

REQUEST FOR A NEW UNIT OF INSTRUCTION

BACKGROUND

- 1. Name of Institution:** Southern Illinois University Carbondale
- 2. Title of Proposed Program:** Master of Architecture
- 3. Contact Person** Terry A. Owens
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- 4. Level of Proposed Unit**
- | | |
|--|---|
| <input type="checkbox"/> Undergraduate Certificate (1-2 years) | <input type="checkbox"/> Post-Baccalaureate Certificate |
| <input type="checkbox"/> Undergraduate Certificate (2-4 years) | <input type="checkbox"/> Post-Master's Certificate |
| <input type="checkbox"/> Associate | <input type="checkbox"/> First Professional Certificate |
| <input type="checkbox"/> Baccalaureate | |
| <input checked="" type="checkbox"/> Masters | |
| <input checked="" type="checkbox"/> First Professional | |
| <input type="checkbox"/> Doctorate ¹ | |
- 5. Requested CIP Code (6-digits)** 04.0201
- 6. Proposed Date for Enrollment of First Class:** Summer 2006
- 7. Location Offered²:** On-Campus
Off-Campus : Region Number(s) _____ or Statewide _____

MISSION, OBJECTIVES AND PRIORITIES

8. Mission

The mission of this program will be to develop the skills, knowledge, and methods of inquiry necessary for the professional practice of architecture. Accreditation will be sought from the National Architectural Accrediting Board (NAAB) for a professional level degree.

¹ To assist staff in specialized areas of instruction, IBHE will retain two outside consultants to review all new doctoral program proposals.

² Institutions may request approval to offer a program, simultaneously, on- and off-campus, including statewide. However, assessments of program objectives and outcomes should be developed that address all of the locations and modes of delivery for which the institution is seeking approval. Note that "on-campus" approval extends to the entire region in which the main campus is located. New off-campus programs to be offered outside the institution's region require approval.

Since its inception in 1954 as an Associate of Applied Science degree program in Architectural Technology to the current offering of a pre-professional Bachelor of Science degree program in Architectural Studies, architectural education at SIUC has satisfied the education requirement for licensing and registration in the state of Illinois. This is no longer the case. The Illinois State Legislature recently revised the Architecture Practice Act, which now requires candidates for the Architecture Registration Examination (ARE) to have completed either a 5-year Bachelor of Architecture or a Master of Architecture degree. Illinois becomes the 36th of 55 National Council of Architecture Accrediting Board (NCARB) jurisdictions to require the NAAB accredited professional degree as the minimum level of education for licensing. In addition to the education requirement, architectural interns must complete the Intern Development Program (IDP) prior to taking the ARE. It takes approximately three years for an architectural intern with a profession degree to complete IDP.

In order for the graduates from SIUC to meet this education requirement we propose to implement a NAAB-accredited Master of Architecture program. Specific objectives and measurable contributions the program will make to the university's mission and focus statements are:

- This program will develop the professional, social, and leadership skills expected of college students and by the profession of architecture in accordance with NAAB accreditation guidelines.
- This program will support the economic, social, and cultural development of southern Illinois by providing a professional education that leads to licensing. Many graduates will work and live in southern Illinois.
- This program will support the commitment to partnerships with communities in southern Illinois by performing service learning activities in the form of planning assistance to city governments and non-for-profit organizations.
- This program will cultivate and sustain diversity through the recruitment of students and faculty, the study of multicultural contributions to the discipline, and the active study and participation in international activities. Special emphasis will be placed on recruiting students from historically Black colleges and universities.
- This program will support both undergraduate and graduate enrollment. The undergraduate program in architecture at SIUC accepts approximately 90 new students each year from over 350 applications (freshmen, transfers, change-of-majors). The program produces 35 to 45 graduates each year. Most of these graduates will apply for admission into this Master of Architecture program. In addition, it is expected that many graduates from other pre-professional level programs will also apply for admission.
- This program will provide the closest access to a NAAB-accredited professional degree program at a public institution within a 200-mile radius of Carbondale. This radius covers a five-state region that includes southern Illinois, southwest Indiana, western Kentucky and Tennessee, and southeast Missouri.
- This program will support the commitment to produce graduates in support of southern Illinois businesses. Graduates from the undergraduate program currently work in virtually every architecture office in southern Illinois including the Metro-East St. Louis area.

