Annual Report 2012
PART II: RESPONSES TO THE MOST RECENT VISITING TEAM REPORT

Name of institution:
Lawrence Technological University

Name of academic unit:
College of Architecture and Design

Name of program administrator as identified in Section A:
Glen LeRoy

Date of last accreditation/candidacy visit:
26 March 2008

NARRATIVE REPORT
Section 1.4 Conditions Not Met

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

Visiting Team’s Comments:
“Even though this criterion was introduced in the early design studios, the projects in ARC4114 Design Studio 5, and graduate level studios consistently lacked accessible parking spaces.”

Response:
Since receipt of the VTR, all students in ARC 4114-Design Studio 5 have been required to indicate accessible parking spaces on their drawings and to demonstrate the ability to develop site plans to accommodate movement of an individual with a disability from an accessible parking space to an accessible building entry and throughout a building. Samples of student work from ARC 4114 demonstrating response to criteria can be made available for NAAB review upon request. Upper division studio instructors have been asked to fully engage accessibility in the studio requirements through topics of content (i.e. veteran’s facility program) and/or representation (i.e. site plan with parking and entry).

13.34 Ethics and Professional Judgment
Understanding of the ethical issues involved in the formation of professional judgment in architectural design and practice

Visiting Team’s Comments:
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:
After receiving the VTR, a faculty committee was formed in 2009 and ethics in the curriculum was addressed, including benchmarking with a Florida A&M framework for ethics. The committee developed a proposal for a specific class in design ethics, along with ethics integration in existing courses and implementation of a six step process for better incorporation of ethics into the undergraduate and graduate curriculum.
In fall 2010 a committee of Professional Practice faculty, Graduate Studio Coordinator and Assistant Dean began meeting to assess Professional Practice 1 (ARC5912) and Professional Practice 2 (ARC5922) for spring 2011, to fully integrate ethics. Beginning in fall 2011 lectures in Professional Practice 1 included an additional lecture/unit on ethics and a specific assignment measuring student understanding.

In spring 2011 full faculty met and 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. It was determined that integration would be implemented in 2011-2012. As of spring 2011 upper division design studios began addressing ethics in process, content and outcome.

In April 2012 the graduate faculty coordinators voted to adopt a new upper division M.Arch curriculum which included the revision of content, including ethics, for the required course ARC 5913 Professional Practice. In this course, lectures, case studies, and readings include ethics content and test questions measure student understanding of the ethics content presented. This evidence is being compiled for the 2014 NAAB accreditation visit to LTU.

Course to contain specific ethics content in the context of professional practice.

ARC 5913 Professional Practice

Other courses in the required curriculum are noted to have the presence of ethics content, which is being more clearly articulated:

ARC 2117 Integrated Design Studios 1 and 2
   (Theory Global and Site Global Lectures)
ARC 3126 Integrated Design Studios 3 and 4
   (Urban Global and Landscape Global Lectures)
LDR 2001 Leadership Models & Practices
ARC 5423 Ecological Issues
   (Ecological stewardship and sensitivity)
ARC 5643 Design Theory
   (Philosophical ethics, social equality and aesthetics)

Section 1.5 Causes of Concern

Growth of Student Body Beyond Facility Capacity

Visiting Team’s Comments:
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:
Due to the economic recession in 2008-12, enrollment in the College of Architecture and Design has decreased in both student headcount and credit hours from the last VTR and from the 2011 Annual Report. All studio students currently have ample dedicated studio space.

Anticipating an economic rebound at some time in the future, the College of Architecture and Design has undertaken several measures to assure adequate space in the future:

1. The College has adopted the highest grade point average for admission to the University, resulting in the highest average GPA for admission to all colleges. This action was initially
taken to raise the academic quality level of entering students, but it has also slightly lowered the number of students entering the architectural programs.

2. The College has adopted a preferred enrollment pattern that emphasizes growing upper division entry and enrollment and stabilizing lower division entry and enrollment. Upper division enrollment is also less space intensive, because fewer studios are required at that level of study in the program.

