provided input to a University-wide task force on the subject and have worked with leadership in the Department of Humanities and the College of Arts and Sciences. It is recognized that most faculty members in the College are not trained in the teaching of writing skills. The primary responsibility for teaching writing skills remains with qualified faculty and writing coaches in the Department of English and Communication Arts and the Academic Achievement Center (AAC). That said, CoAD faculty are committed to aiding students in developing competent written communication skills as a reflection of clear thinking and professional competency. In view of this commitment, the following actions are being pursued:

1. Writing Standards
By holding students accountable for written communications, faculty will underscore the need for graduates to be well-balanced, skilled practitioners. The College encourages all faculty to reinforce the importance of writing skills by requiring writing assignments in their courses. This may include short or extended essays, as well as writing within assignments that are primarily graphic in nature. Furthermore, CoAD faculty members are to assess written communication for content, clarity, and mechanics, just as graphic communication is currently assessed. Writing standards available for reference include the Lawrence Technological University "Banned Errors List" and "List of Common Small Mistakes" (available online at http://www.ltu.edu/currentstudents/banned_errors.asp). Where deficient writing is identified, students are referred to the Academic Achievement Center for help. While writing shall be assessed in a number of courses, primary satisfaction of the criteria A.1, Communication Skills has been targeted for two required courses:

2. Practice Portfolio (ARC 6833)
Seen as the culmination of the students' upper division coursework, this required course asks students to write reflective essays on their learning experience in five courses in the upper division M.Arch curriculum, including the three studios. It is intended that this course provide an opportunity for students to articulate the trajectory of their careers, as well as the ethical and professional framework they developed within the M.Arch program—and to communicate those ideas in writing. Documentation of student evidences will be exhibited in the team room in to demonstrate progress in this area of concern.

3. Twentieth Century Architecture (ARC 4183)
As referenced in the above section regarding the History Sequence, this course requires thoughtful, well-written student essays as a measure of content understanding and writing skills. Documentation of these skills will be exhibited in the Team Room.

4. Advanced Design Studio 1 and 2

In addition the following text has been incorporated into the syllabi for ARC 5814 and ARC 5824 Advanced Design Studios and ARC 5514 and ARC 5524 Thesis 1 and Thesis 2:

Writing in course assignments will be assessed for content, clarity, and mechanics by the course instructor. Students will be asked to make corrections where necessary. Accuracy in spelling, grammar, syntax, and format is required in the presentation of all writing, including primarily graphic assignments and presentation documents.

Note: <u>No spelling or grammatical errors are acceptable in materials presented in this course.</u>

2. Summary of Responses to Changes in the NAAB Conditions

Expectations for long-range planning, self-assessment, and institutional culture have been grouped together in order to strengthen the expectation that professional architectural education occupies a unique and relevant position within the institution.

The APR has been organized in this manner, and special attention has been paid to the development of a narrative that 'tells the story' from the historical development of institutional culture to the feedback loop that advances the Department of Architecture's position within the larger institution, as well as the demands of 21st century architectural practice and education.

Expectations for statistical reporting along with comparative data have been expanded.

All required statistical reports have been prepared using the provided NAAB template. In addition, every opportunity has been taken to include meaningful data throughout the APR to underscore the narrative reporting.

There are now 32 individual SPC, compared to 34. While many of the 2004 SPC have been retained in their entirety (e.g., Writing and Communications Skills), several have been revised or combined to address student achievement more broadly (e.g., Human Behavior) and in certain cases, the level of achievement has been raised from understanding to ability. Some are new and are based on the recommendations from the ARC (e.g., Community and Social Responsibility). The most obvious change has been to group the SPC into three realms. Each realm defines a set of relationships between individual areas of study and identifies the overall learning aspirations for the realm. Programs are still expected to demonstrate that all graduates are learning at the level of achievement defined for each of the SPC; compliance will be evaluated through the review of student work.

These changes have been duly noted, and they have provided background to an ongoing study of the CoAD's design studio sequence since the fall of 2010. At that point, the Faculty Council Curriculum Committee began a study of the design studio sequence, with the intent of strengthening a curricular 'flow', which would logically build a student skill set, and strengthen the relationship between individual studio courses.

This investigation culminated in the 2012-13 academic year, when a set of subcommittees analyzed the revised NAAB criteria and made proposals to realign certain course content to more clearly address the student learning criteria. Recognizing that the design studio is the place of experimentation and integration at the heart of architectural education, one of the goals of the curriculum committee was to address each criterion (in

a primary or secondary manner) in a studio. Student coursework will be exhibited in the Team Room to illustrate this compliance. In addition, documentation of this curricular review will also be included in the Team Room.

Parallel to this course and SLC realignment, it became apparent to the CoAD faculty and administration that conversion to a direct-entry M Arch program was a logical step in maximizing the opportunity to use the knowledge of the faculty in both lower division and upper division courses to address learning criteria while guiding student development. In addition, some required courses had been treated as electives (specifically the Allied and Advanced Design studios, which could be taken by a student after completion of AD5). These courses have now been charged with addressing SLC's, taking pressure off other parts of the curriculum.

Finally, programs that admit students with pre-professional or preparatory education are expected to document whether certain SPCs are expected to have been met prior to admission to the NAAB-accredited program. The SPC matrix accommodates this documentation.

This change has been noted, and discussion of these expectations are included in *sections II.2.2- Professional Degrees and Curriculum and II.1.1 Student Performance Criteria*.

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Part Four: Supplemental Information

1. Course Descriptions (see *2009 Conditions,* Appendix 1 for format)

   The following are required courses in the M.Arch program.

ARC 1012 Art & Design Awareness (2 credits)

Course Description (limit 25 words): Introduction to the related fields of art, architecture and design, including history, theory, and the creative process. This course supplements all freshman level studio courses.

Course Goals & Objectives (bulleted list):

- For each student to have the ability to effectively use the language of architecture
- For each student to have an understanding of the patterns observable in the natural world as well as the precedents found in designed environment
- For each student to have the ability to think critically and creatively about cultural diversity and human behavior, and to understand the importance of history and socioeconomic factors as they relate to the designed environment

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

Primary:

C. 2 Human Behavior

Secondary:

A.8 Ordering Systems
A.9 Historical Traditions and Global Culture
A.10 Cultural Diversity

Topical Outline (include percentage of time in course spent in each subject area): Each subject area noted above consumes approximately 25% of the contact hours in the course. Students spend the majority of their time outside of class on reading assignments involving current events related to the field of design.

Prerequisites: None

Textbooks/Learning Resources: No required texts. Reading assignments related to lecture topics.

Offered (semester and year):

Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Gretchen Rudy F/T

ARC 1213 Visual Communication 1 (3 credits)

Course Description (limit 25 words): Development of basic skills, techniques for architectural drafting, sketching, two-dimensional graphics, perspective, shade & shadow theory, model construction, basic delineation, freehand & perspective sketching.

Course Goals & Objectives (bulleted list):

- Students will engage in risk-centered projects that reflect design processes and the judicious use of media, methods & hybridized techniques each student to have the ability to effectively use the language of architecture
- Students will visualize communication techniques to analyze existing works, hypothesize new constructs & instigate new positions.
- Students will construct measured drawings
- Students will interpret 2-dimensional information into 3-dimensional drawings & models.
- Students will apply architectural graphic conventions to images.
- Students will learn perspective and shade & shadow theory.

Student Performance Criterion/a addressed (list number and title):
None

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

05% Lettering Assignments
30% Drafting Project
20% Model
10% 2 exterior perspectives
05% Interior perspective
05% Value Study (Shade & Shadow)
10% Black & white hand rendering
10% Freehand Sketching
05% Timed Sketches

Prerequisites: none

Textbooks/Learning Resources:
"Architectural Graphics" by Frank Ching and additional books, periodicals and handouts provided by the instructor.

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Gretchen Maricak (F/T)
Garnet Cousins (adjunct)
Jolanta Skorupka (adjunct)
Frank Zmuda (adjunct)
Ken Crutcher (adjunct)

ARC 1223 Visual Communication 2 (3 credits)

Course Description (limit 25 words): Enhancement of freehand skills and techniques, three-dimensional rendering, realistic depiction of materials, with emphasis on color, light, shade-shadow, texture and composition

Course Goals & Objectives (bulleted list):

- Students will engage in risk-centered projects that reflect design processes and the judicious use of media, methods & hybridized techniques each student to have the ability to effectively use the language of architecture
- Students will visualize communication techniques to analyze existing works, hypothesize new constructs & instigate new positions.
- Students will interpret architectural materials though scale and texture.
- Students will apply color theory to architecture and presentations.
- Students will compose comprehensive visual presentations.
- Students include the architectural environment when visually expressing architecture.

Student Performance Criterion/a addressed (list number and title):
None

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

05%	Color Pencil Gradation
10%	3D Color Geometries
10%	Rendered Floor Plan
10%	Landscape
15%	Site Plan (hand & digital)
10%	Sketching with alternative media
40%	Mock ID Presentation (Floor + site plan, exterior + interior perspectives (hand + digital)

Prerequisites: ARC1223: Visual Communication 1

Textbooks/Learning Resources:
"Color Drawing" by Michael Doyle + instructor books, periodicals, handouts

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Gretchen Maricak (F/T)
William Allen (F/T)
Frank Zmuda (adjunct)
Peter Lichomski (adjunct)
Jolanta Skorupka (adjunct)
Jane McBride (adjunct)

ARC 2117, Integrated Design One (7 credits)

Course Description (limit 25 words): An integrated design course with components of Studio, Lab, and Lecture, which develops design principles through the relationship of landscape and architecture.

Course Goals & Objectives (bulleted list):
Students will learn:

- design is an intense and iterative process, a systematic collection of strategies for gathering information, evaluating, analyzing and translating information into visual materials that represent proposals for the intelligent and meaningful organization of habitable spaces.
- design includes trial and error and the production of alternative design ideas, and that careful evaluation of options is an essential to the development of evidence and observations.
- design process demands that designers make a series of intelligent formal decisions based on the acquisition and assessment of information and that design is not guesswork but informed speculations based on research and evidences.
- that an understanding of both formal and natural ordering systems is an essential design skill.
- the basic principles that guide the architectural response to site conditions and the relationship between interior and exterior space.
- to respond to site characteristics and the understanding of natural and ordering systems will be supported by the acquisition of abilities in the area of responsible site design and the initial consideration of individual accessibility.
- the ability to design sites, facilities, and systems to provide independent and integrated use by individuals with mobility, sensory, physical and cognitive disabilities and to apply the basic principles of life-safety systems with an emphasis on egress.

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

Primary	*Secondary*
A.6 Fundamental Design Skills	A.5 Investigative Skills
B.2 Accessibility	A.7 Use of Precedents
B.4 Site Design	A.8 Ordering Systems Skills
	B.9 Structural Systems
	C.2 Human Behavior

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

Research	1/5 of semester	Transformation and Iteration	2/5 of semester
Findings and Proposal	1/5 of semester	Final Presentation	1/5 of semester

Prerequisites: ARC1223: Visual Communications 2, ART 1133: Basic Design 2

Textbooks/Learning Resources:

1. "Architecture: Form, Space, and Order" By: Francis D.K. Ching
2. "Site Matters" Edited: Carol Burns and Andrea Kahn *to be provided in PDF form via Bb
3. "Teeter Totter Principles" By: Steven Holl *to be provided in PDF form via Blackboard

Offered (semester and year): Fall, 2013 (first offering replacing IDS1)

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Lisa Sauve, P/T	William Allen F/T	Edward Orlowski F/T
Erin Kelly, P/T	Mark Dineen, P/T	Martin Schwartz F/T
Bryan Koehn, P/T	Tiffany Smith, P/T	Doug Skidmore F/T
Gretchen Maricak, F/T	Jane McBride P/T	Paul Wang P/T
Jim Stevens, F/T	Ralph Nunez, P/T	Deirdre Hennebury, F/T
Fernando Bales, P/T	Jennifer Lawson P/T	

ARC 2126, Integrated Design Studio Two, 6 credit hours

Course Description (limit 25 words): An integrated design studio with components of Architectural Design, Interior Architecture, and Lighting. Studio develops architectural design principles.

Course Goals & Objectives (bulleted list):

- Students will apply the basic design elements of color, texture, and materiality within the context of interior space, exterior site, and the qualities of light.
- Students will apply building programming strategies to an architectural design through the study of client, site, and programmatic precedents in addition to the rituals and uses of the intended occupants. Programmatic studies will be congruent with the basic principles of life safety and accessibility.
- Students will communicate and represent design intentions of an architectural project graphically, verbally and through written descriptions, critique, and discourse.
- Students will research, analyze, and apply the principles of architectural precedents and to communicate the precedent's formal principles, programmatic strategies, material palate, and method of project delivery. Students will demonstrate the ability to implement an architectural project within the context of adaptive reuse.

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

Primary		Secondary:	
A.6	Fundamental Design Skills	A.1.	Communication Skills
A.7.	Use of Precedents	A.8	Ordering System Skills
B.1	Pre-Design	B.2.	Accessibility
B.5.	Life Safety	B.12	Building Materials and Assemblies
C.1.	Collaboration	C.2.	Human Behavior
C.9	Community and Social Responsibility	C.5	Practice Management

Topical Outline (include percentage of time in course spent in each subject area):
Research 1/5 of semester, Findings and Proposal, 1/5 of semester, Transformation and Iteration, 2/5 of semester, Final Presentation 1/5 of semester

Prerequisites:
Prerequisite(s): ARC 2117 UG D- and (ARC 2813 UG D- * or ARC 3813 UG D-*)

Textbooks/Learning Resources:
Analysis of Precedent, Roger Clark, Form Space and Order, Francis Ching, Sun, Wind & Light, G.Z. Brown, Toward a new Interior, Lois Weinthal, Architecture and Disjunction. Tschumi, Bernard. Problem Seeking: William M. Peña & Steven A. Parshall, Model Making, Megan Werner

Offered (semester and year): Spring 2013 (first offering replacing IDS2)

Faculty assigned
Adriana Bylsma P/T, Beverly Eichenlaub P/T, Jin Feng F/T, Aaron Jones P/T, Bryan Koehn P/T, Gretchen Maricak F/T, Charlie O'Geen P/T, Anthony Reiner P/T, Martin Schwartz F/T, Chris Schanck P/T, Doug Skidmore F/T, Jim Stevens F/T, Karen Swanson F/T, Anne Wilkinson P/T, Mollie Clarahan P/T, Michelle C. Belt P/T, Shari J. Stein P/T, Edward Orlowsk, F/T, Lauren J. Freeland P/T, Chantelle C. Marshall P/T, John P. Minea, P/T, David C. Vanderklok P/T, Arlena D. Hines P/T, Mary E. Dixon P/T

ARC 2313: Building Systems 1 (3 credits)

Course Description (limit 25 words):
A construction studio & lectures focus on construction document preparation of a multi-story, light-frame building. It emphasizes on the nature and properties of materials and systems most often selected for residential construction.

Course Goals & Objectives (bulleted list):
- Understanding the nature, development and properties of contemporary building materials
- Understanding building system performance requirements
- Understanding building systems principles, alternatives, and integration.
- Understanding a variety of important issues that influence material / system selection, including those that have been codified, including: structural stability; fire safety; resource conservation; and user accessibility.
- Ability to produce construction documents (drawings and outline specifications)
- Ability to professionally organize a building systems / materials information reference file.
- Ability to creatively incorporate building systems / materials into design decisions.
- Awareness of costs (initial and long–term) that are associated with material / system choice.
- Awareness of sustainability issues that are associated with material / system choice.

Student Performance Criterion/a addressed (list number and title):
B10 – Building Envelope Systems
B12 – Building Materials and Assemblies

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

Precedent Analysis	5%
Site / Zoning Ordinances	10%
Envelope Systems	20%
Services Systems	20%
Materials & Assemblies	20%
Technical Documentation	20%
Outline Specs	5%

Prerequisites:
PHY 2213, Physics1; PHY 2221: Physics1 Lab; PHY 2223: Physics2; PHY 2231: Physics2 Lab
ARC 2126: Integrated Design 2 ARC 2813: Electronic Methods 1

Textbooks/Learning Resources:
Required:
Fundamentals of Residential Construction, by Allen & Iano, 3rd Ed., Wiley

Recommended:
Building Construction Illustrated by Ching.

Offered (semester and year):
Fall 2011, Fall 2012

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Ash Ragheb, PhD (F/T); James Abernethy, RA (P/T); Ben Tiseo, FAIA, RA (P/T); Michael Mosley, AIA (P/T); Ronald Herzog, AIA, LEED AP (P/T); Paul Goldsmith, LEED AP (P/T)

ARC 2321: Building Systems Global (1 credit)

Course Description (limit 25 words):
An intensive lectures focusing on building materials and processes as they relate to commercial construction. It emphasizes on the nature and properties of materials and systems used for commercial construction.

Course Goals & Objectives (bulleted list):
- understanding of the nature, development and properties of contemporary building materials
- understanding building system performance requirements
- understanding the principles of building construction
- understanding building systems alternatives and integration
- understanding a variety of important issues that influence material/system selection, including those that have been codified, including: stability; fire safety; energy conservation; accessibility.
- understanding of sustainable design issues in the selection of materials / systems.
- awareness of costs (initial and long-term) that are associated with material/system choice.
- awareness of security design issues in the selection of materials / systems.

Student Performance Criterion/a addressed (list number and title):
Secondary:
B.10 – Building Envelope Systems
B.12 – Building Materials and Assemblies

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

Sustainable Design	5%
Codes / Specs	10%
Materials & Assemblies	25%
Envelope Systems	25%
Services Systems	20%
Term Project (3D Model)	15%

Prerequisites:
ARC 2313: Bldg Systems 1 (ARC2313), REVIT Profficiency

Textbooks/Learning Resources:
Required:
Fundamentals of Building Construction, by Allen & Iano, 5th. Ed, Wiley.

Offered (semester and year):
Spring 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Ash Ragheb, PhD (F/T)

ARC 2323: Building Systems 2 (3 credits)

Course Description (limit 25 words):
A continuing intensive studio focusing on building materials and processes as they relate to construction document preparation for multi-story, steel frame, and reinforced concrete frame buildings.