- This program will indirectly support the SIUC Core Curriculum as the undergraduate program in Architecture is the only program in the College of Applied Sciences and Arts to offer a Core Curriculum course.
- This program will support the SIUC commitment to interdisciplinary research. Faculty members in the undergraduate program currently participate in collaborative research efforts with faculty in Archeology, History, Medicine, Health Care, and Library Affairs. Interdisciplinary research will expand with the implementation of this degree.

8.1. Explain how the program will meet regional and state needs and priorities, making specific reference to *The Illinois Commitment*.

- *Policy Area One: Economic Growth*
This program will support economic growth by producing graduates who help meet the occupational demand; by providing continuing education to regional practitioners that is required to maintain licensure, and by providing community and outreach services that support regional development such as tourism, downtown/urban and recreational development, and historic preservation.
- *Policy Area Two: P-20 Partnerships*
This program will support elementary and secondary education by continuing the long running Kid Architecture and Architecture Camp programs targeted at both students and teachers.
- *Policy Area Three: Affordability*
The overwhelming majority of SIUC students receive some type of financial aid assistance. This program will provide access to students from lowest income categories by offering the most affordable accredited architecture education in Illinois. Both undergraduate and graduate architecture students at SIUC will pay the established standard tuition rates. Over 60% of the architecture programs in the United States charge differential tuition rates, additional fees or both. The established standard tuition rates at both University of Illinois at Urbana/Champaign (UIUC) and University of Illinois at Chicago (UIC) are higher than SIUC. In addition, architecture students at both UIUC and UIC pay differential undergraduate and graduate tuition rates. Using FY 2005 tuition rates as an example, an undergraduate (B.S. Architectural Studies) and graduate education (Master of Architecture) at UIUC cost \$42,084. A UIC undergraduate (B.A. Architecture Studies) and graduate education (Master of Architecture) cost \$38,816. An SIUC undergraduate (B.S. Architectural Studies) and graduate education (Master of Architecture) will cost \$27,744.

Master of Architecture programs range in length from one to three and one-half years. Most NAAB accredited programs including UIUC and UIC offer two-year programs. The Master of Architecture at SIUC can be completed in a total of 15 months. This translates into the potential for graduates to find jobs and earn an additional nine months of income that will further offset the cost of education when compared to graduates of two-year programs.

- *Policy Area Four: Access and Diversity*
This program will support access and diversity by providing an NAAB accredited architectural education to students who cannot be served by existing Master of Architecture programs at in-state public universities. In 2002, UIUC accepted 34% of 268 applications and UIC accepted 36% of 161 applications. Combined these

two programs accepted 149 out of 429 applications. This leaves many qualified applicants seeking admission into Master of Architecture programs. The undergraduate program in architecture at SIUC graduates on average between 35 to 45 students each year. Surveys of graduating seniors for the past five years indicate over 90% of the graduates would prefer to stay at SIUC and complete a Master of Architecture degree. When this number is combined with the applications that will come from graduates of other programs, there will be strong demand and a large pool of applicants from which to select thirty well-qualified students each year. This program will continue to serve first generation and minority students. Many students attending SIUC are first generation college students. The faculty is committed to recruiting students from historically Black colleges and universities as well institutions with high concentrations of Hispanic populations. SIUC continually ranks in the top twenty public universities nationally for graduating African American students.