3. The College continues to embark upon a number of transfer agreements with area community colleges, who teach the first two years of the architectural curriculum. This has led to fewer students in the College during the first two years of the curriculum and, thus, less studio space utilized. The College is also monitoring those programs and obtaining information and data on curriculum course compatibility for transferable courses. The goal is to implement portfolio review for all transfer students and to assure that all incoming transfer students have met standards for Visual Communication, Basic Design and Integrated Design Studio 1 and 2.

4. The College has leased additional studio space in Detroit (several miles from the main campus in Southfield, MI), increasing capacity for urban design and inter-disciplinary studios and reducing the studio need on the main campus.

5. The College has developed two under-utilized general classroom spaces in the architecture building into additional studio space.

**History Sequence**

**Visiting Team’s Comments:**
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, prevents 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:**
Since the last NAAB accreditation visit, much progress has been made in the undergraduate history sequence, which is the subject of this cause for concern. The number of architectural history sections offered has been increased. Class sizes have been reduced from “approaching 95” for a single section to an average of 40 per section for two sections. The College has also added a summer semester section for History courses, to allow more flexibility for students and reduce the number of students in sections. This has been accomplished by both shifting the teaching load of history faculty members and retaining adjunct faculty to teach history. Qualified adjunct faculty members exist to teach architectural history in the Detroit/Ann Arbor/Michigan region. Additionally, an adjunct grader (with PhD in history) has been retained, thus, relieving some of the grading burden for classroom teachers. This has
allowed for the incorporation of more essay assignments and test questions in architectural history courses.

In spring 2011 the faculty voted to adopt 20th Century Architecture (ARC 4183) as a required course in the professional degree curriculum. This course was viewed as critical and more historically accessible for all students, with more rigorous focus on canons of history in both western and non-western traditions. The course also allows for more rigorous writing assignments. Each section is capped at a maximum of 20 students.

The required course in Design Theory (ARC 5633) was updated in fall 2011 and includes rigorous reading, essay tests, research papers and focused group discussion. The course fully engages a variety of viewpoints and traditions in architectural and design theory. Each section is capped at 15 students.

In the fall of 2012 a new History/Theory faculty search was announced nationally, and a full-time faculty member is anticipated to be secured for the 2012/2013 academic year.

Human Resources

Visiting Team’s Comments:
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:
As of fall semester 2012 the Department of Architecture has 647 students. A total of 447 lower division students are overseen by the Department Chair and 200 are upper division students overseen by the Director of Graduate Studies.

The College conducted a national search for a new Chair for the Department of Architecture and identified Scott Shall, who was hired and started in his new position in July 2012. Upon filling this line, an Associate Chair position is now under more focused consideration, though a hiring freeze is currently in place at the University for all programs, with the exception of important accreditation needs.

The new Chair is a member of a College’s administrative group consisting of the Dean, Assistant Dean and Director of Graduate Studies, Chair of Art and Design, and an Administrator and Assistant Administrator of Student Services, as well as administrative support staff. This group is working as a team to support the policies, academics, and activities of the College.

Advising

Visiting Team’s Comments:
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:
Since the fall of 2009 the College has closely monitored advising. During the most recent advising period of fall 2011, 91% of all architecture students had been advised on time in meetings with an advisor. No later than December 14, 2011 the remaining students will be advised. The advising system and list of advisors for all students is posted throughout the architecture buildings prior to “advising week” at the College and also posted online. Students are required to see their advisor each semester.
Students are now assigned the same advisor from year to year whenever possible, and in cases of sabbatical or leave, the Student Services Administrator advises them. Quality of student advising is a criterion for a faculty member’s annual review. Since the last accreditation visit, advising ratios have been lowered (fewer students per advisor). This has been accomplished, in part, by retaining some members of the adjunct faculty as adjunct advisors.

Several groups of students have been assigned specific advisors as follows: The Dean or Assistant Dean advise all students who are on academic probation or who have an unusually high number of withdrawals from courses. All transfer students from Chinese schools are advised by one or more faculty members fluent in Chinese language and culture. All students in the dual BArch-Civil Engineering degree program are advised by the same faculty member. These, along with several other specialty advising assignments, have been created to deliver high quality advising to students with particular needs.

To address the advising needs of transfer students, the College is now more pro-active in meeting with prospective students, communicating the transfer procedures, clarifying course equivalencies or deficiencies, and identifying appropriate College faculty for advising this student group.