Course Goals & Objectives (bulleted list):

- Understanding of the nature, development, and properties of contemporary building materials
- Understanding building system performance requirements
- Understanding building systems principles, alternatives, and integration
- Understanding a variety of important issues that influence material / system selection, including those that have been codified: stability; fire safety; energy conservation; and accessibility
- Understanding of sustainable design issues in the selection of materials / systems
- Ability to produce construction documents (drawings and 4 complete material/system specifications)
- Ability to creatively incorporate building systems and materials into design decisions
- Awareness of costs (initial and long-term) that are associated with material / system choice
- Awareness of security design issues in the selection of materials / systems.

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

	Primary criteria:		*Secondary criteria:*
A.4	Technical Documentation	A.2	Accessibility
B.10	Building Envelope Systems	B.5	Life Safety
B.12	Building Materials & Assemblies	B.7	Financial Considerations
		B.11	Building Service Systems

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

Precedent Analysis	5%
Site Selection / Codes	5%
Envelope Systems	20%
Services Systems	20%
Materials & Assemblies	20%
Technical Documentation	20%
Specifications / Energy Analysis	10%

Prerequisites:
ARC 2313: Bldg Systems 1

Textbooks/Learning Resources:
Required:
Fundamentals of Building Construction, by Allen & Iano, 5th. Ed., Wiley

Recommended:
Building Codes Illustrated by Ching, 4th. Ed, Wiley

Offered (semester and year):
Spring 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Ash Ragheb, PhD (F/T); James Abernethy, RA (P/T); Ben Tiseo, FAIA, RA (P/T); Michael Mosley, AIA (P/T); Ronald Herzog, AIA, LEED AP (P/T); Paul Goldsmith, LEED AP (P/T).; Eric Murrell, RA, LEED AP (P/T).

ARC2514: Structures 1 (4 credits)

Course Description: *Introduction to s*tructural theory: statics, loads, force systems, shear and bending moments, deflection, and introductory awareness of structural system behavior. Introduction to the structural design process.

Course Goals & Objectives:

- Discovery of Knowledge: The ability to learn and recall key concepts, terms, facts or principles.
- Integration of Knowledge: 1. *Comprehension of concepts:* The ability to understand or interpret the meaning of concepts. 2. *Analysis skills:* The ability to isolate and identify unstated assumptions, or logical fallacies, or to measure between facts and inferences.
- Synthesis skills*:* The ability to apply the differing subject areas into a coherent or 'whole' concept.
- Application of Knowledge: Demonstration of problem solving skills and concept applications either literal or abstract.
- Sharing of Knowledge*:* The development of communication-based skills relevant to the topics.
- *Evaluation:* The basis of judgment and assessment or valuing, choosing or deciding.

Student Performance NAAB Criterion:
B. 9. Structural Systems (secondary)

Topical Outline (include percentage of time in course spent in each subject area):
30% the basic means of analysis of building structures
30 % applied analysis & design of basic beam and frame structural elements
15% applications of mathematical operations and principles of mechanics
20% the basic principles of statics and strength of materials
5% issues involved in selection of a system

Prerequisites:
Physics 1 and Lab PHY2213, Logic MCS1224 or Math Analysis II MCS1254

Required Texts:
Statics and Strength of Materials for Architecture 2nd. edition, Barry Onouye,
(Prentice Hall 2009), 430 pp , and faculty lecture notes.

Course Offering: All semesters, each academic year.
Summer 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, Summer 2013

Instructors:
Daniel Faoro, RA,AIA, M.Arch/UD (F/T)
Kelchin Shih, MS (adjunct)
Joe Kubinski, MS, PE. (adjunct)

ARC2813: Visual Communication 3 (3 credit hours)
Course Description (limit 25 words): Use of physical, digital and hybridized visual communication media, emphasizing computer-aided drafting, computation, and information modeling, to analyze architectural works and hypothesize new constructions.

Course Goals & Objectives (bulleted list):
- Students will demonstrate the proficient and judicious use of physical and digital media with a focus upon assessing, classifying, and mapping information through the use of Computer-Aided Drafting (CAD), modeling and computation.
- Students will experiment with and establish dialogues between distinct methods and media covered in the course, including, but not limited to, Computer-Aided Drafting (CAD), modeling and computation, information modeling.
- Students will use course content to map, analyze, interpret and visualize data about ecological processes so as to reveal the relationships, patterns and trends present within this information and place the act of design within a Geo-spatial context.
- Students will employ appropriate graphic techniques for analysis, comparison, the generation of hypotheses, and the investigation of ecological processes as they pertain to the relationship of body, architecture and landscapes.
- Students will develop an iterative process of design inquiry that uses course content to analyze existing architectural works, hypothesize new constructs, and instigate new positions.

Student Performance Criterion/a addressed (list number and title):
Secondary:
A.3 - Visual Communication
A.7 – Use of Precedents
A.8 – Ordering Systems

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

Terminology + Technique	*- Introduction to Digital Processes*	*- 5%*
Vector	*- Principles and application*	*- 10%*
Raster	*- Principles and application*	*- 10%*
Computer Aided Drafting	*- Principles and application*	*- 15%*
Diagram	*- Hybridized Tactic*	*- 15%*
Interior + Exterior Perspective Drawing	*- Hybridized Tactic*	*- 15%*
Computer Aided Field Work	*- Introduction to Building Information Modeling*	*- 15%*
Portfolio	*- Introduction to Reflective Practice*	*- 15%*

Prerequisites: ARC1223: Visual Communication 2

Textbooks/Learning Resources:
[As ARC2813 _ Visual Communication 3]
“Practice - Architecture, Technique, and Representation” Stan Allen
[As ARC2813 _ Electronic Methods 1]
Stine, Daniel John. *Design Integration Using Autodesk Revit 2012* (SDC Publications). ISBN: 978-1-58503-678-3

Offered (semester and year):
[As ARC2813 _ Visual Communication 3] Fall2013, Summer2013
[As ARC2813 _ Electronic Methods 1] Spring2013, Fall2012, Summer2012, Spring2012, Fall2011, Summer2011

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Alan Hall (adjunct), Aaron Jones (adjunct), Ayodh Kamath (F/T + coordinator), Tom Pustulka (adjunct), Charles Reed (adjunct)

ARC 3117: Integrated Design 3 (7 credits)

Course Description (limit 25 words): Coordinated studio, lab and lecture focused on integrated architectural design with emphasis on tectonics: material detailing, constructional parts, hierarchy of assemblies, orchestration of parts and wholes.

Course Goals & Objectives (bulleted list):
Students will:

- organize a complex multi-story program including a range of volume types into a coherent, cohesive parti-driven scheme with legible exterior massing, clear internal hierarchy and logical site integration
- develop specific materials and systems strategies, and technical representation, for selected sub-parts of their building design, connecting strategies for construction and execution with their overall architectural concepts
- recognize, define, organize and manipulate specific necessary architectural elements critical to their building design, including structural components (for gravity load, lateral load and span), vertical circulation, exterior envelopes, windows/doors/apertures, and roof
- manage representational media, diagrams, illustrations, measured drawings and scale models in an efficient, facile manner so that every representational view performs in direct support of their design concepts
- analytical, strategic research and planning that 1) addresses workflow and time resources relative to semester workload, design objectives and deliverables, and 2) tracks material and spatial efficiency of proposed project (eg. surface to volume studies, schedule of column and wall types) and 3) actively compares proposed projects with relevant contemporary and historical examples.

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

	Primary criteria:		*Secondary Criteria:*
A.4.	Technical Documentation	A.2	Design Thinking Skills
A.7	Use of Precedents	A.9	Historical Traditions and Global Cultures
B.1	Pre-design	B.6	Comprehensive Design
B.2	Accessibility	B.10	Building Envelope Systems
B.5	Life Safety	B.12	Building Materials and Assemblies
B.7	Financial Considerations		
C.5	Practice Management		

Topical Outline (include percentage of time in course spent in each subject area):
25% Elements: Structure and Space, Parts and Wholes, Field and Figure
25% Assemblies: Joints, Openings, Sequencing
25% Application: Meeting the Ground, Meeting the Sky, Turning the Corner
25% Synthesis: Envelope and Volume, Weathering, Synthetic Design, Future of Parts

Prerequisites:
ARC 2126: Integrated Design 2

Textbooks/Learning Resources:
None yet assigned

Offered (semester and year):
Fall2013 (first offering replacing IDS3)

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Douglas Skidmore (F/T), Charles O'Geen (adjunct), Margaret Wong (adjunct), Beverly Eichenlab (adjunct), Steven Schneeman (adjunct), Amy Swift (adjunct), Aaron Jones (adjunct)
Heidi Beebe (adjunct)

ARC3126: Integrated Design Four (6.00 credits)

Course Description (limit 25 words):
Integrated Design Studio 4 explores architectural responses to multiple dimensions of the city including urban morphology, functions, demography, policy, and history. Using precedent analysis, students frame design at multiple scales.

Course Goals & Objectives (bulleted list):

- To identify appropriate precedent studies, analyze them, extract typologies and parameters, and apply them in design
- To analyze multiple dimensions of urban context across multiple scales and generate design parameters for selection and application based on their interrelationships in design
- To demonstrate translation of design intention into a cohesive project through iterative development

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

	Primary criteria:		*Secondary criteria:*
B.3.	Sustainability	A.2	Design Thinking Skills
B.4.	Site Design	A.7	Use of Precedents
C.3	Client Role in Architecture	B.8	Environmental systems
		B.11	Building service systems
		C.7	Legal Responsibilities
		C.9	Community and Social Responsibility

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

Studio	Architecture + Urban Design	8 contact hours/ week for 15 weeks (70%)
Lab	Architecture + Urban Design	2 contact hours/ week for 15 weeks (20%)
Lecture	Urban Design	1 contact hour/ week for 15 weeks (10%)

Prerequisites:
ARC 3117: Integrated Design Three

Textbooks/Learning Resources:

Required:	*Recommended text:*
Public Places Urban Spaces by Alexander Garvin	Per faculty team teaching each section of IDS4

Offered (semester and year):
Spring 2013 (first offering replacing IDS4)

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Full-time faculty:	*Adjunct faculty:*
Anirban Adhya (2012, 2013)	Michael Canteberry (2012)
Constance Bodurow (2012, 2013)	Beverly Eichenlaub (2013)
Philip Plowright (2012, 2013)	Justin Ferguson (2012)
Paul Wang (2012, 2013)	Mark Nickita (2012, 2013)
	Ralph Nùñez (2012, 2013)
	Danna Reyes (2013)
	Steven Schneemann (2012, 2013)
	Tod Stevens (2012, 2013)
	Clyde Wilson (2012, 2013)
	Michael Wolk (2012)
	Margaret Wong (2012, 2013)

ARC 3423 HVAC & Water Systems (4 credits)
(previously listed as ARC 4423 Environmental Control Systems II)

Course Description (limit 25 words): Principles of human comfort, heating, ventilating and cooling equipment, system selection and sizing, and energy conservation. Plumbing systems overview, layout and fixtures. Fire protection and smoke control.

Course Goals & Objectives (bulleted list):
- List and compare low-embodied energy construction materials.
- Analyze energy implications and code compliance of existing or proposed envelope design using heat loss and heat gain calculations.
- Identify conditions for human comfort.
- Identify what constitutes good and poor indoor air quality and list practices to promote acceptable IAQ.
- Specify minimum ceiling /floor interstitial thickness to accommodate ducts and to allow waste water piping slant to permit adequate flow.
- Determine the domestic hot water (DHW) system sizing requirements.
- Provide adequate space for mechanical HVAC and plumbing equipment including access for proper maintenance of same.
- Identify building fire protection systems and where they are applicable for use.
- Identify active and passive heating and cooling systems and recognize how components of HVAC systems work together within a building.

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

Primary:	*Secondary:*
B.8 Environmental Systems	B.3 Sustainability
B.11 Building Service Systems	

Topical Outline (include percentage of time in course spent in each subject area):
Introduction (3%)
Sustainability/Climatic Data/Design Conditions/Comfort (13%)
Heat Transfer/Heat Loss Calculations (20%)
Building Forms/Zoning/Cooling Load Calculations (20%)
Psychrometrics/IAQ (17%)
Building Equipment/HVAC Systems/Sizing for HVAC (20%)
Water Systems & Plumbing/Fire Protection (7%)

Prerequisites:
PHY 2223 (or 2423), ARC 2231 (or ARC 2321 or 2431) and ARC 2313

Textbooks/Learning Resources:
Mechanical & Electrical Equipment for Buildings, 11th Edition, Walter T. Grondzik, Alison G. Kwok, Benjamin Stein, and John S. Reynolds, John Wiley and Sons, Inc., © 2010 ISBN : 978-0-470-19565-9

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Janice K. Means F/T
Kirsten Lyons P/T
Laura Long P/T
Filza Walters F/T

ARC3523: Structures 2 (3 credits)

Course Description: Analysis and design of different steel members in tension, compression, and bending. Also includes modules on the design and analysis of the structural elements of wood structures.

Course Objectives:

- The primary objective of this course is to furnish the student with a basic understanding of the strength and behavior of structural steel members and common framing systems.
- Demonstrate the applications of relevant building codes to structural analysis different types of steel structures.
- Develop a basic working knowledge of the American Institute of steel Construction (AISC) code in the design of structural members and understanding of the theory behind the code methodology.
- The course will cover the analysis and design of elementary wood structural elements, beam, columns, and walls.

NAAB Performance Criteria:
B.9 – Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):
75% Steel structural systems
25% Wood structural systems

Prerequisites:
ARC2514 Structures 1.

Textbook: STRUCTURAL STEEL DESIGN, Jack C. McCormack and Stephen F. Cerrnak 5th. ed. Prentice Hall 2012 Design Code: Steel Construction Manual, AISC, 14th. ed. (Second Printing: Feb. 2012).

Course Offering:
Spring 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, summer 2013

Instructors:
Faris R. Habba, MS (adjunct)
Kelchin Shih, MS (adjunct)
Del Makkawy, MS (adjunct)

ARC 3163: History of the Designed Environment I (3 credits)

Course Description (limit 25 words): A survey of the designed environment from prehistoric times to the sixteenth century, focusing on changes in appearance, technology, and social functions.

Course Goals & Objectives (bulleted list):
After taking this course students will be able to:

- Identify the various social, economic, ecological, technological, religious, and other cultural factors that influence the built environment.
- Identify how those factors have influenced architecture in different places around the world at different times, and the implications of this diversity on architectural design and construction.
- Utilize a basic vocabulary of architectural history to develop descriptive and analytical skills.
- Cultivate basic historical literacy of canons and traditions that will permit the student to undertake more intensive study in upper level courses.

Student Performance Criterion/a addressed (list number and title):
Primary:
A. 9. Historical Traditions and Global Culture
A. 10. Cultural Diversity

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

All one lecture unless otherwise noted:
Prehistoric Architecture, Ancient Mesopotamia, Ancient Egypt, Mycenea and Minos, Ancient Greece (3 lectures), India, Ancient Rome (3 lectures), Early Christian, Byzantine, Islamic, Early Medieval, Romanesque, French Gothic, North and Central America, Italian Renaissance (4 lectures), Non-Italian Renaissance

Prerequisites: None

Textbooks/Learning Resources:
Marian Moffett, Michael Fazio & Lawrence Wodehouse, Buildings Across Time: An Introduction to World Architecture (3rd edition)

Chris Rohmann, A World of Ideas: The Dictionary of Important Ideas and Thinkers

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Dale Allen Gyure (full-time)
Margaret Hadley (adjunct)

ARC 3623: History of the Designed Environment II (3 credits)

Course Description (limit 25 words): A survey of the designed environment from 1600 to the early late twentieth century, focusing on changes in appearance, technology, and social functions.

Course Goals & Objectives (bulleted list):
After taking this course students will be able to:

- Identify the various social, economic, ecological, technological, religious, and other cultural factors that influence the built environment.
- Identify how those factors have influenced architecture in different places around the world at different times, and the implications of this diversity on architectural design and construction.
- Utilize a basic vocabulary of architectural history to develop descriptive and analytical skills.
- Cultivate basic historical literacy of canons and traditions that will permit the student to undertake more intensive study in upper level courses.

Student Performance Criterion/a addressed (list number and title):
A. 9. Historical Traditions and Global Culture
A. 10. Cultural Diversity

Topical Outline (include percentage of time in course spent in each subject area):
All one lecture unless otherwise noted:
Baroque Rome, Baroque France, Baroque England, 18th Century Rationalism, Romanticism, Historical Revivals, New Industrialism, Ecole des Beaux-Arts Architecture, New Urbanisms, English Arts & Crafts Movement, Art Nouveau and Viennese Secession, The Search for an American Style, Frank Lloyd Wright, Early Modernism (2 lectures), Le Corbusier, Ludwig Mies van der Rohe, Eero Saarinen and Alvar Aalto, Louis Kahn, Post-Modernism, Chinese Architecture (2 lectures), Japanese Architecture

Prerequisites:
ARC 3163 History of the Designed Environment I

Textbooks/Learning Resources:
Marian Moffett, Michael Fazio & Lawrence Wodehouse, Buildings Across Time: An Introduction to World Architecture (3rd edition)

Chris Rohmann, A World of Ideas: The Dictionary of Important Ideas and Thinkers

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Dale Allen Gyure (full-time)
Margaret Hadley (adjunct)

ARC 4114 Architectural Design Studio 5 (4 credits)

Course Description (limit 25 words):
The designated Comprehensive Design Studio culminates previous knowledge and skills related to the NAAB's 11 Student Performance Criteria. Outside professionals act as jurors and consultants.

Course Goals & Objectives (bulleted list):
Students will be able to:

- successfully incorporate and demonstrate the 11 NAAB Student Performance Criteria as listed under Comprehensive Design in a cohesive architectural project
- compile documentation of process and presentation imagery to communicate outside professional review

Student Performance Criterion/a addressed (list number and title):
B.6. Comprehensive Design.

- *A.2. Design Thinking Skills*
- *A.4. Technical Documentation*
- *A.5. Investigative Skills*
- *A.8. Ordering Systems Skills*
- *A.9. Historical Traditions and Global Culture*
- *B.2. Accessibility*
- *B.3. Sustainability*
- *B.4. Site Design*
- *B.5. Life Safety*
- *B.8 Environmental System*
- *B.9. Structural Systems*

Topical Outline (include percentage of time in course spent in each subject area):
A.2. 30%, A.4. 10%, A.5. 5%, A.8. 5%, A.9. 5%, B.2. 10%, B.3. 5%, B.4. 5%, B.5. 10%, B.8. 5%, B.9. 10%

Prerequisites:
ARC 3127 - IDS 4 or ARC 3126-IDS 4 & ARC 2321-GLOBAL & ARC 2323 - BLDG SYS 2 & ARC 3523 - STRUCTURES 2 or ARC 4533 - STRUCTURES 3 or ECE 3723-THEORIES OF STRUCTURE, & MCS 1224-MATH ANAL 2 or MCS 1414-CALC 1

Textbooks/Learning Resources:
The Architect's Studio Companion, Edward Allen / Joseph Iano. Various "Consultants" related to Structure, Environmental and Sustainalbility.