- *Policy Area Five: High Quality*
This program will seek accreditation from NAAB, which is the premier accrediting agency for professional-level architecture programs. NAAB accredited degrees are acknowledged worldwide.
- *Policy Area Six: Accountability and Productivity*
This program will utilize an assessment plan designed to target NAAB accreditation requirements and employer needs. Faculty will be evaluated annually in the areas of teaching, research/creative activities, and service. These evaluations will be directly tied to merit salary increases and the tenure and promotion process.

8.2. Identify similar programs and sponsoring institutions in the state. Compare these programs with the proposed program. Discuss the possible impact of the proposed program on these programs.

There are two similar programs at public institutions in the state of Illinois. The University of Illinois at Urbana/Champaign (UIUC) and the University of Illinois at Chicago (UIC) offer both undergraduate architecture and Master of Architecture programs. The National Architectural Accrediting Board (NAAB) accredits both the UIUC and UIC Master of Architecture programs. UIUC offers a traditional 2-year graduate curriculum with several concentration options in addition to several dual degree combinations. The UIUC program offers community service statewide although little has been offered in southern Illinois outside of the Metro-East St. Louis area. The UIC program offers a traditional 2-year graduate curriculum with several concentration options and primarily provides community service to the Chicago metropolitan area. The Master of Architecture program at SIUC will seek NAAB accreditation. In order to meet accreditation criteria the undergraduate curriculum, which will continue to award the Bachelor of Science in Architectural Studies degree, will be a total of 127 credit hours in length spread over a traditional 4-year sequence. The graduate curriculum will be a total of 42 credit hours in length spread over a summer, fall, spring, and summer semester sequence for a total of 1.25-years and will award the Master of Architecture degree. The primary focus will be on the general practice of architecture with emphasis on historic preservation and community planning. The program will primarily provide community service to southern Illinois and upper Mississippi Delta Region. The undergraduate program has a history of working with southern Illinois communities including Cairo, Brookport, Golconda, Village of Evansville, Chester, Du Quoin, Murphysboro, Carbondale and others.

The proposed program at SIUC will not impact the UIUC and UIC program enrollments. According to *Guide to Architecture Schools* published by the Association of Collegiate Schools of Architecture (2003), both UIUC and UIC accept just over one-third of the applicants to their respective Master of Architecture programs. As mentioned earlier, over 90% of the graduates from the undergraduate program at SIUC prefer to stay at SIUC and complete their master's degree now that it is required for licensing. Prior to the change in the licensing law about one-third, or fifteen to eighteen SIUC graduates applied for admission to Master of Architecture programs at other universities. On average about five graduates applied for admission and were accepted into the Master of Architecture program at UIUC. In recent years, SIUC graduates have not applied for admission to UIC. The remainder, are going out of state to other universities such as University of Michigan, Rhode Island School of Design, Texas A&M, University of Oregon, New School of Architecture and Washington University.

- 8.4.** Discuss estimated future employment opportunities for graduates of this program. Compare the estimated need for graduates with the estimated number of graduates from this program and existing programs identified in 8.3 above. Where appropriate, provide documentation by citing data from such sources as employer surveys, current labor market analyses, and future workforce projections. Describe any special need for this program expressed by state agencies, industry, research centers, or other educational institutions.

Job market demand supports the need for more graduates from NAAB accredited architecture programs. There are two public and two private NAAB-accredited professional programs in Illinois that combined graduate approximately 140 architectural interns per year not including international students. The Illinois Department of Employment Security states the following on their web site <http://cis.ilworkinfo.com/info2.aspx?FileID=Occ&FileNum=100011&TopicNum=3>

“In Illinois, average employment growth is expected for architects through 2012. About 160 job openings are expected each year. Nationally, the number of jobs for architects is expected to grow about as fast as average through the year 2012.

Demand for architects is tied to levels of local construction. The need for new office buildings, schools, and health care facilities will create the most job growth. Many existing buildings are old and in need of repair, especially in big cities. As buildings age, there will be a greater need for remodeling and renovation. The growing number of older people will also require that more housing and nursing facilities be built to meet their needs.” January 28, 2005.