In the fall of 2012 the University created a new position; University Director of Advising. The current Director is now working with all Colleges to implement sound advising practices.

For career advising, students may choose to make an appointment with their assigned advisor. They may also seek advice from their studio instructor, any other faculty member, the University’s career services office, or College’s student services office. Additionally, each student may voluntarily request the assignment of a professional “mentor,” as a result of a cooperative program with AIA Michigan. Special workshops and seminars have been formulated to promote career mentorship and positioning for students in association with the AIA, AIAS, and the University’s office of career services.

Writing Skills

Visiting Team’s Comments:
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:
On February 2, 2009, the College of Architecture and Design’s Faculty Council authorized the establishment of an ad hoc Writing Committee to develop recommendations for incorporating writing assignments and reinforcing writing skills in the College curriculum and to carry out policies established by the University, the College, and the NAAB Visiting Team, subsequent to the accreditation visit in the spring of 2008.

The Writing Committee has met on several occasions since 2009, most recently in October 2011. The committee continues to define, support and implement the following principles and conditions:

The faculty of the College of Architecture and Design (CoAD) believes that written and verbal competencies are essential intellectual and professional skills, that competent written communication is an exercise in, and a reflection of, clear thinking, and that coursework must reinforce these skills. In view of this commitment, the following is being pursued:

*Writing in Architecture and Design Courses*

The CoAD will reinforce the importance of writing skills in all appropriate courses and in all assignments that consist of or contain written material. This includes short or extended essays, as well as writing within assignments that are primarily graphic in nature.

*The Assessment of Writing Proficiency*

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 to be required in the presentation of all writing, including assignments that are primarily graphic. Deficient writing is identified and students are referred to the Academic Achievement Center for help. Instructors are asked to retain examples of writing for the assessment of the progress of students over the course of time.

*Core Curriculum Courses (required non-architectural courses)*

Efforts to enhance and improve core courses will be encouraged so that writing and reading skills may be taught more effectively to students in the College of Architecture and Design. CoAD faculty support these improvement efforts.

*Writing Instruction in the University Curriculum*

Remedial writing courses should be created in accordance with the University’s Foundations of Excellence newsletter recommendation (March, 2009) for those students who lack writing skills after completing required coursework in this area (seven courses and the proficiency exam).

*University Support for Writing Proficiency*

The University has provided funding for additional writing skills instructors/tutors, so that writing assignments can be expanded and properly assessed in history and theory courses. 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), whose work and commitment the College supports. The effectiveness of the AAC and the Writing Proficiency Exam should continue to be assessed at the University level.

*Library Support for Research Skills*

CoAD faculty are advised of existing opportunities for research instruction at the University library. Qualified librarians are available to teach students (and faculty) the proper use of library resources, including the use of search tools and databases, research and bibliographic aids, handbooks, and codes. These skills are required for students engaged in precedent research, case studies, and other project work. CoAD faculty members are given instruction in the use of “Safe Assignment” (plagiarism detection tools available on BlackBoard) or other similar tools.
Publication of Standards for Good Writing
The CoAD incorporates information about University and Library resources and specific standards for writing skills into all course syllabi, course descriptions, or other introductory course documents rather than simply referencing them. Writing standards include the "Banned Errors List" and the "List of Common Small Mistakes."

Grading Written Work
CoAD faculty will assess written communication, just as graphic communication is currently assessed; poor written communication should be reflected in lower grades.

Adjunct Faculty Support
CoAD adjunct faculty members are informed by the faculty’s subject area coordinators of the College’s standards and the University’s support resources. All faculty members are required to support the writing initiatives in their courses.

How and Where Writing is Taught
Students enrolled in the architecture program are required to take the following Humanities Core courses whose content includes the development of writing skills:

- COM1001  University Seminar
- COM1103  English Composition
- COM2103  Technical and Professional Communication
- LLT1213  World Masterpieces 1
- LLT1223  World Masterpieces 2
- SSC2413  Foundations of American Experience
- SSC2423  Development of American Experience

All of these required courses above have writing components and address skills development for both reading and writing at the university level.