Offered (semester and year):
Summer 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, Summer 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Thomas J. Nashlen (F/T), Michael Giovanni (P/T), Ayers Morison, (P/T), Richard C. Hall (P/T)

ARC 4183 Twentieth Century Architecture & Theory (3 credits)

Course Description (limit 25 words): A historical and theoretical study of the transformation of European and American architecture in the twentieth century, focusing on changes in styles, technology, and social function.

Course Goals & Objectives (bulleted list):
This course will help students to:

- Critique various twentieth century buildings and ideas through writings and discussions.
- Evaluate various twentieth century architectural ideas and theories through critical reading skills.
- Write an essay analyzing key historical developments and theoretical concepts of twentieth century architecture.
- Develop a framework for analyzing architecture of any period.
- Identify the various factors that influenced the development and practice of architecture in the twentieth century

Student Performance Criterion/a addressed (list number and title):
A.1 – Communication Skills

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

All one lecture unless otherwise noted:
Precursors to the 20th Century (2 lectures), Modernist Theory, German Werkbund and Bauhaus, De Stijl, Russian Avant Garde, The International Style, Frank Lloyd Wright, Ludwig Mies van der Rohe, Le Corbusier, Louis Kahn, Post-Modernism (2 lectures), Return of Classicism, Deconstructivism, New Formalism, New Avant Garde

Prerequisites: ARC 3163 & 3623 History of the Designed Environment I and II; Writing Proficiency Exam

Textbooks/Learning Resources:
Kenneth Frampton, Modern Architecture: A Critical History (4th ed., Thames & Hudson, 2007).

Harry Mallgrave and Christina Contandriopoulos, eds., Architectural Theory, Vol. II: An Anthology from 1871-2005 (Blackwell, 2008).

Richard Weston, Key Buildings of the Twentieth Century (2nd ed., W.W. Norton, 2010).

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Dale Allen Gyure (full-time), Amy Swift (adjunct)

ARC 4214: Allied Design Studio: Design Development (4 credits)

Course Description (limit 25 words): Design studio focusing on design development utilizing a previous class project. Emphasizes processes including; building systems analysis and selection, systems integration, function and code compliance.

Course Goals & Objectives (bulleted list):

- Students will use suitable representational media to raise precise questions, compare diverse points of view, test alternative outcomes, and reach well-reasoned conclusions throughout the design process
- Students will manage a project for external, professional review using effective project delivery methods.
- Students will identify and incorporate diverse needs, values, physical abilities, social norms and spatial patterns appropriate to the project.
- Students will identify and address social, political and cultural issues of key relevance to the project.
- Students will demonstrate clear design processes in development of designs to comply with functional and code requirements of the building, respond to local climate conditions, and feature building materials and systems which are appropriate to the use, enhance long term durability, are constructible, and accomplish the desired aesthetic effect.

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

Primary criteria:		*Secondary Criteria:*		*Topical criteria:*	
A.2.	Design thinking skills	A.10	Cultural Diversity	A.1	Communication Skills
A.3	Visual Communication Skills	C.4	Project Management	A.4	Technical Documentation
		C.8	Ethics and Professional Judgment	A.5	Investigative Skills
				A.7	Use of Precedents
				B.3	Sustainability
				B.5	Life Safety
				B.10	Building Envelope Systems
				B.12	Building Materials and Assemblies

Above criteria are addressed by this Allied studio only

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

Precedent Analysis	10%
Climate Analysis	10%
Coordination of Building Systems	20%
Development of Design Concepts	20%
Technical Development	20%
Representation	20%

Prerequisites:
ARC 3126 – Integrated Design 4
ARC 2323 – Building Systems 2

Textbooks/Learning Resources:
"The Architect's Studio Companion" By Allen and Iano, Wiley, ISBN -13:978-0-471-73622-6
Supplementary reading and reference materials provided by instructor from various sources.

Offered (semester and year):
Fall 2009, Fall 2010,Fall 2011, Fall 2012, Fall 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Paul Johnson - Fall 2011, Fall 2012, Fall 2013 (adjunct)

ARC 4224 Allied Design Studio: Sustainable Architecture (4 credits)

Course Description (limit 25 words): A design studio pairing architectural inquiry and advanced visualization techniques in the study of sustainable building concepts, green architecture strategies, social equity, and systems development.

Course Goals & Objectives (bulleted list):

- Students will use suitable representational media to raise precise questions, compare diverse points of view, test alternative outcomes, and reach well-reasoned conclusions throughout the design process
- Students will manage a project for external, professional review using effective project delivery methods.
- Students will identify and incorporate diverse needs, values, physical abilities, social norms and spatial patterns appropriate to the project.
- Students will identify and address social, political and cultural issues of key relevance to the project.
- Students will demonstrate clear design processes in creation of works that respond to local climate conditions, and feature building materials and systems which enhance the relationship between the built and natural environments, while addressing issues of economy and social equity.

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

	Primary criteria:		*Secondary criteria*:		*Topical criteria:*
A.2.	Design thinking skills	A.10	Cultural Diversity	B.3.	Sustainability
A.3	Visual Communication Skills	C.4	Project Management	C.9	Community and Social Responsibility
		C.8	Ethics and Professional Judgment		

Above criteria are addressed by this Allied studio only

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

Precedent Analysis	15%
Context and Climate Analysis	15%
Conceptual Design	25%
Technical Development	35%
Representation	10%

Prerequisites:
ARC 3126 – Integrated Design 4
ARC 3423 - HVAC & Water Systems (co-requisite)

Textbooks/Learning Resources:
The Green Studio Handbook. By Allison Kwok and Walter Grondzik Second Edition (Elsevier / Architectural Press, 2007) ISBN 0080890520

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Edward Orlowski - Fall 2011 (F/T)
Daniel Faoro - Spring 2012 (F/T)
Elizabeth Sauve - Fall 2012 (P/T)
Scott Shall - Spring 2013 (F/T)

ARC 4274: Allied Design Studio: Theory and Competitions (4 credits)

Course Description (limit 25 words): A design studio focusing on relevant issues of architectural thought and representation explored via current competitions at the local, national and international levels.

Course Goals & Objectives (bulleted list):

- Students will use suitable representational media to raise precise questions, compare diverse points of view, test alternative outcomes, and reach well-reasoned conclusions throughout the design process
- Students will manage a project for external, professional review using effective project delivery methods.
- Students will identify and incorporate diverse needs, values, physical abilities, social norms and spatial patterns appropriate to the project.
- Students will identify and address social, political and cultural issues of key relevance to the project.
- Students will demonstrate ability to produce design outcomes with clarity, cultural relevance and cohesiveness

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

	Primary criteria:		Secondary criteria:		*Topical criteria:*
A.2.	Design thinking skills	A.10	Cultural Diversity	C.9	Community and Social Responsibility
A.3	Visual Communication Skills	C.4	Project Management		
		C.8	Ethics and Professional Judgment		*Above criteria are addressed by this Allied studio only*

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

Precedent Analysis	10%
Context Analysis	10%
Conceptual Design	30%
Representation	50%

Prerequisites:
ARC 3126 – Integrated Design 4

Textbooks/Learning Resources:
Based on current semester's competitions – research material as needed.

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Fall 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Phillip Plowright - Fall 2011, Fall 2012, Fall 2013 (F/T)
Elizabeth Sauve – Spring 2012 (adjunct)

ARC 4443 Acoustics, Electricity & Illumination (3 credits)
(previously listed as ARC 3413 Environmental Control Systems I)

Course Description (limit 25 words): Acoustics, electricity, and illumination: basic electrical theory as it relates to building construction, electrical problems in power, and distribution; illumination design, the fundamental science and application of acoustics.

Course Goals & Objectives (bulleted list):
- Identify properties of acoustic assemblies for separation of spaces for speech privacy using acoustic terminology to include frequency, wavelength, flanking transmission, NCR, TL, coincident dip, NC, RC, NR, STC and CSTC.
- Describe the surface characteristics and geometries to optimize speech clarity using acoustic terminology to include RT, HAAS effect, masking, room size, AI and absorption characteristics of room surfaces and room contents.
- Illustrate morning, noon and afternoon sun angles to determine potential sunlight penetration and overheating of a structure at each solstice and equinox, when given the latitude of the site.
- Identify and compare lamps based on their efficacy, color rendition and safety for the environment.
- Identify electrical lighting luminaire configurations to facilitate integration of electrical lighting with daylighting which utilizes light level sensing controls to maintain footcandle levels required for the intended function of the space at the work level.
- Calculate electrical parameters in building circuits related to current, power level and power factors for voltage levels and equipment types appropriate to the building size and type.
- Identify electrical equipment used for safety and specify the code requirements for different types of circuits, spaces and equipment.
- Identify sources for power backup and estimate the space requirements for such equipment based on the emergency power level requirements.

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

Primary:	*Secondary:*
B.8 Environmental Systems	B.3 Sustainability
B.11 Building Service Systems	

Topical Outline (include percentage of time in course spent in each subject area):
Acoustics (50%) Includes: Physics of Acoustics; Sound Absorption; Sound Insulation; Mechanical Systems Noise Control; Speech Clarity; Speech Privacy and Sound Reinforcement
Electricity (20%) Includes: Electrical Distribution and Supply; Electrical Power; Electrical Energy Use & In-Building Distribution; and Electrical Wiring Design.
Illumination (30%) Includes: Physics of Light/Lighting terms; Daylighting; Lighting Control for Daylighting/Electrical Lighting Integration; and Lighting Design Process

Prerequisites: PHY 2223 (or 2423), ARC 2231 (or ARC 2321 or 2431) and ARC 2126

Textbooks/Learning Resources: (1) Walter T. Grondzik, Alison G. Kwok, Benjamin Stein, John S. Reynolds, Mechanical & Electrical Equipment for Buildings, 11th edition (John Wiley & Sons) (2) Mechanical & Electrical Equipment for Buildings, 11th Edition, Walter T. Grondzik, Alison G. Kwok, Benjamin Stein, and John S. Reynolds, John Wiley and Sons, Inc., © 2010

Offered (semester and year):
Summer 2012, Fall 2011, Spring 2012, Summer 2011, Fall 2012, Spring 2013, Summer 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Anthony Herk P/T adjunct, David Paterson P/T adjunct, Joe Oranchak P/T adjunct and Mollie Clarahan P/T adjunct.

ARC4533: STRUCTURES 3 (3 credits)

Course Description: The primary objective of this course is to furnish the student with a basic understanding of the strength and behavior of reinforced concrete members and simple concrete structural systems.

Course Goals & Objectives:
- The primary objective of this course is to furnish the student with a basic understanding of the strength and behavior of reinforced concrete members and common concrete structural systems.
- Demonstrate the application of relevant building codes to different type of concrete structures.
- Develop a basic working knowledge of the American Concrete Institute (ACI) code in the design of structural members and understanding of the theory behind the code methodology.
- The course will cover the analysis and design of elementary masonry structural elements, walls, lintels and shear walls.

Student Performance Criterion:
Primary:
B.9 – Structural Systems

Topical Outline (include percentage of time in course spent in each subject area):
75% Concrete structural systems
25% Masonry systems

Prerequisites: *ARC2514 Structures 1.*

Textbooks/Learning Resources:
Reinforced Concrete Design, Limbrunner and Aghayere, 7th ed. Prentice Hall 2009, *Building Code Requirements for Structural Concrete* (ACI 318-10)

Course Offering:
Summer 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, Summer 2013

Instructors:

Faris R. Habba, MS (adjunct)
Kelchin Shih, MS (adjunct)
Del Makkawy, MS, (adjunct)

Course: ARC4543 Structures IV/ Advanced Structures ARC5543; 3 cr. (dual listed UG/GR class).
Course Description: Advanced analysis of building loads (dead, live, wind, earthquake, etc.) and the special requirements of long span systems and lateral force resistance.

Course Goals & Objectives:

- **Discovery of Knowledge**: The ability to learn and recall key concepts, terms, facts or principles.
- **Integration of Knowledge:** 1. *Comprehension of concepts:* The ability to understand or interpret the meaning of concepts. 2. *Analysis skills:* The ability to isolate and identify unstated assumptions, or logical fallacies, or to measure between facts and inferences.
- **Synthesis skills***:* The ability to apply the differing subject areas into a coherent or 'whole' concept.
- **Application of Knowledge**: Demonstration of problem solving skills and concept applications either literal or abstract
- **Sharing of Knowledge*:* The development of communication-based skills relevant to the topics.**
- ***Evaluation:*** **The basis of judgment and assessment or valuing, choosing or deciding.**

Student Performance Criterion:
Primary:
B. 9. Structural Systems: *Understanding* of the basic principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems.

Topical Outline (include percentage of time in course spent in each subject area):
65% Long-span and high-rise systems
35% Lateral loads and resilience systems

Prerequisites:
Structures 1- (ARC2514), Structures 3- (ARC45433) and Structures 2- ARC3523.

Texts (Required):
Structures, 6th. edition*,* by Daniel Schodek,(Prentice Hall 2007), faculty lecture notes.

Course Offering:
Summer 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, summer 2013

Instructors:
Daniel Faoro, RA,AIA, M.Arch/UD (F/T)
Paul Dannels, M.Arch (adjunct)
Pittabi Sitaram, Ph.D (adjunct)
Del Makkawy (adjunct)

ARC5013: Research Methods (3.00 credits)

Course Description (limit 25 words):
Research Methods is an intensive study of frameworks, methodologies, and tactics applied to contemporary design issues in architecture through critical thinking, application, documentation, and analysis.

Course Goals & Objectives (bulleted list):
- To examine how research is used and applied in architecture design
- To develop a relevant research concept through questions, framework, methods, and tactics
- To read, understand, and evaluate research proposals
- To examine appropriate methods and tactics applied to a specific architecture research
- To systematically search relevant literature to support a research or thesis topic
- To disseminate research results in written and visual formats

Student Performance Criterion/a addressed (list number and title):
Primary criteria:
A.11. Applied research

Secondary criterion:
A.5. Investigative Skills
A.6. Fundamental Design Skills

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

Defining research in architecture	One week/ 15 weeks (6%)
Research framework, theory and design in relation to research	Two weeks/ 15 weeks (14%)
Multiple research methods	Six weeks/ 15 weeks (40%)
Concept development, literature review, methods selection, application, analysis, and documentation	Six weeks/ 15 weeks (40%)

Prerequisites:
Upper division standing/ Instructor's approval

Textbooks/Learning Resources:
Required text:
Groat, L., Wang, D. (2002). *Architecture Research Methods*, New York, NY: Wiley.

Recommended texts and resources
Many varying across faculty (List available by request)

Offered (semester and year): All three semesters every year
Summer 2013, Spring 2013, Fall 2012
Summer 2012, Spring 2012, Fall 2011

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Full-time faculty:	*Adjunct faculty:*
Anirban Adhya (2012-2013, 2011-2012) Joongsub Kim (2012-2013, 2011-2012)	Justin Ferguson (2011-2012) Elizabeth Keslacy (2012-2013) Jennifer Siegel (2011-2012)

ARC 5014 Architectural Foundation Studio I (4 credits)

Course Description (limit 25 words): Architectural Foundation Studio 1 (AFS-1) introduces architectural elements and their relationships using formal strategies at multiple scales and varied digital and analogue techniques of visualization.

Course Goals & Objectives (bulleted list):

- Students will use suitable representational media to raise precise questions, compare diverse points of view, test alternative outcomes, and reach well-reasoned conclusions throughout the design process.
- Students will manage a project for external, professional review using effective project delivery methods.
- Students will identify and incorporate diverse needs, values, physical abilities, social norms and spatial patterns appropriate to the project.
- Students will identify and address social, political and cultural issues of key relevance to the project.

Student Performance Criterion/a addressed (list number and title):
A.1. Communication Skills (secondary)
A.3. Visual Communication Skills (secondary)
A. 6. Fundamental Design Skills (primary)
A.7. Use of Precedent (secondary)
A. 8. Ordering Systems Skills (primary)
B. 1. Pre-Design (primary)
B. 2. Accessibility (primary)
B. 4. Site Design (primary)
C.9 Community and Social Responsibility (primary)

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

Representation and Translation	33%
Form and Tectonics	33%
Experience and Site	33%

Prerequisites:
Upper division standing

Textbooks/Learning Resources:
Architecture: Elements, materials, form by Francesca Prina (Princeton Field Guide to Art)
Architectural Drawing: A Visual Compendium of Types and Methods by Rendow Yee
Architectural Modelmaking (Portfolio Series) by Nick Dunn

Offered (semester and year):
Fall only - 2010, 2011, 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Ross Hoekstra (adjunct)
Diana Khadr (adjunct)

ARC 5024 Architectural Foundation Studio 2 (4 credits)

Course Description (limit 25 words): Architectural Foundation Studio 2 (AFS-2) focuses on meaning and process in architectural design by understanding priorities of formal organization, social content and decision-making.

Course Goals & Objectives (bulleted list):

- develop skill and knowledge in the use and flexibility of method in architectural design including syntactical understanding of manipulating formal elements, perceptive effects, patterning and distribution of mass, volume, materiality, color, texture, proportion, rhythm, and light in a socio-cultural context.
- extend knowledge into occupational pressures (program, building use), circulation patterns and contextual analysis
- analyzing context and program through the use of constraints, assets, flows and pressures
- analyzing typological precedent for persistent formal patterns with embedded social content
- using extra-architectural content to structure design proposal through questions, big ideas, and metaphor

Student Performance Criterion/a addressed (list number and title):
A.2. Design Thinking Skills (primary)
A. 6. Fundamental Design Skills (primary)
A.7. Use of Precedent (primary)
A. 8. Ordering Systems Skills (secondary)
B. 1. Pre-Design (primary)
B. 4. Site Design (secondary)
B. 5. Life Safety (primary)

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

Program and occupation of space	10%
Forces and spatial pressures	30%
Patterns and typology	30%
Cultural values and social mythology	30%

Prerequisites:
Upper division standing

Textbooks/Learning Resources:
Revealing Architectural Design: Methods, Frameworks & Tools by Philip D. Plowright (Routledge)

Offered (semester and year):
Spring only - 2010, 2011, 2012, 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Philip Plowright (F/T)

ARC 5034 Architectural Foundation Studio 3 (4 credits)

Course Description (limit 25 words): Architectural Foundation Studio 3 (AFS-3) explores architectural design through traditional visualization and assembly methods alongside more experimental representational tools and techniques.