According to *ArchVoices*, an independent weekly email newsletter, one half of the graduates of architecture programs are expected to become licensed architects. The other half will pursue career options that take advantage of an architectural education. Substantial numbers of non-licensed individuals work in architecture offices. A study conducted in 1993 by the American Institute of Architecture Students (AIAS) identified over 100 career opportunities for architecture graduates beyond working directly in the field of architecture. Some of these related career opportunities include construction management, facility management, historic preservation, property

development, sales of building materials, furniture/product design, urban design and architectural education.

Employers actively seek graduates from the existing undergraduate architecture program at SIUC. For the last twelve years over 95% of the graduates who chose not to continue their education in an NAAB accredited Architecture program at another institution have either been offered a job in the profession or a related field.

9. Program Description

- 9.1.** Provide a brief narrative description of the program, including a list of its central academic objectives. Explain how the curriculum is structured to meet the program's stated objectives. Provide a complete catalog description for the proposed program, including:

The core of both the undergraduate and graduate programs is the design studio. In the graduate program students will be exposed to concentrations in community design, historic preservation and building design. In addition, students will take advanced-level courses in research methods, programming, structures and professional practice. Students receive a rigorous and demanding education that will prepare them to move into a variety of architectural intern positions in the profession. The entire undergraduate and graduate curriculum is designed to meet the stated objectives for NAAB accreditation. The purpose of this degree is to provide an NAAB accredited education that will satisfy the education requirements for licensing in the State of Illinois as overseen by the Illinois Department of Professional Regulation and for certification by the National Council of Architectural Registration Boards.

Catalog Description:

The Master of Architecture (MARCH) degree is considered to be a first-professional degree that enables graduates to satisfy education requirements for licensing. The program is intended for individuals who have completed an undergraduate degree in architecture/architectural studies and requires a minimum of 42 semester credit hours to be completed over a 15-month period including a summer, fall, spring, and summer semester sequence. The mission of the program is to develop the skills, understanding, and methods of inquiry necessary for the professional practice of architecture.

Admission

The program will utilize a selective admission process that will evaluate grade point average, Graduate Record Examination score, letters of reference, and portfolio. Individuals who have completed an undergraduate degree in architecture/architectural studies and who satisfy the minimum admission requirements set by the Graduate School are eligible to apply for admission. For individuals who have not graduated from an architecture program, additional coursework will be required to meet entrance requirements.

Additional Expenses

Due to the creative nature of the major, additional expenses for completion of the degree requirements are difficult to accurately predict. Students can expect to spend

between \$1,000 and \$2,000 per semester on supplies and travel expenses. All students admitted into the program are required to purchase or lease a laptop computer and software that meet required program specifications.

Graduation Requirements

A minimum of 42 semester credit hours beyond the baccalaureate degree is required for completion of the Master of Architecture degree. The curriculum includes both required and elective courses. All elective course work must have the approval of the student's academic advisor. Students are required to complete a thesis design project.

Curricular Guide

The curriculum has been developed based on a review of accredited programs from similar universities. In particular, the curriculum is a close match with Texas Tech University's master's program and the University of Idaho's master's program (see attached materials). As such, the program as presented in this curricular guide should meet the requirements of accreditation. It also builds on the ideas forwarded by Ernest Boyer and Lee Mitgang (1996) in their book *Building Community* which emphasizes four existing headings for NAAB accreditation standards, which translate to our curriculum. Those four organizational headings, which form the foundation of our coursework are as follows:

Discovery of knowledge – which relates to the scientific, social, aesthetic, political and environmental foundations of architecture, and how they relate to active inquiry and learning

Integration of knowledge – which asks students to “make connections between the discipline of architecture and other related fields”

Application of knowledge – which focuses on the economic, management, legal and ethical issues that face architects