University Seminar (COM1001) requires that students complete ten journal entries and write a final paper on a specified topic. Hence, students have an opportunity in the early weeks of their initial semester to either review and/or hone writing skills learned in high school or at other post-secondary institutions.

English Composition (COM1103) demands three essays (700-1000 words), a research paper (1500-2500 words), mid-term exams, and final exams. In addition, there is an assignment for an annotated bibliography and for a research presentation. This includes meeting in the main library for bibliographic instruction. The course explicitly covers the following types of writing: analysis, explication techniques, comparison and contrast, writing articles about stories, persuasive writing and research.

Technical and Professional Communication (COM2103) teaches clear, persuasive communication. Speaking, writing, and research skills are polished, and group projects develop teamwork. Computer graphics and visual communication are also emphasized.

World Masterpieces 1 (LLT1213) and World Masterpieces 2 (LLT1223). The writing components in these courses include weekly paragraph assignments ("like a journal," said one student) with highly detailed structural requirements (i.e. the paragraphs must “be at least five sentences long, have a clear topic sentence, include only sentences developing that topic sentence, etc.). In addition, there are three term paper assignments. The course syllabi also contain an "essay outline" that clearly demonstrates and explains the components of a university-level essay (Introduction, Body, Conclusion, Sources). Additionally, according to the course syllabi, the following writing errors are demonstrated, explained, and banned from assignments: fragments, comma splices, subject-verb disagreement, incorrect pronoun usage, and common contraction errors (i.e. its and it’s). Both courses also have written mid-term and final exams.
The American Experience courses (SSC2413 and SSC2423) demand essay papers (two in 2413; three in 2423 consisting of four pages in each); both courses have mid-term and final-term exams. Additionally, SSC2423 requires reading and writing assessments (six to eight), including in-class quizzes on reading and writing exercises and peer editing of paper drafts. These courses present challenging philosophical reading materials and expect students to be able to write in explanatory and persuasive fashions, utilizing arguments and proofs.

**Practice Portfolio (ARC 6833)**
This required course (launched in Summer 2012) requires students to write five reflective essays on their learning experience in five courses in the upper division M.Arch curriculum, including three studios. They must also write reflectively on their academic experience as it defines a trajectory into practice. The required writing (along with graphic images) is a minimum of 3000 words. The portfolio (writing/graphics) created by students, in both web and print form, is a clear summary of their experiences and capabilities as demonstrated by their performance in the M.Arch program and their emerging practice profile.

**Writing Resources at Lawrence Technological University and the College of Architecture and Design**
The Main Library keeps an extensive supply of style guides and writing handbooks in both the Reference section and the stacks.

**Writing in Architectural Design Studio Courses**
Types of assignments and subjects for writing assignments include:

- Case studies, building types studies, or precedent studies
- Programming studies
- Design brief or program documents
- Design concept, ethics, or strategy statements that accompany design presentations
- Materials or other technical/design related research assignments
- Business plans and business communications exercises
- Writing in presentation materials, on boards or in digital presentation formats

Explaining design intentions in an ordered written or spoken argument is good practice and good training for clarifying one’s ideas. Therefore, the goals for writing assignments in architectural design courses are: (1) the reinforcement of the notion that verbal and written communications skills are essential to the development of clear thinking; and (2) that they are required for educational and professional competence. The primary objective of writing in the studio is the reinforcement and application of writing skills gained in other courses.

It is expected that most studio writing assignments will be brief, often appearing as material within graphic presentations. However, the assignment of essays is also highly encouraged.

**Building, Environmental Systems Design, and Other Technical Courses**
Types of assignments and subjects for writing assignments in technical courses include: case studies or precedent studies; evaluations or assessments of technical systems in the work of exemplary architects; materials or other technical and design related research assignments; analytical reports of building mechanical systems with recommendations for sustainable improvements; and building systems narratives or other materials that accompany students’ graphic assignments.

The goals for writing assignments in technical courses are to reinforce the notion that verbal and written communications skills are essential to the development of clear technical and design thinking and that these skills are required for educational and professional success. Explaining
design intentions in an ordered written or spoken argument is good practice and good training for clarifying and articulating technical design ideas.

Short essays are assigned; one or two written pages or about 500 to 750 words is the recommended length.