Course Goals & Objectives (bulleted list):

- refine knowledge of the relationship between visual practices and architectural development.
- develop advanced knowledge of model and graphic production focused on tectonics, building details and materiality
- understand the role of alternative senses and body variations in the creation of place
- understand and apply structural systems in relation to context and environment
- explore and identify the assembly of materials, systems, and components appropriate for a building design
- introduce working in design teams and the nature of collaborative work.
- awareness of smaller scale development of architectural elements

Student Performance Criterion/a addressed (list number and title):
A. 3. Visual Communication (primary)
A. 4. Technical Documentation (primary)
B. 2. Accessibility (primary)
B. 4. Site Design (primary)
B. 9. Structural Systems (primary)
C. 1. Collaboration (primary)

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

Materiality and tectonic systems	30%
Wall section development (structure/cladding)	35%
Movement, senses and interpretation	25%
Site to enclosure integration	10%

Prerequisites:
Upper-division standing

Textbooks/Learning Resources:
TBD

Offered (semester and year):
Future course (approved as part of program refinement in Spring 2013)

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
TBD (future offering Fall 2014)

ARC 5423: Ecological Issues (3 credits)

Course Description (limit 25 words): There is earth, with finite resources and a growing population. The impact the built environment has on the limited resources is significant. We explore those issues.

Course Goals & Objectives (bulleted list):

- To identify and understand *ECOLOGICAL issues* as they relate to Architecture.
- To understand the political and social nature of ecological issues.
- To identify those issues that architecture may address.

Student Performance Criterion/a addressed (list number and title):
None

Topical Outline (include percentage of time in course spent in each subject area):
Environmental Damage 8%
Climate Change 10%
Friendly Trade Partners 2%
Societies' response to environmental problems 10%
Pollution 10%
Waste 10%
Habitat Destruction 10%
Energy 18%
Greed / Envy / Complacency & Ignorance 10%
Natural Systems 10%
Population 2%
Due to the nature of a seminar, there is a lot of overlap of topic areas.

Prerequisites:
Upper division standing

Textbooks/Learning Resources:

COLLAPSE by Jared Diamond
BREAK THROUGH by Ted Nordhaus & Michael Shellenburger
SMALL is BEAUTIFUL by E. F. Schumacher
BIOMIMICRY by Janine M Benyus

Additionally there are many web sites that are required.

Offered (semester and year):
Summer, 2011, Fall 2011, Spring 2012, Summer 2011, Fall 2012, Spring 2013, Summer 2012

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Professor William Allen (F/T)

ARC5643: Design Theory (3 credits)

Course Description (limit 25 words): An intellectual survey course of the theoretical positions of design starting from a philosophical basis in Classical Greece and following developments into in the 21st century.

Course Goals & Objectives (bulleted list):

- create awareness of the present culture of design (architecture, interiors, urban)
- promote critical thinking skills while analyzing philosophical, artistic and aesthetic movements
- increase quantitative knowledge of, and qualitative thought in ,design thinking structures
- the ability to communicate orally and in written form
- research and literacy skills developed.

Student Performance Criterion/a addressed (list number and title):
C8 Ethics and Professional Judgment

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

Aesthetics	40%
Judgment	20%
Ethics	15%
Meaning	10%
Thinking Frames	15%

Prerequisites:
Upper division standing

Textbooks/Learning Resources:

Branko Mitrović, Philosophy for Architects (Paperback). Princeton Architectural Press (June 29, 2011), ISBN-13: 978-1568989945

Vassiliki Kolocotroni (Editor), Jane Goldman (Editor), Olga Taxidou (Editor). Modernism: An Anthology of Sources and Documents (Paperback). University Of Chicago Press (February 15, 1999). ISBN-13: 978-0226450742I

Mari Hvattum, *Tracing Modernity: Manifestations of the Modern in Architecture and the City* (Paperback), Routledge; 1st edition (July 14, 2004), ISBN-13: 978-0415305129

Neil Leach, The Anaesthetics of Architecture (Paperback), MIT Press (March 26, 1999), ISBN-13: 978-0262621267

Offered (semester and year):
Summer 2011, Fall 2011, Spring 2012, Summer 2012, Fall 2012, Spring 2013, Summer 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Philip Plowright (F/T)
Dr. Diedre Hennebury (Adjunct)
Jennifer Seigal (Adjunct)

ARC 5804: Critical Practice Studio (4 credits)

Course Description (limit 25 words): A leading design practitioner and collaborating faculty explore a current issues in critical practice. Students research, generate and represent design ideas in a collaborative team format and working process.

Course Goals & Objectives (bulleted list):

- development of critical design thinking
- development of team work skills
- understanding thinking styles and interpersonal communication
- development of graphic communication, and speaking skills
- understanding the effect of method and process on design outcomes
- the use and application of research in formal design

Student Performance Criterion/a addressed (list number and title):
A1 Visual Communication Skills
C1 Collaboration (primary)
C6 Leadership (primary)
A5 Investigative Skills (secondary)
A6 Fundamental Design Skills (secondary)
A11 Applied Research (secondary)

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

Critical Thinking Skills	30%
Collaborative Skills	30%
Graphics Skills	20%
Research Skills	20%

Prerequisites:
Upper division standing

Textbooks/Learning Resources:
varies per year

Offered (semester and year):
Summer 2011, Summer 2012, Summer 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Aaron Jones, adjunct (2011), Constance Bodurow, F/T (2011), Margaret Wong, adjunct (2011), Mason White, visiting faculty - University of Toronto (2011), Philip Plowright, F/T (2011,2012), Ralph Nelson, F/T (2011,2012),Dr. Beverly Geltner, associated researcher, adjunct (2011, 2012, 2013), Dr. Matthew Cole, F/T (2011, 2012, 2013), Chris Schanck, adjunct (2012), Dale Clifford, visiting faculty - Carnegie Mellon University (2012), Jake Chidester, adjunct (2012), Mary Cay Lancaster, adjunct (2012), Tod Stevens, adjunct (2012), Anirban Adhya, F/T (2013), Edward Orlowski F/T (2013), Aaron Jones, adjunct (2013), Lisa Sauve, adjunct (2013), Andrew Daley, adjunct (2013), Tobias Armborst, Daniel D'Oca, and Georgeen Theordore, visiting faculty (2013)

ARC 5814: Advanced Design Studio 1 (4 credits)

Course Description: Students complete an advanced-level design project that includes guided research, a design process, and a design proposition.

Course Goals & Objectives (bulleted list):
Students are expected to achieve both understanding and ability in the following areas:

- Critical strategies related to research, conceptual skills, design thinking, and principles and process; specifically in situation definition, problem identification, formulation, analysis, and resolution in design
- Graphic, written, and oral communication and representation skills
- The integration of critical issues and strategies for sustainability as applied to design
- The integration of technical understandings and abilities as applied them to design
- An understanding of professional best-practices
- Skills and the ability to engage in intelligent and informed conversations about design.

Student Performance Criteria addressed (list number and title):

Primary:		Secondary:	
A2	Design Thinking Skills	A1	Communication Skills
A5	Investigative Skills	C1	Collaboration
A11	Applied Research	C8	Ethics and Professional Judgment
B3	Sustainability	C9	Community and Social Responsibility
C2	Human Behavior		

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

Communication Skills	15%
Design Thinking Skills	30%
Applied Research	15%
Sustainability	10%
Human Behavior	15%
Ethics and Professional Judgment	15%

Prerequisites:
Graduate standing; ARC 5012 Research Methods and ARC 5804 Critical Practice Studio

Textbooks/Learning Resources:
Texts are required or recommended at the discretion of the individual section instructor.

Offered (semester and year):
Fall 2011, Fall 2012

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Full Time Faculty	**Part Time Adjunct Faculty**
Martin Schwartz	John Abela
James Stevens	Sam Bayne
Paul Wang	Jason Colon
	Mark Farlow
	Aaron Jones
	Celeste Novak
	Arthur Smith
	Juan Torres

ARC 5824: Advanced Design Studio 2 (4 credits)

Course Description: Students complete an advanced-level design project that includes guided research, a design process, and a design proposition.

Course Goals & Objectives:

Students are expected to achieve both understanding and ability in the following areas:

- Critical strategies related to research, conceptual skills, design thinking, and principles and process; specifically in situation definition, problem identification, formulation, analysis, and resolution in design
- Graphic, written, and oral communication and representation skills
- The integration of critical issues and strategies for sustainability as applied to design
- The integration of technical understandings and abilities as applied them to design
- An understanding of professional best-practices
- Skills and the ability to engage in intelligent and informed conversations about design.

Student Performance Criteria addressed:

Primary:		Secondary:	
A2	Design Thinking Skills	A1	Communication Skills
A5	Investigative Skills	C1	Collaboration
A11	Applied Research	C8	Ethics and Professional Judgment
B3	Sustainability	C9	Community and Social Responsibility
C2	Human Behavior		

Topical Outline and percentage of time in course spent in each subject area:

Communication Skills	15%
Design Thinking Skills	30%
Applied Research	15%
Sustainability	10%
Human Behavior	15%
Ethics and Professional Judgment	15%

Prerequisites:
Graduate standing; ARC 5012 Research Methods and ARC 5804 Critical Practice Studio

Textbooks/Learning Resources:
Texts are required or recommended at the discretion of the individual section instructor.

Offered (semester and year):
Spring 2012, spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Full Time Faculty	**Part Time Adjunct Faculty**
Constance Bodurow	John Abela
Daniel Faoro	Jason Colon
Edward Orlowski	Mark Farlow
Martin Schwartz	Aaron Jones
James Stevens	Arthur Smith
Paul Wang	Juan Torres

ARC 5913: Professional Practice (three credits awarded):

Course Description An overview of professional architectural practice from a regulatory, procedural and ethical perspective, client perspectives, professional services, contracts and legal relationships, and professional firm organization.

Course Goals and Objectives
Students shall demonstrate a fundamental understanding of:

- The history of the profession, training and licensure, clients, professional services, the construction industry, design and contract document organization, and firm organization.
- The role of the architect in society, and the ethical framework of practice.
- Laws, codes, and governmental regulations governing the requirements for professional licensing as a practicing architect in the State of Michigan.

Student Performance Criteria/ addressed
A.10 – Cultural Diversity
B.7 – Financial Considerations
C.3 – Client Role in Architecture
C.4 – Project Management
C.5 – Practice Management
C.6 – Leadership
C.7 – Legal Responsibilities (secondary)
C.8 – Ethics and Professional Judgment
C.9 – Community and Social Responsibility

Topical Outline

The Profession and Regulatory Matters	20%
Ethics and Professional Judgment	20%
Legal and Client Relationships	20%
Project Management	25%
Practice Management	15%

Prerequisites
Upper division standing

Textbooks/Learning Resources
"The Architecture Student's Handbook of Professional Practice", Fourteenth Edition The American Institute of Architects. Publisher - John Wiley & Sons, Inc., ISBN 978-0-470-08869-2

"Ethics and the Practice of Architecture", Wasserman, Sullivan, Palermo
Publisher - John Wiley & Sons, Inc., ISBN 0-471-29822-0

Offered (semester and year)
Summer 2012 (First offering replacing Professional Practice 1), Fall 2012, Spring 2013, Fall 2013, Summer 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Matthew Bohde- Summer 2012, Fall 2012, Spring 2013, Fall 2013, Summer 2013 (adjunct)
John Harmala - Fall 2012, Fall 2013 (adjunct)

ARC 6514: Thesis 1 (4 credits)

Course Description: Self-directed advanced architectural research and critical investigation on a pre-selected and approved topic of personal interest guided by a full-time faculty member.

Course Goals & Objectives (bulleted list):

Students are expected to achieve both understanding and ability in the following areas:

- Critical strategies related to research, conceptual skills, design thinking, and principles and process; specifically in situation definition, problem identification, and analysis.
- Graphic, written, and oral communication and representation skills
- The integration of critical issues and strategies for sustainability and human behavior as applied to design
- Skills and the ability to engage in intelligent and informed conversations about design from ethical, professional, and theoretical positions.

Student Performance Criteria addressed (list number and title):

Primary:		Secondary:	
A2	Design Thinking Skills	A1	Communication Skills
A5	Investigative Skills	C1	Collaboration
A11	Applied Research	C8	Ethics and Professional Judgment
B3	Sustainability	C9	Community and Social Responsibility
C2	Human Behavior		

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

Communication Skills	10%
Design Thinking Skills	10%
Applied Research / Investigation	50%
Sustainability	10%
Human Behavior	10%
Ethics and Professional Judgment	10%

Prerequisites:
Graduate standing; ARC 5012 Research Methods and ARC 5804 Critical Practice Studio

Textbooks/Learning Resources:
Texts are required or recommended at the discretion of the individual section instructor. Students are expected to develop a comprehensive bibliography of sources related to their selected thesis topic.

Offered (semester and year):
Fall semester, 2011 and 2012

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Anirban Adhya – Fall 2012 (F/T)
Joongsub Kim – Fall 2011 (F/T)
Janice Means – Fall 2012 (F/T)
Edward Orlowski – Fall 2011, 2012(F/T)

ARC 6524: Thesis 2 (4 credits)

Course Description: Application of architectural research and critical investigation conducted in Thesis 1, intended to test a theoretical position and contribute to a field of architectural inquiry.

Course Goals & Objectives (bulleted list):

Students are expected to achieve both understanding and ability in the following areas:

- Critical strategies related to research, conceptual skills, design thinking, and principles and process; specifically in situation definition, problem identification, formulation, analysis, and resolution in design
- Graphic, written, and oral communication and representation skills
- The integration of critical issues and strategies for sustainability, and human behavior as applied to design
- Skills and the ability to engage in intelligent and informed conversations about design from ethical, professional, and theoretical positions.

Student Performance Criteria addressed (list number and title):

Primary:		Secondary:	
A2	Design Thinking Skills	A1	Communication Skills
A5	Investigative Skills	C1	Collaboration
A11	Applied Research	C8	Ethics and Professional Judgment
B3	Sustainability	C9	Community and Social Responsibility
C2	Human Behavior		

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

Communication Skills	15%
Design Thinking Skills	25%
Applied Research / Investigation	30%
Sustainability	10%
Human Behavior	10%
Ethics and Professional Judgment	10%

Prerequisites:
Graduate standing; ARC 6514 Thesis 1 and ARC 5804 Critical Practice Studio

Textbooks/Learning Resources:
Texts are required or recommended at the discretion of the individual section instructor. Students are expected to develop a comprehensive bibliography of sources related to their selected thesis topic.

Offered (semester and year):
Spring semester, 2012 and 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Anirban Adhya – Spring 2013 (F/T)
Daniel Faoro – Spring 2013 (F/T)
Joongsub Kim – Spring 2012 (F/T)
Edward Orlowski – Spring 2012, 2013(F/T)
James Stevens – Spring 2013 (F/T)
Paul Wang – Spring 2013 (P/T)

ARC6833: Practice Portfolio (3 credits)

Course Description (limit 25 words): Students will critically review and document their graduate work as a reflection on theory and practice, including an academic statement defining professional trajectory.

Course Goals & Objectives (bulleted list):

- Reflection on graduate achievement
- Writing as reflective process
- Critical evaluation of work trends
- Curate / Position work within a professional practice trajectory
- Dissemination of work to a professional public at large

Student Performance Criterion/a addressed (list number and title):
Primary:
A.1 - Communication Skills
Secondary:
A.3 - Visual Communication Skills

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

Compilation	20%
Reflection	40%
Representation	20%
Dissemination	20%

Prerequisites:
ARC 5804, ARC 5814, ARC 5824,

Textbooks/Learning Resources:
Donald Schon, The Reflective Practitioner (paperback), Basic Books Press (Sept 23, 1984), ISBN-13: 978-0465068784

Offered (semester and year):
Summer 2012, Summer 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):
Summer 2013:

John Abela	- adjunct
Jason Colon	- adjunct
Andrew Daley	- adjunct
Mark Farlow	- adjunct
Aaron Jones	- adjunct
Juan Torres	- adjunct

Summer 2012:

John Abela	- adjunct
Mark Farlow	- adjunct
Aaron Jones	- adjunct
Martin Schwartz	- F/T
Juan Torres	- adjunct

ART 1113: Basic Design 1 (3 credits)

Course Description (limit 25 words): Observation, analysis, and application of visual imagery and the principles and elements of design to create two-dimensional compositions; visual/verbal design techniques; introduction to color theory.

Course Goals & Objectives (bulleted list):

- For each student to have the ability to employ the design process to solve design problems
- For each student to have the ability to recognize the theoretical aspects of color and realize the importance of color strategies in the field of design
- For each student to have the ability to effectively use the language of architecture
- For each student to have an understanding of the patterns observable in the natural world as well as the precedents found in designed environment
- For each student to have the ability to think critically and creatively about the world around them, and to articulate their ideas both verbally and visually

Student Performance Criterion/a addressed (list number and title):
A.8 Ordering Systems

Topical Outline (include percentage of time in course spent in each subject area):
Each subject area noted above consumes approximately 20% of the studio contact hours in the course. Students spend the majority of their time outside the studio solving, refining and executing solutions to design problems

Prerequisites: None

Textbooks/Learning Resources: No required texts. Suggested texts and focused lecture material used

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Steven Rost	F/T	Tom White	Adjunct
Keith Nagara	F/T	Rick Hall	Adjunct
		Libby Welch	Adjunct
Vance Hanna	Adjunct	Fernando Bales	Adjunct
Vicki DeLaura	Adjunct	Chris Schanck	Adjunct
Addie Langford	Adjunct		

ART 1133: Basic Design 2 (3 credits)

Course Description (limit 25 words): Observation, analysis, and application of visual imagery and the principles and elements of design to create three-dimensional compositions; visual/verbal design techniques; application of color theory.