Sharing of knowledge – which focuses on the ability of students to “communicate clearly to everyone affected by the building environment”

The heart of the curriculum is the studio. Students learn to apply the theory and skills learned to real-world problems in their studio activities. Studios are the heart of the pedagogy of architecture. Studios provide an interactive environment which affords a rich interaction between the faculty member and the individual student. As noted in *Guide to Architectural Schools*, published by the Association of Collegiate Schools of Architecture (2003), in a discussion on studios:

The student, either individually or as a member of a team, working with a faculty “critic”, finishes a project with a preliminary design solution for the problem, which is graphically (and often verbally) presented. For centuries, “juries” of faculty and professionals have been used to discuss and evaluate the student solutions – undoubtedly the best-remembered experiences of all students. Ideally, knowledge from other courses is applied in the design studio. (p6)

The idea of the studio, and its importance to architecture education is further reinforced by the work of Michael Brawne's (2003) recent text: *Architectural Thought: The Design Process and the Expectant Eye*" Professor Brawne indicates that:

Most architectural education is based on project work. This is structured around a sequence which normally starts off with problem definition, continues as a number of sketch schemes which are progressively criticized and refined and then finally presented and judged. (p 159)

Problem solving skills are communicated and nurtured in this environment, which will prepare the student to sit for the licensing examination. The curriculum and the specific course descriptions as proposed by the faculty are as follows:

Summer Semester

ARC 444 -6 Off-Site Study

6

Fall Semester

ARC 511-3 Research Methods
ARC 521-3 Programming for Thesis Project
ARC 551-6 Design VII: Community Design
XXX - 3 Elective

15

Spring Semester

ARC 552 -6 Design VIII: Thesis Project
ARC 562 -3 Structures IV: Analysis &
Lateral Forces
ARC 592 -3 Professional Practice
ARC 5XX-3 ARC (Elective)

15

Summer Semester

ARC 651 -6 Historic Preservation

Or

ARC 652 -6 Urban Planning

6

Course Descriptions:

ARC 444-6 Off-Site Study Off-site study of specified world area(s) concerning the influence of the region's particular culture on architecture, landscape, urban and interior design. The course reviews both historic and current: ethnicity, social, philosophical, religious, economic and political values of the region being visited to gain insights on the symbiotic relationship between culture and design. Prerequisite: Graduate standing and consent of major advisor. Fees: cost of transportation, lodging, access fees and general cost related to the on-site location of study.

ARC 511-3 Research Methods Philosophy of research in architecture, research design, data gathering and interpretation. Prerequisite: Graduate standing and consent of major advisor.

ARC 521-3 Programming for Thesis Project Directed research, data gathering, and analysis of historic, formal and functional precedents in preparation for the thesis project. Each student will select a client/subject and

site, prepare a detailed architectural program along with a thesis statement.
Prerequisite: Graduate standing and consent of major advisor.

ARC 551-6 Design VII: Community Design Assist public and non-profit groups by providing planning, programming, and conceptual design ideas. Emphasis and scope of projects are determined by the community needs. This will enable students to be involved in a service learning academic experience.
Prerequisite: Graduate standing and consent of major advisor.

ARC 552-6 Design VIII: Thesis Project An architectural design or historic preservation project chosen by the student and subject to approval by the student's master's studio advisor. Prerequisite: Graduate standing and consent of major advisor.

ARC 562-3 Structures IV: Analysis & Lateral Forces Study of framing materials and systems for buildings using advanced concepts of structural analysis. Included are earthquake resistant structures, wind resistant design, composite beams, plastic theory, statically indeterminate structures, long spans, moment distribution, multi-story structures, and other related topics. Prerequisite: Graduate standing and consent of major advisor.