History and Theory Courses
Suggested types of assignments and subjects for writing assignments include formal analyses, comparison and contrast papers, position papers, analytical evaluations, and research papers. The required course entitled Twentieth Century Architecture (ARC 4183) now addresses these written modes of outcome.

Assessment of Writing Proficiency
Writing is assessed for content, clarity, and mechanics by the course instructor, and students are asked to make corrections as appropriate. Accuracy in spelling, grammar, syntax, and format is specifically encouraged and required. Deficient writing is identified, and students are referred to the Academic Achievement Center for help.
Changes to the program that may be of interest to subsequent visiting teams or to the NAAB

During the last NAAB accreditation visit in 2008, the College had the following two accredited programs:
1. A 36 credit hour Master of Architecture program for students possessing a BS Architecture from Lawrence Technological University (applicants from other BS Arch programs may have required additional credit hours, depending on equivalency standards and review).
2. A 105 credit “4+3” Master of Architecture program for incoming students with a degree in a non-architectural discipline.

Since 2008 a number of changes to the program have been implemented and are outlined below:

Outline of Changes to the Program
1. 2009 implementation of the 89 credit Master of Architecture (3+) program track.
2. 2010 evolution of online course offerings in the Master of Architecture program.
4. 2011 adoption of the 168 credit Master of Architecture program.
5. 2012 adoption of a revised 36 credit upper division Master of Architecture curriculum.

1. 2011 adoption of the 168 credit Master of Architecture program.

Program Summary
In the spring of 2011 the College faculty voted to approve a Master of Architecture degree program consisting of 168 credits. This is now the program defined for NAAB accreditation review. This program consists of a minimum of 132 lower division credits and a minimum of 36 upper division credits.

The Master of Architecture program is built on a foundation of sustainability in practice and combines a core of general studies with professional and inter-disciplinary studies. The goal is to clearly define a program that reflects contemporary society and current best-practices in the discipline. The program is designed to evolve over time, in sync with society and practice. The adoption of a 168 credit Master of Architecture program was motivated by several factors; two of which were most significant. The primary motivation was to provide a continuity of experience for the majority of students (including continuation of LTU scholarship and participation in the laptop computer program). Also of great importance was to define a single architecture program, with multiple points of entry for students of all backgrounds and experiences, in order to provide maximum ease of access for all motivated students.

Points of Entry
There are four main entry points for the Master of Architecture degree program. The first point is for freshman or FDIAC entry (0 to 29 credits in college). The second entry point is for transfer students or articulation transfer students (30 to 119 credits in college). The third entry point is for students holding a B.A. or B.S. degree in a non-architecture discipline (120 credits minimum and college degree received). The fourth point of entry is for students holding a B.S. Arch (132 credits minimum and B.S. Arch degree received).

Direct Entry M.Arch clarification, B.S. Arch Clarification and Exit Options
Students successfully completing the 132 lower division credits move to the upper division 36 credits and if successfully completed, petition to receive the Master of Architecture degree; they do not receive a Bachelor of Science in Architecture degree.
After successfully completing the required 132 lower division credits, a student may petition to receive the B.S. Architecture degree and complete their education or pursue graduate studies at another institution.
If students complete 132 credits and their lower-division grade point average (3.0 minimum) does not allow them to continue into the upper division coursework, they may petition for the B.S. Arch degree.
If a student completes 168 credits and their upper-division grade point average (3.0 minimum) does not allow them to receive the M.Arch., they may petition for the B.S. Arch degree.
# Master of Architecture Program Curriculum (168 credits as of April 2012)

## Lower Division (132 credits)

### Semester 1
- **Basic Design 1** ART1113
- **Visual Communications 1** ARC1213
- **Art and Design Awareness** ARC1012
- **English Composition** COM1103
- **Math Analysis 1** MCS1214
- **University Seminar** COM1003

### Semester 2
- **Basic Design 2** ART1133
- **Visual Communications 2** ARC1223
- **World Masterpieces 1** ARC1213
- **Tech. and Prof. Composition** COM2103
- **Math Analysis 2** MCS1224

### Semester 3
- **Integrated Design Studio 1** ARC2117
- **Electronic Methods 1** ARC2813
- **World Masterpieces 2** LLT1223
- **History/Designed Environment 1** ARC3613
- **College Physics 1** PHY2213
- **College Physics 1 Lab** PHY2221