Course Goals & Objectives (bulleted list):

- For each student to have the ability to employ the design process to solve design problems
- For each student to have the ability to apply the theoretical aspects of color to design problems and realize the importance of color strategies in the field of design
- For each student to have the ability to effectively use the language of architecture
- For each student to have an understanding of the patterns observable in the natural world as well as the precedents found in designed environment
- For each student to have the ability to think critically and creatively about the world around them, and to articulate their ideas both verbally and visually

Student Performance Criterion/a addressed (list number and title):
A.8 Ordering Systems

Topical Outline (include percentage of time in course spent in each subject area):
Each subject area noted above consumes approximately 20% of the studio contact hours in the course. Students spend the majority of their time outside the studio solving, refining and executing solutions to design problems

Prerequisites: ART 1113 Basic Design 1

Textbooks/Learning Resources: No required texts. Suggested texts and focused lecture material used

Offered (semester and year):
Fall 2011, Spring 2012, Fall 2012, Spring 2013

Faculty assigned (list all faculty assigned to teach the course during the two academic years prior to the visit and whether each was F/T, P/T, or adjunct):

Steven Rost	F/T		
Keith Nagara	F/T		
Tom Nashlen	F/T		
Vance Hanna	Adjunct	Rick Hall	Adjunct
Vicki DeLaura	Adjunct	Chris Schanck	Adjunct
Addie Langford	Adjunct		

2. Faculty Resumes (see *2009 Conditions,* Appendix 2 for format)

   The following are resumes of full-time CoAD faculty who teach in the M.Arch. program. Resumes for adjunct faculty will be included in the Team Room

Name: Glen S. LeRoy, FAIA, FAICP

Courses Taught (Two academic years prior to current visit):
ARC 4224, 4234, and 4624 – Allied Design (co-taught)
ARC 5882 – Environmental Graphics Design Studio (co-taught)
ARC 5732 – Real Estate Practice
ARC 3011, 3012, 3013, 3014 – Directed Studies

Educational Credentials:
B. Arch., Tulane University, 1973
M. Arch., University of Pennsylvania, 1976
M.C.P., University of Pennsylvania, 1976
M. Arch., Tulane University, 2003

Teaching and Academic Administrative Experience:
Teaching Assistant, Tulane University, 1972-1973
Assistant Professor/Associate Professor, Kansas City Program Director, University of Kansas, 1980-2001
Professor and Dean, Architecture and Design, Lawrence Technological University, 2005-Present

Professional Experience:
Principal, Gould Evans Associates, Kansas City, Missouri, 1990-2005
Principal, Glen LeRoy, AIA, AICP, Kansas City, Missouri, 1982-1983, 1984-1987, 2005-Present
Partner, LeRoy & Scott Associates, Kansas City, Missouri, 1987-1990
Principal Planner, HNTB Kansas City, Missouri, 1983-1984
Planner/Urban Designer, Design Build Architects, Lawrence, Kansas, 1980-1982
Project Architect, Marshall & Brown, Inc., Kansas City, Missouri/Overland Park, Kansas, 1979-1981
Project Architect, Abend Singleton Associates, Kansas City, Missouri/Westwood, Kansas, 1978-1979
Project Architect/Planner, Heery & Heery, Inc., Atlanta, Georgia, 1976-1978
Graduate Research Assistant, University of Pennsylvania, Philadelphia, Pennsylvania, 1974
Architectural Intern, Sidorowicz Architects-Engineers, Kansas City, Kansas, 1971-1975
Architectural Intern, August Perez and Associates, New Orleans, Louisiana, 1970

Licenses/Registration:
Licensed Architect – Georgia (since 1977)
Licensed Architect – Pennsylvania (since 1998)
Certified Planner – National AICP Certification (since 1984)
NCARB Certificate (since 1984)

Selected Publications and Recent Research:
"Urban Planning and Design," Section 14.2, *The Architects' Handbook of Professional Practice, 15th Edition,* John Wiley, publication anticipated by 2014.
"*Sustainability Education: Best Practices for the Academy,* Creator/Presenter, AIA National Conference, Denver, CO, June 20, 2013.
"*Topaz Medallion Symposium,"* Creator/Moderator, AIA National Conference, Denver, CO, June 22, 2013.
"Mid-Century Modern," Michigan Association of Planners, Southfield, MI, June 7, 2013.
"Economic Positioning of Michigan in an Era of Climate Change," ongoing research with multiple regional and national presentations annually since 2007

Selected Professional Memberships:
American Institute of Architects, National Board of Directors, 2010-13, AIA Fellow
American Planning Association/American Institute of Certified Planners, AICP Fellow
Center for Understanding the Built Environment, National Advisory Board
National Association of Minority Architects

Name: Amy Green Deines, Assoc. AIA, IIDA

Courses Taught (Two academic years prior to current visit):
ARC 4224, 4234 and 4634 – Allied Design – Multi-disciplinary
ART 3993, DetroitSHOP

Educational Credentials:
BFA, Design, Wayne State University
M. Arch., Cranbrook Academy of Art

Teaching Experience:
Lawrence Technological University | College of Architecture and Design, Chair, Art + Design Department, 2011
Berlin International Program | Lawrence Technological University, 2012
University of Detroit Mercy | School of Architecture, Tenured + Promoted, 2000 – 2011
Warsaw Polytechnic University, Department of Architecture, Warsaw Poland, Spring 2010
Cleveland Urban Design Center, Kent State University | CAED, Visiting Professor, Masters Studio 2007 + 2008 + 2009
Volterra, Italy | Detroit Exchange Program, Semester abroad with students of architecture. 2008
Lawrence Technological University - Department of Architecture, 1999 – 2000

Professional Experience:
Design Consultant, Rossetti Associate, 2013
IMX Cosmetics Custom Mixing Stations, R+D direction and re-launch of product 2013
Green + Deines Studio, Co-Founder, 2000 – 2009
Imx Cosmetics, Custom Lip Gloss + Nail Polish Machine + Environments, 2003-2007
Awake by Design, Partner, 2007 – Current
Rossetti Architects, Senior Designer, 2000 – 2001
Swanson Meads Architects, Intern Architect, 1998
JPRA Associates, Designer, 1995 – 1998
Peterhansrea Design, 1995

Licenses/Registration:
NCIDQ (since October 2010)

Selected Publications and Recent Research:
Dichotomy | Exchange, Spring 2011, Accepted Paper
The Plan Urban Development Journal, Editor and Contributor _ Milan | Detroit, December 2010 Published, Milan, Italy
ACSA Regional + Annual Conference. Proceedings, “Seeking the City,” 2008
ACSA Regional + Annual Conference. Proceedings, 2005 – 2008

Professional Memberships:
American Institute of Architects, Associate Member
National Organization of Minority Architects
International Interior Design Association
International Federation of Interior Architects

Name: Scott Gerald Shall, AIA

Courses Taught (Two academic years prior to current visit):
Spring 2013 ARC4224 Allied Design Studio: Sustainable Architecture

Educational Credentials:
FA01-SP02 Tulane Uuniversity, Master of Architecture II post-professional degree, 3.87 GPA
FA92-SP98 University of Cincinnati (UC), Bachelor of Architecture, 3.55 GPA

Teaching Experience:
FA12-present Chair + Associate Professor
Lawrence Technological University, Department of Architecture, College of Architecture and Design
FA07-SP12 Assistant Professor
Temple University, Department of Architecture, Tyler School of Art,
FA02-SP07 Assistant Professor
University Of Louisiana at Lafayette (ULL), School of Architecture & Design (SoAD).

Professional Experience:
FA05-present. Founding Director & President
International Design Clinic [IDC], www.internationaldesignclinic.org,
SU10+SU11 Lead Artist
Mural Corp, Mural Arts Program of Philadelphia, Philadelphia, PA,
SU97-present Principal
sgsa+d, llc [www.sgsad.com] Cincinnati, OH | Lafayette, LA | Philadelphia, PA,
SU98-SU01 Project Manager + Lead Architect
Bruce D. Robinson Architecture • Design, Cincinnati, OH,

Licenses/Registration: Commonwealth Of Pennsylvania

Selected Publications and Recent Research:
SP12 Nerche Ernest A. Lynton Award For the Scholarship Of Engagement, Finalist
FA12 Venice Biennale, US Pavilion, Venice, Italy. Exhibitor, Group Show.
SP11 "Research In Crisis: New Analytical Tools For The Humanitarian Architect" In *Considering Research: Proceedings of the ARCC Spring Research Conference*, edited by Philip Plowright and Bryce Gamper, 281-291. Detroit, Michigan: Lawrence Technological University, ISBN 978-1-257-32189-6.
FA09 "Respecting Service And Learning" In *Service Learning in Higher Education: National and International Connections*, edited by Phylis Lan Lin, Chapter 15. Indianapolis, Indiana: University of Indianapolis Press, 2010. ISBN 978-1-880938-77-5.
SP09 Review Of *Design Activism and Design Like You Give A Damn*, Journal of Architectural Education (JAE). *Volume 62, Issue 4* (May 2009): 132-4.
SP09 "Considered Building: Experimental Constructions in Mumbai", American Institute Of Architects (AIA), In *The AIA Report on University Research*, 5th ed., edited by Dr. George Elvin, 266- 291. New York: AIA Press, 2010.
SP08 "If You Could Change The World: Dreamers and Doers. Influence and Confluence. Together They've Transformed the Built Environment – and Even The Way We Think" "*Interior Design*, March 2008, 254-5.

Professional Memberships:
American Institute Of Architects (AIA)
SEED Network

Name: Martin Schwartz, AIA

Courses taught two academic years prior to current visit
Integrated Design Studios 1 and 2 , Advanced Design Studios 1 and 2
The lecture component of IDS 2

Educational Credentials
M. Arch., 1977
Graduate School of Architecture and Urban Planning, University of California, Los Angeles (UCLA)
B.A., with High Honors, 1973
Communications (Tutorial Department), University of California, Santa Barbara (UCSB)

Teaching Experience

Lawrence Technological University	2005 to present
Adjunct Professor, College Professor, Associate Professor	
Architect-in-Residence / Co-Guest Department Head	
Cranbook Academy of Art, Department of Architecture	2004 / fall
Adjunct Assistant Professor	1999-2000
Taubman College of Architecture and Urban Planning	
The University of Michigan	
Frederick Charles Baker Distinguished Professor in Lighting	1994 / spring
Department of Architecture, University of Oregon	
Willard A. Oberdick Fellow and Adjunct Assistant Professor	1991 - 1993
College of Architecture and Urban Planning, The University of Michigan	
Visiting Lecturer	1987 - 1988
School of Architecture, University of Plymouth (England, UK)	
Assistant Professor	1985 - 1990
School of Architecture, Mississippi State University	
Instructor	1982 - 1985
School of Architecture, Tulane University	

Licenses/Registration
Michigan, 1994: Registration Number 39318 (active)

Selected Publications and Recent Research
"Light Organizing" and "What We Talk About When We Talk About Darkness" Two lecture presentations at *Light and Dark*, The AIA Alaska 2012 Annual Convention Fairbanks, Alaska, November 16, 2012 and November 17, 2012
"Daylight and Meaning in the Architecture of Gunnar Birkerts" An article in *NYT Magazine*, Copenhagen: Louis Poulsen Co., online February 10, 2010, www.louispoulsen.com/enus/Downloads/Literature/AIA_CES%20Credit.aspx
"Architecture in the Light of Day" A blog on the influence of daylight on architecture with text and illustrations, an ongoing project started in August 2009; http://www.architectureinthelightofday.blogspot.com/
Gunnar Birkerts Metaphoric Modernist A book of essays and critical discussions of the architecture of the noted American-Latvian architect, Gunnar Birkerts, published by Edition Axel Menges (Stuttgart) July 2009 (with an introductory essay by Sven Birkerts)
"Inhabiting Light: Daylight in the Work of Jorn Utzon" An essay published in *NYT Magazine,* spring 2006, co-authored with Richard Weston (of The Welsh School of Architecture, Cardiff, Wales, UK)
"Light Organizing Architecture: Jorn Utzon's Bagsvaerd Church" An essay chapter published in the monograph, *Jorn Utzon Logbook, Volume II: Bagsvaerd Church,* Edition Blondal; Hellerup, Denmark: 2005

Professional Memberships
The American Institute of Architects

Name: Peter F.C. Beaugard, MFA

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

ART 4514 - Graphic Design Senior Thesis 1
ART 4524 - Graphic Design Senior Thesis 2
ART 4614 - Interaction Design Senior Thesis 1
ART 4624 - Interaction Design Senior Thesis 2
ART 4612 – Senior Seminar 1
ART 4622 – Senior Seminar 2
ART 3343 - New Media 1
ARC 4324 - Allied: Multidisciplinary Studio

Educational Credentials:

B.F.A, Maryland Institute College of Art, 2006
M.F.A., Cranbrook Academy of Art, 2008

Teaching Experience:

Adjunct Faculty, Lawrence Technological University, 2007-2008
Assistant Professor, Lawrence Technological University, 2008-Present
Lecturer in Art and Design, University of Michigan, 2010
Chair, Department of Art and Design, Lawrence Technological University, 2013-Present

Professional Experience:

Intern, Round Two Communications, Baltimore, MD, 2005-2006
Graphic Designer, White Associates, Birmingham, MI, 2006-2007
Graphic Designer, Creative Breakthroughs, Troy, MI, 2007-2008
Summer Associate, Fahrenheit 212, New York, NY, 2011
Innovation Consultant, Fahrenheit 212, New York, NY, 2012-2013

Licenses/Registration:

N/A

Selected Publications and Recent Research:

The Illusive Insight, TedXDetroit Detroit, MI, 2012
Designing for Asynchronous Learning Environments, Educational Technologist of Michigan Fall Conference, Flint, MI, 2011
Life after the Academy, Cranbrook Academy of Art, Bloomfield Hills, MI, 2011
Improving Graphic Design for Online Education, International Journal of Arts and Sciences, Toronto, Canada, 2010
Design and Entrepreneurship Studio: A Coleman Foundation Project, Self-Employment in the Arts Conference, Lisle, IL, 2010
Revisiting the Quality and Variety of Graphic Design in Online Education, Sloan-C International Conference for Online Education, Orlando, FL, 2010
Art and Design: Collapsing Boundaries, Explore Design, Toronto, Canada, 2009

Professional Memberships:

American Institute of Graphic Artists (AIGA) – Detroit Chapter

Name: Anirban Adhya, Ph.D. Assoc. AIA

Courses Taught (Two academic years prior to current visit):
ARC3117: Integrated Design Studio 3
ARC3126: Integrated Design Studio 4
ARC5013: Research Methods
ARC5682: History of Urban Form
ARC5752: Quantitative Methods in Urban Design
ARC5782: Urban Theory
ARC6514: Thesis 1
ARC6524: Thesis 2
ARC3012: Directed Study
ARC6883: Independent Study

Educational Credentials:
Ph.D. (Architectue), University of Michigan, 2008
M.Arch., University at Buffalo - SUNY, 2003
B.Arch., Bengal Engineering College - India, 2000

Teaching Experience:
Associate Professor, Lawrence Technological University, 2012-current
Assistant Professor, Lawrence Technological University, 2006-2012
Adjunct Professor, Architecture, Lawrence Technological University, 2004-2005
Guest Lecturer, Urban Design, University of Michigan, 2004, 2009

Professional Experience:
Urban Design Associate, Urban Design Project, University at Buffalo-SUNY, 2001-2003.
Architect, The Appropriate Alternative, Calcutta, India, 2000-2001.
Intern, Anjan Gupta Associates, Calcutta, India, 1999-2000.

Licenses/Registration:
Licensed architect: India, 2000-current

Selected Publications and Recent Research:
Stevens, J. & **Adhya, A.** (2013). The Interstitial Challenge: understanding manifestations of terrain vague through an inquiry into the social and environmental dilemmas of Detroit, USA and Clichy-sous-Bois, Paris, France. Baron, P. & Manuella, M. (Eds.). *Terrain Vague: The Interstitial as Site, Concept, Intervention*. New York: Routledge (Forthcoming in Spring 2013).

Adhya, A. (2013). From Crisis to Projects; a regional agenda for addressing foreclosures in shrinking first suburbs: Lessons from Warren, Michigan. *URBAN DESIGN International*, 18(1), pp. 43-60.

Adhya, A. (2012). Placemaking and Jacobs' Model of Skepticism. Hirt, S. with Zahm, D. (Eds.). *Urban Wisdom of Jane Jacobs*. New York: Routledge.

Stevens, J., Plowright, P., & **Adhya, A.** (2009). Rethinking Models of Architectural Research: we don't do objects. *ARCC Journal*, 6(2), pp. 25-32.

Adhya, A. (2008). Urban Design re-examined: urban vs. design. Roaf, S. & Bairstow, A. (Ed.). *The Oxford Conference: A Re-evaluating of Education in Architecture.* Oxford, UK: WIT Press.