ARC 592-3 Professional Practice The architect's duties and ethical responsibilities in practice, project supervision, office administration, and comprehensive services; specification writing, unit costs, and building estimation. Research, organization, format, and content of various sections included in the Project Manual-Technical Specifications document.
Prerequisite: Graduate standing and consent of major advisor.

ARC 651-6 Historic Preservation Methods of documentation, stabilization, and adaptive reuse of historic structures. Field investigations, descriptions, and drawings provide practical experience. Prerequisite: Graduate standing and consent of major advisor.

ARC 652-6 Urban Housing Study of housing and redevelopment problems, theories, standards, and practice. Prerequisite: Graduate standing and consent of major advisor.

ARC Electives Additional Courses will be developed depending on the individual expertise of new faculty hires.

- 9.2. Explain what students are expected to know and/or be able to do upon completing the program.
 - A. Speaking and Writing Skills

Ability to read, write, listen, and speak effectively

B. Critical Thinking Skills

Ability to raise clear and precise questions, use abstract ideas to interpret information, consider diverse points of view, reach well-reasoned conclusions and test them against relevant criteria and standards

C. Graphic Skills

Ability to use appropriate representational media, including freehand drawing and computer technology, to convey essential formal elements at each state of the programming and design process

D. Research Skills

Ability to gather, assess, record, and apply relevant information in architectural coursework

E. Formal Ordering Systems

Understanding the fundamentals of visual perception and the principles and systems of order that inform two- and three-dimensional design, architectural composition, and urban design

F. Fundamental Design Skills

Ability to use basic architectural principles in the design of buildings, interior spaces, and sites

G. Collaborative Skills

Ability to recognize the varied talent found in interdisciplinary design project teams in professional practice and work in collaboration with other students as members of a design team

H. Western Traditions

Understanding of the Western architectural canons and traditions in architecture, landscape and urban design, as well as the climatic, technological socioeconomic, and other cultural factors that have shaped and sustained them

I. Non-Western Traditions

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

J. National and Regional Traditions

Understanding of national traditions and the local regional heritage in architecture, landscape design and urban design, including the vernacular tradition

K. Use of Precedents

Ability to incorporate relevant precedents into architecture and urban design projects

L. Human Behavior

Understanding of the theories and methods of inquiry that seek to clarify the relationship between human behavior and the physical environment

M. Human Diversity

Understanding of the diverse needs, values and behavioral norms, physical ability, and social and spatial patterns that characterize different cultures and individuals and the implication of this diversity for the societal roles and responsibilities of architects

N. Accessibility

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

O. Sustainable Design

Understanding of the principles of sustainability in making architecture and urban design decisions that concern natural and built resources, including culturally important buildings and sites, and in the creation of healthful buildings and communities

P. Program Preparation

Ability to prepare a comprehensive program for an architectural project, including assessment of client and user needs, a critical review of appropriate precedents, an inventory of space and equipment requirements, an analysis of site conditions, a review of the relevant laws and standards and assessment of their implication for the project, and a definition of site selection and design assessment criteria

Q. Site Conditions

Ability to respond to natural and built site characteristics in the development of a program and the design of a project

R. Structural Systems

Understanding of principles of structural behavior in withstanding gravity and lateral forces and the evolution, range, and appropriate application of contemporary structural systems

S. Environmental Systems

Understanding of the basic principles and appropriate application and performance of environmental systems, including acoustical, lighting, and climate modification systems, and energy use, integrated with the building envelope

T. Life Safety

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

U. Building Envelope Systems

Understanding the basic principles and appropriate application and performance of building envelope materials and assemblies

V. Building Service Systems

Understanding of the basic principles and appropriate application and performance of plumbing, electrical, vertical transportation, communication, security and fire protection systems

W. Building Systems Integration

Ability to assess, select, and conceptually integrate structural systems, building envelope systems, environmental systems, life-safety systems, and building service systems into building design

X. Building Materials and Assemblies

Understanding of the basic principles and appropriate application and performance of construction materials, products, components, and assemblies, including their environmental impact and reuse