### Semester 4
- **Integrated Design Studio 2** ARC2126
- **Leadership Models and Practice** LDR2001
- **Foundation American Experience** SSC2413
- **College Physics 2** PHY2223
- **College Physics 2 Lab** PHY2231

### Semester 5
- **Integrated Design Studio 3** ARC3117
- **Writing Proficiency Exam** COM3000
- **Development American Experience** SSC2423
- **Building Systems 1** ARC5033
- **Structures 1** ARC2514

### Semester 6
- **Integrated Design Studio 4** ARC3126
- **Environmental Systems 1** ARC3413
- **Building Systems 2 Global** ARC2321
- **Building Systems 2** ARC2323
- **Structures 2** ARC3523

### Semester 7
- **Architectural Design Studio 5** ARC4114
- **Environmental Systems 2** ARC4423
- **Leadership Capstone** LDR4000
- **Twentieth Century Arch.** ARC4183
- **Structures 3** ARC4533
- **Elective ARC/ART/ARI** ARXxxx2

### Semester 8
- ** Allied Design Studio** ARC4xx4
- **Elective ARC/ART/ARI** ARXxxx3
- **Elective LLT/SSC/PSY** XXXxxx3
- **Structures 4** ARC4543

## Upper Division (36 credits)

### Semester 9 (Summer Semester)
- **Critical Practice Studio** ARC5804
- **Research Methods** ARC5013
- **Profile Elective (architecture)** ARX65xx2

### Semester 10
- **Advanced Design Studio 1/Thesis 1** ARC5814
- **Design Theory** ARC5643
- **Profile Elective (architecture)** ARX65xx2

### Semester 11
- **Advanced Design Studio/Thesis 2** ARC5824
- **Ecological Issues** ARC5423
- **Profile Elective (architecture)** ARX65xx2

### Semester 12 (Summer Semester)
- **Professional Practice** ARC5913
- **Practice Portfolio** ARC6833
- **Profile Elective (non-architecture)** XXX65xx3
2. **2011 evolution of the 36 credit Master of Architecture program track.**

In the fall of 2011 the Graduate Faculty Coordinators Committee voted unanimously to adopt several evolutionary changes to the 36 credit upper division portion of the Master of Architecture degree. The primary change was from required Concentrations to Practice Profiles.

**Former Concentrations**

Prior to fall 2011 the 36 credit Master of Architecture degree program had 7 Concentrations and students were required to select a Concentration upon admission and complete specific courses required within the Concentration. The Concentrations were as follows:

1. Concentration in Design and Practice
2. Concentration in Sustainable Architecture
3. Concentration in Urban Design
4. Concentration in Interior Design
5. Concentration in Critical Studies in Architecture
6. Concentration in Global Design and Practice
7. Concentration in Healthcare Design

The Concentrations created several management, delivery and perception problems as they grew in number over time. Faculty overseeing Concentrations had an unfair imbalance of responsibilities and contact with students. Students were typically unable to take courses outside of their Concentration. There was great imbalance in the number of students in each Concentration, and students and faculty perceived sustainability, design and practice to be confined to specific Concentrations rather than integral to all Concentrations.

**New Profiles**

In fall 2011 the College unanimously adopted Practice Profile as the successor to Concentrations, implemented incrementally beginning fall 2011 and completed by summer 2012.

A simple explanation of a Practice Profile is as follows: a topical concentration with greater curricular flexibility and more focused relevance for practice.

All Practice Profiles are built around principles of sustainability, design and practice. All Profiles are defined by faculty and selected by students; both in sync with societal needs and desires. All Profiles build on and expand existing courses and the practice traditions of our College, while naturally evolving, expanding, or contracting over time as the needs and desires of society change.