Professional Memberships:
American Institute of Architects (AIA), Associate
Environmental Design Research Association (EDRA)
Association of Collegiate Schools of Architecture (ACSA)
Association of Collegiate Schools of Planning (ACSP)
Council of Architecture, India (CoA)

Name: Professor William S. Allen

Courses Taught (Two academic years prior to current visit):
Ids 1 Site Component
Ids 1 Site Global Lecture
Visual Communicatons 2
Allied Land Studio
Ecological Issues

Educational Credentials:
BLA, 1971 University of Michigan

Teaching Experience:
Lawrence Technological University, Southfield, Michigan, 1973 – present
Oakland Community College, Auburn Hills, Michigan, 2010 - present

Professional Experience:
Will Allen & Associates: Principal
Prote Allen: Partner
Prote Krause Allen: Partner
Prote Krause & Associates: Senior designer
Jerry Mays & Associates: draftsman

Licenses/Registration:
Registered landscape architect; Michigan, 1978 - present

Selected Publications and Recent Research: None

Professional Memberships: None

Name: Constance C. Bodurow, Assoc. AIA, AICP

Courses Taught (Two academic years prior to current visit):
ARC3117 - Integrated Design Studio 3
ARC3126 - Integrated Design Studio 4
ARC5824 - Advanced Design Studio 2: Transdisciplinary Urbanism
ARC5804 Critical Practice Studio [formerly Master Class]
ARC 5724/4224 - Urban Studio II/Allied Urban
ARC6514/6524- Thesis I/Thesis II
Electives:
ARC5693 - Sustainable Urbanism, ARC5742 - Urban Design Methods, ARC5912 - Principles and Practices of Urban Design, ARC5762 - Urban Design Policy and Implementation, ARC5822 - Visualization of Urban Density, ARC 6883 - Independent/Directed Study

Educational Credentials:
MS.Arch.S., M.C.P., Massachusetts Institute of Technology, Cambridge MA, 1991
BFA, Michigan State University, East Lansing MI, 1981

Teaching Experience:
Assistant Professor, University of Detroit Mercy School of Architecture, 2004-2007
Assistant Professor, Lawrence Technological University, 2007-2012
Associate Professor, Lawrence Technological University, 2013-Present

Professional Experience:
studio[Ci] @ Lawrence Technological University, Founding Director, 2008 – Present
DesignEquity Urban Design + Planning Detroit MI, Founding Principal, 2003-2008
MotorCities National Heritage Area Detroit MI, Founding Executive Director, 2000-2003
A Better City Boston MA, Manager of Urban Design and Planning, 1999-2000
Wallace Floyd Assoc., Inc. Boston, MA, Sr. Urban Designer, Central Artery/Tunnel Project, 1996-1999
Goody Clancy and Associates, Inc. Boston, MA, Urban Designer/Project Manager, 1994-1996
icon architecture, inc. [Lane Frenchman] Boston, MA, Urban Designer/Project Manager, 1990-1994

Licenses/Registration:
American Institute of Certified Planners, registration no. 10556

Selected Publications and Recent Research:
Generating sustainable urban form in Detroit. Design applications utilizing Geodesign methodologies, Revue Internationale de Géomatique 1260-5875 International Journal of Geomatics and Spatial Analysis, Geodesign: From theory to practice, *Guest editors* Stéphane Roche, Michael Goodchild, no. 2/2012 pp.185-222
The Next Generative Infrastructure for Detroit, Proceedings of the EAAE/ARCC International Conference on Architectural Research: Cities in Transformation, Milano, Italia 7-10 *June 2012*
studio[Ci] Vol. 1, Ford College Community Challenge [Ford C3], *Urban Evolution_Creating a Net Zero Energy Community, Design Work as of May 2012*, Lawrence Technological University, May, 2012, ISBN 978-1-62050-576-2
The Next Generative Infrastructure for Detroit, by studio[Ci], Proceedings of the American Collegiate Schools of Architecture, Digital Aptitudes, ACSA 100th Annual Meeting, Projects Presentation: Boston, MA, March 2012
Creating Regional Detroit's First Net Zero Energy Community, Proceedings of the Architectural Research Centers Consortium/ARCC 2011 Annual Conference: Considering Research, LTU, April 2011

Professional Memberships:
Association of Collegiate Schools of Architecture [ACSA]
American Institute of Architects + Local Components: Detroit|Michigan and Boston Society of Architects
American Planning Association + Michigan and Massachusetts Chapters

Name: Steve Coy

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

ART 3513 - Graphic Design 2
ART 3213 - Sculpture
ART 3613 – Imaging Studio 2
ART 2993 – Special Topics (Community Art Entrepreneurship)
ART 3043 - Video Imaging
ART 2993 – Detroit-Berlin Connection
ART 2993 – Special Topics (Art History-Berlin)
ART 3623 – Imaging Studio 3

Educational Credentials:
M.F.A University of Hawaii, 2007
B.F.A University of Michigan, 2001
University of Western Australia, 2000

Teaching Experience:
Lecturer, University of Michigan 2008-2011
Adjunct Professor, Lawrence Technological University 2011
Assistant Professor, Lawrence Technological University 2011-Present

Professional Experience:
Media Artist, Y-Arts, Boll Family YMCA, Detroit, MI 2009 – 2011
Media Production Instructor: River Rouge High School 2009 – 2011
Community outreach (Instructor): 2009 – 2011
Woodward Academy, *Documentary*
Hanley International, *Multimedia Collaborative*
Focus Hope, *Film program*
Assistant Director of Exhibitions, Work: Detroit Gallery, University of Michigan Detroit, MI 2007 - 2009
Interim Director of Exhibitions, Work: Detroit Gallery, University of Michigan Detroit, MI 2008

Licenses/Registration: N/A

Selected Publications and Recent Research:
Jonathan Ringen, “Why the Future is Detroit is your Future, Too,” Rolling Stone Magazine, September 27, 2012
“Fall Movies in Pictures,” The New York Times, September 9, 2012
David Denby, “Good Fights,” New Yorker, September 10, 2012
Richey Piiparinen, “The Rust Belt Aesthetic: Conflict and Creativity,” Huffington Post, June 19, 2012
NYLON Magazine
Sam Feeder, “Meet the Hygienic Dress League,” and “Corporate Update,” Culture POP, June 23 and July 25, 2012
Ben Fulton, “Sundance: Documenting the ’99 percent’,” Salt Lake Tribune, January 12, 2012

Professional Memberships: None

Name: Daniel L. Faoro, RA, AIA
Courses Taught (Two academic years prior to current visit):
ARC2514 - Structures 1
ARC 4224 – Allied Design Studio: Sustainable Architecture
ARC4543 - Structures 4
ARC5543- Advanced Structures
ARC 5824– Advanced Design Studio 2
ARC 6514 – Thesis 1
ARC 6524 – Thesis 2

Educational Credentials:
MAUD, Harvard University Graduate School of Design, 1983
B.Arch, University of Illinois at Chicago, 1981.
Unite Pedagogique et trios, Versailles, France Summer Semester, 1978.

Teaching Experience:
Associate Professor, Lawrence Technological University, 2000-present
Interim Architecture Department Chair, Lawrence Technological University, 2008-2012
Assistant Professor, North Dakota State Univ. Dept. of Architecture and Landscape Architecture, 1992-2000
Assistant Professor, University of Detroit School of Architecture, 1990-1991
Assistant Professor, Kansas State University Architecture Department, 1988-1989
Visiting Assistant Professor, Clemson University Planning Department, 1987

Professional Experience:
Historic Preservation Consultant, City of Hammond, Indiana, 1987
Wilson /Jenkins and Associates: Job Caption, Assistant Designer, and Project Designer, 1984-86
Skidmore, Owings and Merrill, Chicago, IL, Designer/Draftsman. 1981, 1983
Harry Weese and Associates, Chicago,IL , Summer Designer/Draftsman, 1980.
Perkins and Will Associates, Summer Intern 1979
Licenses/Registration: Licensed Architect, Illinois, (1998 to present).

Selected Publications and Recent Research:
The sustainable benefits of adaptive reuse and renovation, ASHRAE Detroit Area Conference SOS for the Environment paper selected and presented October 2012.

Sustainability considerations in structural system design and selection, International Conference on Structures and Architecture Conference, 01-06-2012. Conference July 24-26, 2013 in Portugal.

Established and Chaired the Affleck House 70th Anniversary Exhibit UTLC Gallery, 4-15-2011, and Committee;

Established and Coordinated the CoAD Master Practitioner Folio Series Publication and Exhibit 8/23-9/21- 2011.

Principal Investigator, Michigan *Architecture Foundation Evans Grant*, $7.500, June 1,

Professional Memberships:
American Institute of Architects Detroit Chapter; 2000 - to present
Association of Heating, Refrigeration and Air conditioning engineers, ASHRAE, (Associate member) 2006- to present.

Name: Jin Feng

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

ARC2126	Integrated Design Studio 2 (interior)
ARI4143	Interior Architecture 3
ARI5143	Lighting Design and Research
ARI3I14	nterior Architecture 1
ARI4113	History of Interiors and Furniture
ARI5622	Current Issues of Interior Design
ARI6514	Interior Design Thesis 1
ARI6524	Interior Design Thesis 2
ARI6113	Interior Design Thesis Praxis

Educational Credentials:

B.E. Arch	Tsinghua University, Beijing, 1983
M. Arch	University of California, Berkeley, 1986
D. Arch	University of Michigan, 1993

Teaching Experience:

Instructor in architecture, Tsinghua University, 1985-1985
Lecturer in interior design, Eastern Michigan University, 1992-1993
Assistant Professor in interior design, Indiana University, 1993-2000
Assistant Professor in interior design, Purdue University, 2000-2003
Associate Professor in interior design, Iowa State University, 2003-2006
Associate Professor in interior architecture, Lawrence Technological University, 2006 to date

Professional Experience:

Project architect, Tsinghua University Design Institute, 1983-1984
Design assistant, Facilities Planning and Design, University of Michigan, 1987-1992

Licenses/Registration:

Selected Publications and Recent Research:

Basic AutoCAD for Interior Designers Using AutoCAD 14 (Prentice Hall, 1999)
Basic AutoCAD for Interior Designers Using AutoCAD 2002 (Prentice Hall, 2002)
Basic AutoCAD for Interior Designers Using AutoCAD 2007 (Prentice Hall, 2007)
Earthwatch Institute Field Research Grant, “Chinese Village Tradition: the Village of Danjiashan.” 2005-2009
Journal article: “My Brother – the footprints of a peasant from mountain village to city.” *Urban Flux* (Beijing, China) vol. 23, Jan. 2012. Pp. 43-46.
Journal article: “Understanding of a New Dwelling Style as Fashion in Northern Shaanxi Province of China from Interpretation of a Wedding Rhyme,” *Urban Flux*, vol. 23, Jan. 2012. Pp 46-48.
Journal article: “Impact of Phenomenology, Hermeneutics, and Existentialism on Architectural Research,” *Urban Flux*, Vol.23, Jan. 2012, pp. 16-17.
Journal article: “Small Village – Micro-world of a Great Culture,” *Urban Flux*, Vol.23, Jan. 2012 (First author, coauthor: Dang Anrong, Jiang Lu, Liu Yanfeng), pp 9-12

Professional Memberships:
Interior Design Educators Council

Name: Dale Allen Gyure, PhD

Courses Taught (Two academic years prior to current visit):
ARC 3613: History of the Designed Environment I
ARC 3623: History of the Designed Environment II
ARC 4183: Twentieth Century Architecture & Theory
ARC 4173: Frank Lloyd Wright and His Times

Educational Credentials:
B.S. in Psychology, Ball State University, 1984
J.D., Indiana University, 1989
M.Arch.H., University of Virginia, 1997
Ph.D., University of Virginia, 2001

Teaching Experience:
Lawrence Technological University, College of Architecture and Design, 2001-present
Goucher College, Master's Program in Historic Preservation, 2000-present
University of Virginia, Continuing Education Program, 1988-89

Professional Experience:
Michigan State Historic Preservation Review Board, 2013-

Licenses/Registration:
None

Selected Publications and Recent Research:
"Out of Character: Florida Southern College After Wright," in Richard Longstreth, ed., *Additions, Subtractions, Adjacencies: The Challenges of Change to the Work of Frank Lloyd Wright* (University of Virginia Press – in press).

"A Lost Opportunity: Wright's Ill-Fated Music Building for Florida Southern College," *Frank Lloyd Wright Quarterly* (Winter 2013).

A History of Frank Lloyd Wright's Affleck House (Lawrence Tech University, 2013).

The Chicago Schoolhouse: High School Architecture and Educational Reform, 1856-2006 (The Center for American Places/University of Chicago Press, 2011).

Frank Lloyd Wright's Florida Southern College (University Press of Florida, 2010).

"The Heart of the University: A History of the Library as an Architectural Symbol of American Higher Education," *Winterthur Portfolio* 42 (Summer/Autumn 2008): 107-132.

"A 'Child World' and a 'People's Clubhouse'": School Architecture and the Work-Study-Play System in Gary, Indiana, 1907-1930," *Arris: Journal of the Southeast Chapter of the Society of Architectural Historians* 12 (2001): 74-91.

Professional Memberships:
Society of Architectural Historians (Board of Directors)
Frank Lloyd Wright Building Conservancy (Board of Directors)
College Art Association
Southeastern Society of Architectural Historians
Vernacular Architecture Forum

Name: Deirdre L. C. Hennebury

Courses Taught (Two academic years prior to current visit):
ARC 2117, Integrated Design Studio 1 (Theory)
ARC 5643, Design Theory
ARC 5882, Special Topics: Adaptive Reuse and Rehabilitation

Educational Credentials:
Bachelor of Arts & Sciences, Princeton University, 1995
Master of Architecture, Harvard University, 2000
Certificate in Museum Studies, University of Michigan, 2009
Master of Urban Planning, University of Michigan, 2011
PhD, Architecture, expected 2013

Teaching Experience:
Assistant Professor of Architecture, Lawrence Technological University, 2013-
Adjunct Faculty in Architecture, Lawrence Technological University, 2010-2013
Instructor in Museum Studies, University of Michigan, 2010
Lecturer in Architecture, University of Michigan, 2008
Instructor in Communication Studies, University of Michigan, 2007-2008
Instructor in Architecture, University of Michigan, 2004-2007
Career Discovery Studio Instructor, Harvard University, 1998
Teaching Assistant in Architecture, Harvard University, 1997

Selected Publications and Recent Research:

Curatorial
Michigan Modern: Design that Shaped America - Creating didactic materials including labels, text panels and informational booklet (opening June 2013 at Cranbrook Art Museum, developed by the Michigan State Historic Preservation Office and Cranbrook Art Museum)
Vision and Interpretation: Building Cranbrook, 1904-2012 - Curator (June 2012-March 2013 at Cranbrook Art Museum)

Talks
*Vision and Interpretation (*June 2012, Gallery Talk and Q&A session at Cranbrook Art Museum)
*Architecture and the Museum (*February 2013, February 2012 – Presentation for University of Michigan Museum Studies Proseminar)
Urban Reimagining and Cultural Development: The Cases of the Tate Museums in London, Liverpool, & St. Ives (April 2010 – Issues in Museum Studies Lecture, University of Michigan)
Expanding the Museum: UMMA's Frankel Wing and its Historical Context
(May 2009 – Doris Sloan Memorial Symposium lecture, University of Michigan Museum of Art)

Working Papers
George Gough Booth and Eliel Saarinen: building Cranbrook (Cranbrook Center for Collections and Research)
Culture in the service of renewal: Museum Architecture and Britain's Industrial Legacy (Museum Studies Program, University of Michigan)

Name: Ayodh Vasant Kamath

Courses Taught (Two academic years prior to current visit):
ARC 1430/2139 Visual Communication 3

Educational Credentials:
B.Arch., Sushant School of Art & Architecture, Indraprastha University, India, 2006
SMArchS. (Design Computation), Massachusetts Institute of Technology, 2009

Teaching Experience:
Visiting Faculty, Sushant School of Art & Architecture, Indraprastha University 2011-2012
Visiting Faculty, University School of Architecture & Planning, Indraprastha University 2012-2013
Assistant Professor of Digital Design & Fabrication Technologies, LTU, 2013 – Present

Professional Experience:
Intern, Sanjay Prakash & Associates, New Delhi 2005-2006
Architect, Kamath Design Studio, New Delhi 2006-2007
Designer, Ball-Nogues Studio, Los Angeles 2009-2011
Partner, Kamath Design Studio, New Delhi 2011-2013
Consulting Partner, Kamath Design Studio, New Delhi 2013 – Present

Licenses/Registration:
Licensed Architect – Member of the Council of Architecture, India (Since 2006)

Selected Publications and Recent Research:
"Digitally Designed Architectural Form Built Using Craft-Based Fabrication: Weaving a complex surface as a bamboo reticulated shell." Open Systems: Proceedings of the 18th International Conference on Computer-Aided Architectural Design Research in Asia (CAADRIA 2013), May 15, 2013

"Reinterpreting Tal Chappar." Interventions | Adaptive Reuse, Department of Interior Architecture, Rhode Island School of Design, Vol 3 April 2012 (Co-Author with Revathi Kamath, Ambika Kamath, and Maitri Dore)

Professional Memberships:
Member of the Council of Architecture, India

Name: Joongsub Kim, PhD, RA, AIA, AICP

Courses Taught:
Integrated Design Studio (architecture and urban design components, undergraduate)
Advanced Design Studio (graduate)
Allied Urban Design Studio (undergraduate)
Master of Architecture Thesis
Public Interest Design Practices and Research Workshop (graduate and undergraduate)
Comprehensive Urban Exam (graduate)
Environmental Psychology (undergraduate and graduate)
Research Methods in Architecture (graduate)
Current Issues in Urban Design (graduate)

Educational Credentials:
PhD in Architecture, University of Michigan, Ann Arbor
Master in City Planning and Master of Science in Architecture Studies, MIT, Cambridge, MA

Teaching Experience:
2000-present: **Associate Professor** (tenured in 2006), Lawrence Technological University

Professional Experience:
1992-1994 & 2002-present: Joongsub Kim, PhD, AIA, AICP, Architectural and Urban Design Consultant
1986-1991: Project Designer, Allen, Demurjian, Major, and Nitsch Inc., MA and RI, USA
1983-1984: Intern Architect, S. Y. Lee Inc., Lincoln, NE, USA
1980-1982: Architectural Designer, Hyundai Group Construction Co., Korea & Saudi Arabia

Licenses/Registration:
1994-present: Registered Architect, State of Massachusetts, License No. 9257
1999-present: Certified Planner, National Certification, No. 125194

Selected Publications and Recent Research:
2013: "Analysis of Smart City Models and the Four-foci Taxonomy for Smart City Design" *Proceedings of the 2013 Architectural Research Centers Consortium Conference (ARCC),* Charlotte, North Carolina.
2012: "How Design Review Staff Do Far More Than Regulate" *Urban Design International Journal*. v17-3
2012: "Assessing Contemporary Urbanisms in the Age of Shrinking Cities" *Proceedings of the 2012 Association of Collegiate Schools of Planning Annual Conference,* Cincinnati, Ohio.
2012: "Assessing Shrinking City Models: Focusing on Strategies for Citizen Participation," *Proceedings of the 2012 Environmental Design Research Association Annual Conference*, Seattle, Washington.
2011: "The Role of Urban Agriculture in the Design and Planning of Cities and Communities" *Proceedings of the 2011 Association of Collegiate Schools of Architecture National Conference*, Montreal, Canada.
2011-2012: NCARB National Grant Award for the Integration of Practice and Education in the Academy
2011: The inaugural Michael Brill Grant Award in Urban Communication and Environmental Design
2011: National and Community Service Learn and Serve America Grant Award
2009-2010: Community Foundation for Southeast Michigan Grant Award
2009: "Urban Design as a Catalyst for Advancing Architectural Education," *ARCC Journal*, v6-1.
2009: "Contemporary Urbanisms and Sustainable Urban Revitalization" *Proceedings of the International Conference on Green Tech, Eco Life & Sustainable Architecture for Cities of Tomorrow*, Korea.
2008: Graham Foundation Advanced Studies in the Fine Arts Research Grant Award
2007-2008: ACSA National Collaborative Practice Award Citation
2007: "Perceiving and Valuing Sense of Community in a New Urbanist Development: A Case Study of Kentlands" *Journal of Urban Design*, Vol. 12, No. 2, 203–230.

Professional Memberships:
2002-present: Member, American Institute of Architects
1999-present: Member, American Planning Association/American Institute of Certified Planners

Name: Gretchen Maricak

Courses Taught (Two academic years prior to current visit):
ARC1213 Visual Communication 1
ARC 1223 Visual Communication 2
ARC 2117 Integrated Design Studio 1
ARC 2126 Integrated Design Studio 2

Educational Credentials:
Eastern Michigan University, ABD, Department of Educational Leadership.
Dissertation Title: "How Architecture Students are Socialized into the Profession of Architecture"
Wayne State University, College of Fine, Performing & Communication Arts, M.A. (Drawing, Printmaking, Oil Painting), 1993.
Lawrence Technological University, College of Architecture, B.Arch., 1977.
Lawrence Technological University, College of Architecture, B.S. Arch., 1976.

Teaching Experience:
Lawrence Technological University
Associate Professor, 1994-present
Senior Lecturer, 1992-1994
Adjunct Professor, 1977-1992

Professional Experience:
Private Practice, Architectural Design, Illustration & Fine Art, 1995-present.
Ferrero/Maricak Architecture & Delineation, Ferndale, Michigan 1984-1995.
Minoru Yamasaki & Associates, Troy, Michigan 1982-1984.
Harvey Ferrero Architect, Ferndale, Michigan 1974-1982.

Licenses/Registration:
Licensed Architect, State of Michigan, 1986-present.

Selected Publications and Recent Research:
Dissertation in progress: "How Architecture Students are Socialized into the Profession of Architecture".
Article. "Shade & Shadow Theory and Construction". Colored Pencil Society of America Spring 2013 National Newsletter.
Paper Abstract Accepted. "Tactics for Architecture Students' Organizational Socialization:. Architectural Research Consortium Conference. 2011.
Four Square Exhibit. Studio Coutour, Detroit, Michigan. Architecture Faculty Exhibit, Lawrence Technological University. "4 Eco City Drawings". December 2012.
The Architectural Art of Gretchen Maricak. The Birmingham Historical Museum & Park. Salon retrospective of both fine art and architectural design. July 15-November 14, 2012.
The Arts & Crafts Period in Birmingham's Eco City Neighborhood. Birmingham Historical Museum & Park. Birmingham, MI. Restoration of five 1920's vernacular residences in Eco City through colored pencil renderings. July 15- November 14, 2012.
Our Town Exhibit. Birmingham Community House. City of Birmingham, MI. One drawing (#1) of 1920's vernacular residences in Eco City, Birmingham, MI. October, 2011.
Michigan Colored Pencil 2011. Lotus Art Gallery, Plymouth, Michigan. Two drawings (#2 & #3) of 1920's vernacular residences in Eco City, Birmingham, MI. September 2011.

Professional Memberships:
Member/Chapter Public Relations Director. Colored Pencil Society of America. National Organization and Local Chapter #104. 2011-present.

Name: Janice K. Means, PE, LEED AP

Courses Taught (Two academic years prior to current visit):
ARC 4423 Environmental System II (renamed ARC 3423 HVAC & Water Systems)
ARC 3993/CHM 3993 Junior Honors Project
ARC4224 Allied Design: Sustainable (as technical advisor)
ARC 5594 Sustainability Studio (co-taught)
ARC3013/ARC6882 (Direct. Study/Indep. Study) Energy Analysis of Elem. School/Solar Energy Semiotics
ARC 4993/ARC6002 (Directed Study/Independent Study) Affleck Applied Study
(coordinate ARC 3413 Environmental Systems I (renamed ARC 4443 Acoustics, Electricity & Illumination)

Educational Credentials:
B.A. Secondary Education Social Sciences (Sociology Concentration/Physics Minor), Oakland University, Rochester, MI, 1970
B.S. General Engineering, Oakland University, Rochester, MI, 1978
M.S.E. Mechanical Engineering, University of Michigan, 1991

Teaching Experience:
Math & Science Teacher for 7th & 8th grade, Mason Junior H.S., Waterford Sch. District 1940 - 1974
Lecturer in Architecture/ Continuing Education & Professional Development Adjunct Instructor, Lawrence Institute of Technology 1986 – 1995
Lecturer in Architecture, Lawrence Technological University 2003 – 2004
Assistant Professor, Lawrence Technological University, 2004 – 2009
Associate Professor, Lawrence Technological University, 2010 – Present

Professional Experience:
Senior Mechanical Engineer, Barton Malow Design 1997 – 2002
Owner, Consulting Engineer, Energy Technology Consultants 1983 – 2001
Project Engineer II, Johnson Controls, Inc. 1994 – 1996
Senior Codes & Standards Engineer/Staff Engineer/Technical Assistant 1977 - 1983

Licenses/Registration:
Registered Professional Engineer, State of Michigan (since 1984)
LEED Accredited Professional (since 2009)
Universal Refrigeration Service Certification (since 1994)

Selected Publications and Recent Research:
(1) Chapter 36, "Solar Energy Equipment", ASHRAE 2008 HVAC Systems and Equipment Handbook. One of three contributors to the revision

(2) "Interim Results of Monitoring and Simulating Two Existing, High Performance Buildings to Achieve and Maintain Sustainable Operation", co-authored with Jessica Turner, Ryan Grabow and Jonathan Cebelak , 2010 ASHRAE Annual Meeting Transactions, Volume 116, Part 2, 2010

(3) "Do High Performance-Labeled Buildings Really Perform at the Promised Levels?", co-authored with Filza H. Walters, CLIMA2010 Congress CD (ISBN 978-975-6907-14-6), R6-TS77-OP04r, May 2010

Professional Memberships:
American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)
Detroit Chapter of ASHRAE
Engineering Society of Detroit (ESD)
U.S. Green Building Council-Detroit Regional Chapter (USGBC-DRC)

Name: Thomas J. Nashlen, RA

Courses Taught (Two academic years prior to current visit):
ARC 4114 Architectural Design Studio 5
ART 1133 Basic Design 2

Educational Credentials:
B.S. Arch., Lawrence Institute of Technology, 1968

Teaching Experience:
Adjunct Professor of Architecture, Lawrence Institute of Technology, 1975 - 1979
Assistant Professor of Architecture, Lawrence Institute of Technology, 1979 - 1985
Associate Professor of Architecture, Lawrence Technological University, 1985 - present
Chair, Department of Architecture, Lawrence Technological University, 1995 - 1998
Senior Design Coordinator, Lawrence Technological University, 1992 to present

Professional Experience:
Consultant to AIA Huron Valley Architrave Publication., 2005 to 2010
Consultant on The Nomination of Highland Cemetery of Ypsilanti to the National Register of Historic Places., 2004 to present
Design Consultant - Vice President, Architects Plus, Inc., 1978-present
Vice President / Designer, Tkacz & Nashlen Associates, Inc., 1974-1976
Project Architect, Urban Planners, Inc., 1972-1974
Project Designer, KMM Associates, Inc., 1969-1972
Designer/Job Captain, DCS Architect, 1966-1969

Licenses/Registration:
Licensed Architect – Michigan (since 1972).

Selected Publications and Recent Research:
Paper accepted for an interdisciplinary conference at the University of Louisiana at the Norton Center for the Arts. “Reading Le Corbusier: Journey to the East”. 2011, *Nashlen/Martin*
Rochester Eccentric, “Architecture students take a crack at Legacy Project”, 2009
Sanilac County News, “Port Sanilac downtown gets a little help”, 2006
Times Herald, Port Huron, “Lawrence Tech students take on Port Sanilac site”, 2006
Author, *A Manual For Comprehensive Design*, Lawrence Technological University, 1987
Author, *A Manual For Understanding Color*, Lawrence Technological University, 1984
Computer Presentation for Eastern Michigan University, Interior Department, 2008
Developed and organized a project based on the “Legacy Center” in Rochester Hills, MI. The project’s premise is to bring together various factions of the arts and theatre in association with Oakland University in a major center to serve the surrounding communities. The project was coordinated with various professionals (city officials, planners and architects). 2008
Development and computer graphic imaging of a Ukrainian Holocaust Memorial. The Memorial was developed in association with Prof. Tom Regenbogen and has been erected in a public park in Windsor Ontario., 2010

Memberships:
Association of Collegiate Schools of Architecture
President’s Club, Lawrence Technological University
Neighborhood Improvement Association, Livonia, MI
Friends of the Wilson Farm Historic Society, Livonia, MI
Grosse Ile Historic Society, Grosse Ile, MI
Friends of the Detroit River, Grosse Ile, MI

Name: Ralph K. Nelson, AIA

Courses Taught (Two academic years prior to current visit):
ARC 5804 – Critical Practice Studio
ARC 5884 – Environmental Graphic Design Studio 1
ARI 5824– Advanced Interior Architecture Design Studio 2
ARC 5882 – Special Topics: Defining Digital Vernacular
EAE 4024 – Architectural Engineering Integrated Design Studio 3

Educational Credentials:
B.Arch., University of Minnesota, 1988
M. Arch., Yale University, 1991

Teaching Experience:
Lecturer, Boston Architectural Center, 1991-1992
Adjunct Assistant Professor, University of Minnesota, 1993 - 1997
Visiting Associate Professor, University of Cincinnati, 1998
Sue Fan Gooding Chair, University of Kentucky, 1999
Adjunct Professor, California College of Arts and Crafts, 2000
Associate Professor, University of Minnesota, 2000 – 2009
Assistant Dean and Director of Graduate Studies, Lawrence Technological University, 2010-2013
Associate Professor, Lawrence Technological University, 2010-Present

Professional Experience:
Principal, Loom Studio, St. Paul, MN and Ann Arbor, MI, 1993-Present
Architect, Edward Larrabee Barnes and Associates, NYC, NY, 1987-1989
Intern Architect, Steven Holl Architects, NYC, NY, 1986-1987

Licenses/Registration:
Licensed Architect – Minnesota (since 1989)

Selected Publications and Recent Research:
"Bricks and Balloons: Architecture in Comic-Strip Form".
Featuring the project "Willa's Wonderland", authored by Melanie Van Der Hoorn and published by NAI 010, 2012

"Rural Design; A New Design Discipline".
Featuring the project "Farm Logic: Sheep Barn", authored by Dewey Thorbeck and published by Routledge, 2012

"Emerging Voices 30: Form, Idea and Resonance in the Architectural League".
Featuring the work of Loom, edited by Anne Rieselbach and published by Princeton Architectural Press, Forthcoming Jan. 2014.

"Pixel Blocks".
Ongoing research and commercial production of an innovative line of concrete blocks, in collaboration with Angelus Block, Los Angeles, CA, 2011-Present.

"Digital Vernacular: Full-Scale Thinking and Making".
Authored by Ralph Nelson and James Stevens, featuring research on digital fabrication and vernacular architecture. Tendered offer to publish by Routledge.

Professional Memberships:
American Institute of Architects (AIA)
DOCOMOMO – Board Member, Minnesota Chapter

Name: Edward M. Orlowski, AIA; LEED AP; ADPSR

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

ARC 2117 – Integrated Design Studio 1
ARC 2126 – Integrated Design Studio 2
ARC 4224 – Allied Design Studio: Sustainable Architecture
ARC 5804 – Critical Practice Studio
ARC 5824– Advanced Design Studio 2: Activist Architecture and Design
ARC 6002 – Special Topics: Adapt, Reclaim, Reuse
ARC 6112 – Thesis Praxis
ARC 6514 – Thesis 1
ARC 6524 – Thesis 2

Educational Credentials:
B.S. Arch., Lawrence Institute of Technology, 1987
M. Arch., University of Michigan, 1991

Teaching Experience:
Lecturer in Architecture, Lawrence Technological University 1994 – 1999
Assistant Professor, Lawrence Technological University, 1999 - 2005
Chair, Department of Architecture Lawrence Technological University, 2004 - 2008
Associate Professor, Lawrence Technological University, 2005 – Present

Professional Experience:
Intern, Kirk & Koskela Architects, Detroit, MI, 1985 – 1989
Intern, Hobbs + Black Associates, Ann Arbor, MI, 1989 – 1991
Designer / Job Captain, Luckenbach | Ziegelman Architects, Birmingham, MI, 1992 – 1997
Senior Project Designer, SHG, Detroit, MI, 1997 – 1998
Associate, AGZ Architects, Southfield, MI, 1998 - 1999

Licenses/Registration:
Licensed Architect – Michigan (since 1996)

Selected Publications and Recent Research:
"Stop Asking Permission: Activist Architecture Students as Community Catalysts". Presentation as part of a panel discussion at the 2011 Association for Community Design Annual Meeting, Philadelphia, October 11, 2011.
Interviewed by Nicolas Jackson in the Atlantic online as part of the "9 ½ Questions" series: http://www.theatlantic.com/health/archive/2011/10/a-conversation-with-edward-orlowski-professor-of-architecture/247206/
"Bringing it all Back Home: Providing Design Aid in our own Backyard." Presented at the ACSA International Conference, Barcelona, Spain, June 21, 2012.
"House of Blues: The Shotgun and Scarcity Culture in the Mississippi Delta" in Reading The Architecture of The Underprivileged Classes*, edited by Nnamdi Elleh, phD. (Ashgate, date pending).*
Recipient: 2013-14 Coleman Fellowship

Professional Memberships:
American Institute of Architects (AIA) – Urban Priorities committee, Detroit
Architects / Designers / Planners for Social Responsibility (ADPSR)
Architecture for Humanity – Detroit Chapter
Association for Community Design
SEED Network
Society of Architectural Historians

Name: Philip D. Plowright, R.A., ASA, DRS

Courses Taught (Two academic years prior to current visit):
ARC6514 Graduate Thesis Chair I/II
ARC5992 Special Topics: Examining Metaphor – Theory and Methodology
ARC6103 MasterClass/Critical Practice Studio (Graduate)
ARC5643 Design Theory (Graduate)
ARC5016 Architectural Foundation Studio II (Graduate)
ARC4274 Allied Design: Theory/Competitions (Undergraduate)
ARC3126 Integrated Design Studio 4 (Undergraduate)

Educational Credentials:
Master of Architecture (M.Arch), University of British Columbia, Vancouver, B.C, Canada, 1997
Bachelor of Arts (Art History/Fine Art), University of Guelph, Guelph, Ontario, Canada, 1994

Teaching Experience:
Associate Professor of Architecture with Tenure, Lawrence Technological University, 2011-
Assistant Professor of Architecture, Lawrence Technological University, 2005-2011
Adjunct Professor, College of Arts and Science, Lawrence Technological University, 2005
Adjunct Professor, College of Architecture and Design, Lawrence Technological University, 2000-2005

Professional Experience:
Managing Editor, Enquiry/The ARCC Journal of Architectural Research, 2012 – present
Board of Directors, Architectural Research Centers Consortium, 2009 – present
Director, rlab.a (Research Lab, Architecture), 2006 - present
Architect, VanTine | Guthrie Studio / InForm Design, 2001 - 2005
Intern Architect, Gunn Levine Associates, 1999 - 2001
Graduate Architect, Gregory M. McLean Architect, 1998 - 1999
Intern Planner, Woodworth Consulting, 1995

Licenses/Registration:
Licensed Architect, Michigan (#1301051952)

Selected Publications and Recent Research:
Plowright, Philip. (2014). *Architectural Design Methodologies: Applying Thinking Frameworks to Practice Strategies*. London, Routledge.
Plowright, Philip (2013). "Agency and Personification: Core Analogical Operators in the Architectural Design Process". 2013 ARCC Conference on Architectural Research, UNCC March 27-30.
Plowright, Philip and Matthew Cole (2012). "Bringing Structure to Judging Success in Architectural Design: The TIOSE Qualitative Measure". *International Journal for Architectural Research*. Volume 6, Issue 3. Archnet-IJAR, Massachusetts Institute of Technology. 7-19.
Plowright, Philip and Dr. Anirban Adhya (2012). "Setting Priorities: Sustainability, Environmental Health, and Embedded Value Judgments for the Urban Design Process". EAAE/ARCC *International Conference on Architectural Research*, Politecnico di Milano, Italy. June 7-10.
Plowright, Philip, James Stevens, Dr. Anirban Adhya (synchRG) (2010) "A Study of Process in Design: Curatorship, cloud intelligence and applied research" *ARCC/EAAE 2010 International Conference on Architectural Research*, June 23-26.
Plowright, Philip (2010) "The Use of Philosophy" presented at the symposium "Straining Pulp Theory from Architecture Discourse, a symposium", The International Society for the Philosophy of Architecture and Newcastle University, Newcastle, England. June 14.