**Practice Profile Summary (36 credit hour M.Arch curriculum, implemented April 2012)**

**Practice Courses**

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<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Research Methods</td>
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<tr>
<td>Ecological Issues</td>
<td>3</td>
</tr>
<tr>
<td>Design Theory</td>
<td>3</td>
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<tr>
<td>Professional Practice</td>
<td>3</td>
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<td>Practice Portfolio</td>
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<tr>
<td>Critical Practice Studio</td>
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**Profile Courses**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Design Studio 1 (or Thesis 1)</td>
<td>4</td>
<td>Elective design studio (or Thesis) with profile topic.</td>
</tr>
<tr>
<td>Advanced Design Studio 2 (or Thesis 2)</td>
<td>4</td>
<td>Elective design studio (or Thesis) with profile topic.</td>
</tr>
<tr>
<td>Profile Elective 1</td>
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<td>Topical elective in seminar, workshop or lab format</td>
</tr>
<tr>
<td>Profile Elective 2</td>
<td>2</td>
<td>Topical elective in seminar, workshop or lab format</td>
</tr>
<tr>
<td>Profile Elective 3</td>
<td>2</td>
<td>Topical elective in seminar, workshop or lab format</td>
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<tr>
<td>Profile Elective 4, (Non-Arch)</td>
<td>2</td>
<td>Non-Architecture elective in seminar or workshop format</td>
</tr>
</tbody>
</table>

36 Credits Total
**Practice Profiles** (with selected example elective courses to connote content)

**TECHNOLOGY**
- Applied Digital Fabrication and Enterprise
- Sustainable Building Systems
- Sustainable & Innovative Materials

**HEALTH**
- Evidence Based Design
- Healthcare Issues and Trends
- Environmental Psychology

**ECOLOGY**
- Climate and Typology
- Historic Preservation and Adaptive Reuse
- Current Issues in Ecology

**CULTURE**
- Architecture as Activism
- Visualizing Urban Density
- Public Interest Design

**MANAGEMENT**
- Integrated Project Delivery and Project Management
- Real Estate Development
- Law for Architects

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3. **2009 to 2012 implementation of the 90 credit Master of Architecture program track.**

Since the last accreditation visit, changes to the undergraduate component of the 4 + 36 credit hour program have been identified. They have included: the development of ethics content, the development of an approach to writing proficiency, and an enhanced approach to advising.

At the graduate level, during the last NAAB accreditation visit in 2008, the accredited programs included: (1) the 36 credit hour program for students possessing a BS Architecture from Lawrence Technological University (applicants from other BS Arch programs may require additional credit hours); and (2) a “4+3 program” for students with a degree in a non-architectural discipline.

During the 2007-08 academic year, the College of Architecture and Design changed the nomenclature of its accredited 4+3 program to the new terminology of M.Arch 3+. It was considered that M.Arch 3+ was more comprehensible in terms of standardized naming used by other universities. Another aspect of changing the terminology was to address confusion surrounding graduation requirements of the 4+3 track. Changing the terminology of the M.Arch 4+3 to M.Arch 3+ allowed the repackaging of existing graduate professional and elective courses into a clearer course of study. It should be noted that the M.Arch 3+ is merely a variation of the existing accredited Master of Architecture degree and not a new program. Students in the M.Arch 3+ attend the same classes as in our M.Arch program and need to meet the same graduation requirements.
The M.Arch 3+ program is focused on students who have a desire to pursue architecture as a career after already completing an undergraduate degree in a course of study other than architecture. The repackaged 4+3 program was identified as having several issues. It left the student in the program in a transitory state between a graduate and an undergraduate program, affecting financial aid, access to resources and studio/academic culture. The student in the M.Arch 3+ program is considered a graduate student upon entrance.

Summary of the M.Arch 3+ program is as follows:
General Studies (79 credit hours) are counted as an admission requirement from a previous undergraduate degree program. These are general studies in the arts, humanities, and the sciences.
Entrance requirements include pre-requisite courses, such as visualization techniques, software and CADD/BIM knowledge, principles of design, calculus and trigonometry, and physics. These requirements must match the Student Performance Criteria of aligned courses presently offered in our undergraduate program.
Professional Studies at the graduate level upper division (80 credit hours) make up the core of the program. The professional studies courses are from our standard accredited M.Arch program, with the exception of three studios (see note below).
Electives (10 credits) are available for students to explore special interests and develop a more focused area of study, or to choose a greater breadth of exploration.