Professional Memberships:
American Society for Aesthetics (ASA)
Design Research Society (DRS)
International Society for the Philosophy of Architecture (ISpA)

Name: Ashraf F. Ragheb, PhD, AIA

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

ARC 2313 – Building Systems 1
ARC 2321 – Building Systems 2 Global
ARC 2323 – Building Systems 2
ARC 5592 – Sustainable Architecture and Building Systems
ARC 5882 – Special Topics: Computer Application in Bldg Technology
ARC 6883 – Independent Study

Educational Credentials:
B. Arch., Ain Shams University, Cairo, Egypt, 1991
M.S. Arch., University of Michigan, Ann Arbor, 2003
Ph.D. Arch., University of Michigan, Ann Arbor, 2010

Teaching Experience:
Lecturer in Architecture, Helwan University, Cairo, Egypt, 1997 – 2000
Lecturer in Arch & Technology, University of Michigan, Ann Arbor, 2004 - 2005
Assistant Professor, University of Wisconsin Milwaukee, 2005 - 2006
Assistant Professor, Lawrence Technological University, 2006 – 2011
Associate Professor, Lawrence Technological University, 2012 – Present

Professional Experience:
Architect, Dar El-Handasah Consultants, London, (partner in *Perkins & Will*, Chicago, USA), 1991 - 1993
Architect, Engineering Consultants Group (ECG), Cairo, 1993- 1995
Project Architect, MS Consultants - Architects, Planners, Engineers, Cairo, 1995 -1998
Project Architect, Planning and Urban Development "PUD" Consultants, Cairo, 1998 - 2000

Licenses/Registration:
Registered Architect, Registered Arch Engineer, Cairo, Egypt since 1992

Selected Publications and Recent Research:
Ragheb, A., "Metrics for Buildings or Building of Metrics:: A Comparison of Environmental Footprint of the Traditional vs. the Renewable Medical Offices ", Proceedings of SOLAR' 2013 Annual Conference, American Solar Energy Society ASES, Baltimore, MD, April 17-20, 2013.
Ragheb, A., "A Dimension to Sustainability: A Life Cycle Assessment Approach to Adapt Environmental Performance in Medical Offices", Proceedings of Architecture in the 4th Dimension Conference, Boston, MA, Nov. 15-17, 2011.
Ragheb, A., "From a Consumer Product to a Complex Building:: A Quantitative Approach to Sustainability Using Life Cycle Assessment LCA", Proceedings of ARCC' 11 annual conference 'Reflecting upon current themes in Architectural Research', Lawrence Tech University, Detroit, MI, April 20-24-2011.
Ragheb, A., "Closing the Implementation Gap: A Critical Model for Architectural Research", Proceedings of ARCC' 09 annual conference 'Leadership in Architectural Research: Between Academia and Profession', University of Texas, San Antonio, TX, April 15-18, 2009

Professional Memberships:
American Institute of Architects AIA
Society of Building Science Educators SBSE
Building Technology Educators' Society BTES
Habitat for Humanity – Oakland Chapter, MI
US Green Building Council USGBC
Egyptian Architects Association EAA
Egyptian Engineers Association EEA

Name: Steven Rost, MFA

Courses Taught (Two academic years prior to current visit):
ART 3013 Introduction to Photography
ART 1113 Basic Design 1
ART 1123 Basic Design 2
ART 4514 BFA Senior Thesis 1 (Graphic Design and Digital Arts)
ART 4514 BFA Senior Thesis 2 (Graphic Design and Digital Arts)
ART 4612 Senior Seminar 1 (Graphic Design and Digital Arts)
ART 4622 Senior Seminar 2 (Graphic Design and Digital Arts)
Paris Study Abroad program, China Study Abroad, Berlin Study Abroad

Educational Credentials:
BS Business Administration, major in Marketing-University of Denver, 1971-1975
Attended, Minneapolis College of Art and Design, 1978-1980
Parsons School of Art, 1979
MFA Cranbrook Academy of Art, 1980-1982

Teaching Experience:
Roeper School, 1981-1986
Teaching assistant-Cranbrook Academy of Art, Photography Department 1981-82
Adjunct faculty, Lawrence Institute of Technology, 1983-1986
Assistant Professor, Lawrence Institute of Technology, 1986-1996
Associate Professor, Lawrence Technological University 1996-2005
Director of Imaging programs 2009-12
Full Professor, Lawrence Technological University 2005-Present
Director of Fine Arts programs 2012-13

Selected Publications and Recent Research:
Marketing for Architects and Designers, co-author

Exhibitor, Image and Sense of City, ANTINER conference, Athens, Greece

Professional Memberships:
College Art Association (CAA)
National Association of Arts Administrators (NCAA)
American Association of University Professors (AAUP)
American Institute of Graphic Artists (AIGA)

Name: Gretchen Gillard Rudy

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

ARC 1021: Art & Design Awareness
ART 1133: Basic Design 2
ART 3633: Traditions of Art 1
ART 3643: Traditions of Art 2
ART 4113: Twentieth Century American Art
ART 4133: Paris: Revolution to Modernism
ART 3653: Twentieth Century Art

Educational Credentials:

B.A., Albion College
B.S.Arch, Lawrence Institute of Technology
B.Arch, Lawrence Institute of Technology
M.Arch, Lawrence Technological University
M.A. in Art History, Wayne State University

Teaching Experience:

Senior Lecturer, Lawrence Technological University, 1992 to present

Professional Experience:

Schervish Vogel Merz

Name: Douglas A. Skidmore, AIA

Courses Taught (Two academic years prior to current visit):
ARC 2126 – Integrated Design Studio 2
ARC 6002 – Special Topics: Architecture of the Organic
ARC 2117 – Integrated Design Studio 1
ARC 2126 – Integrated Design Studio 2
ARC 5824– Advanced Design Studio 2: Space Stuff

Educational Credentials:
B.Arch., University of Oregon, 1993
M. Arch., Cranbrook Academy of Art, 2012

Teaching Experience:
Adjunct Professor of Architecture, Lawrence Technological University 2011
College Professor of Architecture, Lawrence Technological University, 2012 - Present
Coordinator, Integrated Design 3, Lawrence Technological University, 2013 - Present

Professional Experience:
Partner, Beebe Skidmore Architects, Portland, OR and Detroit, MI, 2007 - Present
Senior Associate Architect, Allied Works Architecture, Portland, OR, 1996 - 2007
Project Architect, Gary Moye Architect, Eugene, OR, 1993 - 1996
Intern Architect, Tulio Inglese Architect, Amherst, MA, 1991

Licenses/Registration:
Licensed Architect – State of Washington 9517

Selected Publications and Recent Research:
Lawrence Technological University Faculty Seed Grant 2013 - Present
“Hybrid Spanning Panel: Assembly and Test”

“Prototype: Wilderness Cabin #1,”
New Constellations New Ecologies; Research and Design Projects Catalog for the 101st Annual Meeting of the Association of Collegiate Schools of Architecture Mitchell, Edward and Ila Berman, eds.
ACSA Press 2013 ISBN 978-0-935502-84-8

Paper and Panelist: “Design, Contained: SANAA v. Saarinen,”
“Identity” Symposium, Cranbrook Academy of Art, Bloomfield Hills MI 2010

“New Frontiers,” dwell Magazine and dwell.com, October 2012
Issue: Brilliant Design Across the USA
Project: Two Story Four Square, Boise, ID

“72 Hour Urban Action Stuttgart 2012 Competition Winners,” ArchDaily, August 21, 2012
Project: The Shortcut

Professional Memberships:
American Institute of Architects (AIA)
US Green Building Council

Name: James C. Stevens, AIA, NCARB

Courses Taught (Two academic years prior to current visit):
ARC 5824: Advanced Design Studio 2 (graduate)
ARC 5814: Advanced Design Studio 1 (graduate)
ARC 5882: Special Topics, Digital Vernacular
ARC 4882-2011: Applied Digital Fabrication & Enterprise
ARC 4882: Digital Fabrication (graduate)
ARC 4993: Digital Fabrication (undergraduate)
ARC 4264: Allied Studio, Paris
ARC 2117: Integrated Design Studio One
ARC 2126: Integrated Design Studio Two
ARC 5882: Special Topics: Defining Digital Vernacular

Educational Credentials:
Master of Architecture, North Carolina State University, College of Design, 2007
Bachelor of Fine Arts, Savannah College of Art and Design, 1994

Teaching Experience:
Assistant Professor Of Architecture, Tenure-Track, Lawrence Technological University, 2008 – Present
Visiting International Faculty Member, POLIS University, Tirana, Albania, 2011- Present
Teaching Assistant, North Carolina State University, College of Design, 2005 – 2007
Instructor Of Architecture, Coastal Carolina Community College, Department of Architecture Technology, 1995-1997

Professional Experience:
Quinn Evans Architects, Associate, Ann Arbor, Michigan, 2008
Vernacular Studio, Associate, Raleigh, North Carolina, 2007
Peterson, Eure And Associates, Principle / Vice President, New Bern, North Carolina, 2001-2007
Coastal Design Center, Principal / President, New Bern, North Carolina, 1995-2001
North Carolina Dept. Of Culture Resources, State Historic Preservation Office, Preservation Specialist, Asheville, North Carolina 1994-1995

Licenses/Registration:
Licensed Architect - Michigan Lic. # 59388
National Council of Architecture Registration Boards (NCARB) Certificate #75605

Selected Publications and Recent Research:
TERRAIN VAGUE (working title) Chapter: The Interstitial Challenge: understanding manifestations of terrain vague through an inquiry into the social and environmental dilemmas of Detroit, USA and Clichy-sous-Bois, Paris, France, Publishing Contract with Rutledge, anticipated in Fall 2013
Edited by: Patrick Barron & Manuela Mariani With Anirban Adhya, PhD

THE 3D TYPE BOOK, La Robia Featured, Edited by: Tomi Vollauschek & Agathe Jacquillat, ISBN: 9781856697132, April 2011

DESIGN AND CULTURE JOURNAL, Vol. 2, Issue 1, Page 81-94, Berg 2010, Printed in the UK.
Written by: Leslie Atzmon, Profile of digital fabrication work in the exhibit Dimensional, Topography, Chicago, 2008

Professional Memberships:
American Institute of Architects, Professional Member
Association of Collegiate Schools of Architecture
United States Fab Lab Network

Name: Karen P. Swanson, Registered Architect

Courses Taught (Two academic years prior to current visit):
ARC 2126 – Integrated Design Studio Interiors
ARI 3114 – Interior Architecture Studio 1
ARI 3124 – Interior Architecture Studio 2
ARI 5123 – Interior Architecture Grad Studio 2
ARI 5612 – Interior Design Issues
ARI 5814 – Advanced Interior Design Studio 1

Educational Credentials:
MArch, University of Illinois @ Chicago, 1988
BFA, University of Michigan School of Art, 1981 Interior Design/Photography

Teaching Experience:
College Professor, Lawrence Institute of Technology CoAD, Fall 2012 to Present
Adjunct Faculty, University of Detroit Mercy SOA, Masters Design Studio, 2007-2012
Adjunct Faculty, University of Detroit Mercy SOA, Undergraduate Design Studio, 1993, 1994

Professional Experience:
Rossetti Architects, Summer 2012
Principal, Swanson Meads Architects, 1998 - present
Principal, Swanson/Swanson Architects, 1993 - 1998
Luckenbach Zeigelman Architects, 1989 - 1993
Tigerman McCurry Architects, Chicago, 1988 - 1989
Environ Architects, Chicago, 1987-1988
Loebl Schlossman & Hackl Architects, Chicago, 1984 - 1987
Jordy & Company, Denver, 1982 - 1984
Troy Meinhardt & Associates, Denver, 1981 - 1982
Syd Harrison Architect, Denver, 1981 - 1982

Licenses/Registration:
Licensed Architect State of Michigan since 1992

Selected Publications and Recent Research:
Michigan Modern Contributor (current)
DIFFA: Installation w/LTU student participant, 2012
DIFFA: Installation participant, 2011
Detroit Make It Here, 2010
Detroit Home Awards, Swanson Meads Architects, Best Contemporary Design, 2008
Detroit Home Awards, Swanson Meads Architects, Best Overall Home, 2nd Place, 2008
Karmanos Charity Show house, Birmingham, 2008
GM Tech Center Article, Eero Saarinen Exhibition, 2007
Cranbrook Article, Crains Detroit Business, 2004
American Lung Association, Playhouse, 2006
AIA Detroit Design Retreat Participant, Piku Residence, 2003
Doolin Dental Building, People's Choice Award, 2002
HOUR Detroit, Piku Residence, 2002
AIA Detroit Guide to Detroit Architecture, 2003 Special Project Recognition
Contract Magazine, Neoglyphics, 1999
AIA Detroit Honor Award - Neoglyphics, 1998
AIA Detroit Honor Award - Sparky Herbert's Alley Dwelling and Catering Office, 1998

Professional Memberships:
Cranbrook Art Academy Board of Governors

3. *Visiting Team Report* (*VTR*) from the previous visit and *Focused Evaluation Team Reports* from any subsequent Focused Evaluations.

   In order to promote transparency in the process of accreditation in architectural education, LTU makes the most recent Visiting Team Report*, including attachments and addenda, available at the following website:*
   http://www.ltu.edu/architecture_and_design/accreditation.asp

4. Catalog (or URL for retrieving online catalogs and related materials)

   Lawrence Technological University no longer publishes printed course catalogs. Online catalog information can be found at the following websites:

   http://www.ltu.edu/academicsandmajors/undergrad_cat.asp

   http://www.ltu.edu/academicsandmajors/grad_cat.asp

5. Response to the Offsite Program Questionnaire (See *2010 Procedures,* Section 8)

   The following pages provide information on offsite and online programs which support the M.Arch degree:

Branch Campuses Questionnaire – The Detroit Studio
[NOTE: if the program uses more than one branch campus, additional site, teaching site, online learning, or study abroad program, please complete a questionnaire for each program.]

Name of Institution:		Lawrence Technological University College of Architecture and Design
Title of Degree:		Master of Architecture, Bachelor of Science in Architecture, Master of Urban Design, Master of Environmental Graphics (Note: students who have taken courses at the Detroit Studio in the past belong to one or more of these degree programs)
Name of Program Administrator:		Scott Shall, AIA, Architecture Department Chair
Name of Person Completing this Form:		Joongsub Kim, PhD, AIA, AICP, Associate Professor
Location of Branch Campus, Additional Site, Teaching Site, Online learning, or Study Abroad Program:		2990 West Grand Boulevard, Detroit, Michigan 48202
Distance from Main/Flagship Campus:		20 min. drive (approx.).
Number of Courses from Curriculum Leading to a NAAB-Accredited Degree Offered at this site		Five (5)
(List all courses: number, title, credits offered) [insert additional rows as necessary]		
Course Number	Credits offered	Course Title
ARC 3117 (ID3)	7	Integrated Design 3 Studio (junior)
ARC 3126 (ID4)	6	Integrated Design 4 Studio (junior)
ARC 4264	4	Allied Design: Urban (senior)
ARC 5714	4	Urban Studio 1 (graduate)
ARC 5724	4	Urban Studio 2 (graduate)
Is attendance at the branch campus, additional site, teaching site, study abroad or online program required for completion of the NAAB-accredited degree program?		Students have an option of taking the courses listed above at Detroit Studio or on main campus.
Who has administrative responsibility for the program at the branch campus?		Detroit Studio coordinator: Joongsub Kim, PhD, AIA, AICP, Associate Professor
To whom does this individual report?		Chair of the Architecture Department (Re: course offering) Associate Dean of the College of Architecture and Design (Re: facilities)
Where are financial decisions made?		Dean & Associate Dean of the College of Architecture and Design
Who has responsibility for hiring faculty?		Chair of the Architecture Department
Who has responsibility for rank,		Dean of the College of Architecture and Design &

tenure, and promotion of faculty at the branch campus?	Chair of the Architecture Department
Does the branch campus have its own curriculum committee?	No
Does the branch campus have its own admissions committee?	No
Does the branch campus have its own grievance committee?	No
Does the branch campus have its own resources for faculty research and scholarship?	No
Does the branch campus have its own AIAS or NOMAS chapter?	No
Does the branch campus maintain its own membership in ACSA?	No

Additional Comments:

The Detroit Studio is a community-based studio and an outreach program. The Detroit Studio projects focus on small communities that face brutal realities in the trenches of America's most challenging city. The Detroit Studio provides opportunities for design-based social learning that benefits professionals, architecture students, residents, and their children, educating them about the power of design and changing their world-views. The Detroit Studio works with "small heroes" and grassroots organizations. The mission of The Detroit Studio is educational: to provide students with an enriched educational experience through community-based architectural, urban design and community development projects; and to offer accessible and useful programs and information to the public, design profession, municipal officials and business community. The Detroit Studio is an off-campus studio facility founded in 1999 by the CoAD at LTU and located in the New Center area of Detroit. Its location in central Detroit creates a unique educational setting for students, and its long-term commitment to working with Detroit neighborhoods distinguishes it from the programs of other local universities. The Detroit Studio is committed to serving communities in Detroit, Wayne County and Southeastern Michigan as part of the mission of a local university through Service Learning projects that utilize interdisciplinary collaboration and teamwork to address real needs, problems and potentials. Projects undertaken at The Detroit Studio serve communities in areas of Urban Design, Planning, and Sustainable Community Development. It establishes partnerships with municipalities, design professionals, professional organizations, community organizations, business leaders, and local schools and universities. The Detroit Studio has collaborated with nearly 1900 participants and 120 organizations in 40 communities over 13 years, through more than 50 studios.

Branch Campuses Questionnaire – LTU Online

[NOTE: if the program uses more than one branch campus, additional site, teaching site, online learning, or study abroad program, please complete a questionnaire for each program.]

Name of Institution:		Lawrence Technological University
Title of Degree:		Master of Architecture
Name of Program Administrator:		Scott Shall, Chair, Department of Architecture
Name of Person Completing this Form:		Lynn Wietecha, Ph.D. eLearning Services
Location of Branch Campus, Additional Site, Teaching Site, Online learning, or Study Abroad Program:		Online
Distance from Main/Flagship Campus:		Online
Number of Courses from Curriculum Leading to a NAAB-Accredited Degree Offered at this site		19
(List all courses: number, title, credits offered) [insert additional rows as necessary]		
Course Number	Credits offered	Course Title
ARCH 5013	3	Research Methods
ARCH 5114	3	Comprehensive Design Studio
ARCH 5423	3	Ecological Issues
ARCH 5543	3	Advanced Structures
ARCH 5622	2	Current Issues in Architecture
ARCH 5643	3	Design Theory
ARCH 5682	2	History of Urban Form
ARCH 5742	2	Urban Design Methods
ARCH 5743	3	Current Issues in Urban Design
ARCH 5814	4	Advanced Design Studio 1
ARCH 5824	4	Advanced Design Studio 2
ARCH 5862	2	History of Urban Form
ARCH 5882	2	ST: Adaptive Reuse
ARCH 5913	3	Professional Practice
ARCH 5942	2	Project Management
ARCH 5952	2	Construction Management
ARCH 6732	2	Urban Comprehensive Exam
ARCH 6912	2	Practice Management
ARCH 6832	2	Advanced Design Studio Documentation
Is attendance at the branch campus, additional site, teaching site, study abroad or online program required for completion of the NAAB-accredited degree program?		No.

Who has administrative responsibility for the program at the branch campus?	Scott Shall, Chair, Department of Architecture
To whom does this individual report?	Dean, College of Architecture
Where are financial decisions made?	College of Architecture with input from eLearning Services and Provost office
Who has responsibility for hiring faculty?	Department of Architecture
Who has responsibility for rank, tenure, and promotion of faculty at the branch campus?	Department of Architecture
Does the branch campus have its own curriculum committee?	N/A
Does the branch campus have its own admissions committee?	N/A
Does the branch campus have its own grievance committee?	N/A
Does the branch campus have its own resources for faculty research and scholarship?	N/A
Does the branch campus have its own AIAS or NOMAS chapter?	N/A
Does the branch campus maintain its own membership in ACSA?	N/A

Additional Comments:

LTU Online programs are managed through LTU's eLearning Services Department. eLearning's role involves:

- Providing instructional designers to work with architecture faculty to develop courses for online delivery
- Providing technical support to both faculty and students
- Marketing online programs to interested students
- Identifying new strategies and technologies to enhance instruction
- Evaluate quality and suggest improvements in online courses

The College of Architecture maintains control and leadership of course content, faculty selection and scheduling of all Architecture courses.

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