Three studio courses have been added to the program, Architectural Foundation Studio 1, 2, and 3 (ARC5014, ARC 5024, ARC 5034), replacing two studios of 13 credits. It was felt to be important for incoming graduate students to have a “graduate identification” from the beginning of their studies and studios tailored to their introductory needs. This is achieved by maintaining graduate students in their own studios, rather than integrating them into the present undergraduate studios. This also enhances studio culture among the 3+ graduate students. Following completion of the Architectural Foundation Studios, 3+ students mainstream with other graduate students and take Comprehensive Design Studio, Critical Practice Studio, and two Advanced Design Studios.

**Program**
The length of study is 90 semester credits.

**Preliminary Courses required before acceptance (or equivalent)**
ART 1115 Design Elements and Principles
ART 1215 Visualization Techniques
ARC 2813 Electronic Methods 1
MCS 1414 Calculus 1
PHY 2213 College Physics 1 w/Lab
PHY 2223 College Physics 2 w/Lab
**3+ Curriculum (90 credits)**

**Semester 1**
- Architectural Foundation Studio 1 (ARC5014)
- History/Designed Environment 1 (ARC5013)
- Building Systems 1 (ARC5033)
- Structures 1 (ARC5014)

14 credits

**Semester 2**
- Architectural Foundation Studio 2 (ARC5024)
- History/Designed Environment 2 (ARC5023)
- Building Systems 2 (ARC5043)
- Structures 2 (ARC5053)
- Building Systems 2 Global (ARC5001)

14 credits

**Semester 3**
- Architectural Foundation Studio 3 (ARC5034)
- Twenty first Century Arch. (ARC5063)
- Environmental Systems 1 (ARC5073)
- Structures 3 (ARC5093)

13 credits

**Semester 4**
- Comprehensive Design Studio (ARC5114)
- Critical Practice Studio (ARC5804)
- Current Issues in Arch. (ARC5622)
- Environmental Systems 2 (ARC5083)
- Structures 4 (ARC4543)

12 credits

**Summer Studio**
- Critical Practice Studio (ARC5804)
- Research Methods (ARC5013)

7 credits

**Semester 5**
- Advanced Design Studio/Thesis 1 (ARC5xx4)
- Design Theory (ARC5643)
- Architecture Elective (ARC5xx2)
- Ecological Issues (ARC5423)

12 credits

**Semester 6**
- Advanced Design Studio/Thesis 2 (ARC5xx4)
- Professional Practice (ARC5913)
- Architecture Elective (ARC5xx2)
- Architecture Elective (ARC5xx2)

11 credits

**Semester 7**
- Practice Portfolio (ARC6833)
- Architecture Elective (ARC5xx2)
- Architecture Elective (ARC5xx2)

7 credits

**Summary**

<table>
<thead>
<tr>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Professional: 80 semester credits</td>
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<tr>
<td>Elective: 10 semester credits + Profile Focus</td>
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<tr>
<td>Graduate: 90 semester credits for the M.Arch 3+</td>
</tr>
<tr>
<td>General: 79 semester credits (counted from previous undergraduate degree ONLY)</td>
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</tbody>
</table>

**Total**

169 semester credits (NAAB minimum of 168 cr. for Accredited degree)
4. **2010-2012 evolution of online course offerings in the Master of Architecture program.**

In the 2010-2011 academic year, the College was able to offer for the first time all courses for the Master of Architecture upper division (including studio) in a complete online format. The only exception is the Critical Practice Studio, which is conducted as a hybrid online and on-campus course and meets over 5 intensive weekend sessions in summer semester, on campus and on site as part of a field trip component to the course.

Some virtues of online delivery are becoming clear; current students and leading practitioners are comfortable and productive in an online environment and our program must respond accordingly. Online delivery allows access for a greater number of students who could not pursue an M.Arch due to limitations of geography or other factors. Online delivery demands a higher standard for clear concise communication and students and faculty are responding accordingly.

As one of the first schools in the country to explore uncharted territory and offer the option of pursuing a Master of Architecture online, our College is taking great care to understand both the virtues as well as the limits of online delivery. The Director of Graduate Studies, Ralph Nelson, was invited by the ACSA to present at the ASCA national conference in spring 2012 on the LTU M.Arch online program. We will be monitoring our program closely over the next several semesters as we approach our NAAB accreditation site visit in 2014.