Y. Construction Cost Control

Understanding of the fundamentals of building cost, life-cycle cost, and construction estimating

Z. Technical Documentation

Ability to make technically precise drawings and write outline specifications for a proposed design

AA. Client Role in Architecture

Understanding of the responsibility of the architect to elicit, understand, and resolve the needs of the client, owner, and user

BB. Comprehensive Design

Ability to produce a comprehensive architectural project based on a building program and site that includes development of programmed spaces demonstrating an understanding of structural and environmental systems, building envelope systems,

life-safety provisions, wall sections and building assemblies and the principles of sustainability

CC. Architect's Administrative Roles

Understanding of obtaining commissions and negotiating contracts, managing personnel and selecting consultants, recommending project delivery methods, and forms of service contracts

DD. Architectural Practice

Understanding of the basic principles and legal aspects of practice organization, financial management, business planning, time and project management, risk mitigation, and mediation and arbitration as well as an understanding of trends that affect practice, such as globalization, outsourcing, project delivery, expanding practice settings, diversity, and others

EE. Professional Development

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

FF. Leadership

Understanding of the need for architects to provide leadership in the building design and construction process and the issues of growth, development, and aesthetics in their communities

GG. Legal Responsibilities

Understanding of the architect's responsibilities as determined by registration law, building codes and regulations, professional service contracts, zoning and subdivision ordinances, environmental regulation, historic preservation laws, and accessibility laws

HH. Ethics and Professional Judgment

Understanding of the ethical issues involved in the formation of professional judgment in architectural design and practice

9.3. Describe the strategies to be incorporated into the proposed program to promote student learning.

In addition to the strategies individual faculty members may apply in the classroom, the following is a list of strategies for improving learning:

- Ensure students understand the purpose of the program. During the recruitment process applicants will receive detailed information about the program that will clearly identify the goals and objectives of the program. Applications will include a transcript for the undergraduate degree completed, GRE score, portfolio of work, and letters of reference. The transcript will be used to determine if the individual has completed the necessary undergraduate prerequisite courses and to calculate

GPA as determined by SIUC's Graduate Admissions. The GRE is used to evaluate analytic writing, verbal, and analytical skills. The portfolio review and letters of reference will indicate if the student has the required knowledge and skills necessary for entry into the program, as well as the potential for success.

- Measure student learning and academic performance as they move through the program. The program will adhere to SIUC Graduate School guidelines for grades and grade point averages. Students will be required to maintain a minimum of a 3.0 GPA. Only courses for which the grades of A, B, C, or S have been received are acceptable in fulfillment of graduate degree requirements. A graduate faculty member will counsel any student who receives a grade of C for a course.
- Communicate evaluation results to students promptly and provide effective feedback on performance. Students are required to provide a detailed presentation of all design work. A jury of reviewers consisting of professors, licensed professionals and subject matter experts will critique the presentation. The design review system utilized in studio-based courses provides immediate and detailed evaluation in the form of both verbal and written comments.
- Familiarize students with the norms and practices of the discipline and profession. The use of precedent studies is an integral method of architectural teaching and will be one of the methods used in all design studios as one way for students to become familiar with the historic practice of architecture. Design studio courses will be the primary focus of the program. Studio practices and processes are indicative of a primary activity in any professional architectural design office. The professional practice course teaches the normal, accepted, and potential practices of the profession. This course demonstrates through team activities the importance of cooperative processes and skills necessary for the practice of architecture. Field trips, simulated visits to potential sites, and visits to actual sites under construction help students gain first-hand knowledge of the built environment by direct contact with design on site.
- Facilitate faculty/student and student/student contact. The design studio promotes one-on-one contact between the professor and student. On a daily basis, or as needed, faculty will conduct individualized critiques. Group projects are incorporated to promote student interaction and familiarize students with various managerial roles in professional design offices. Participation in student organizations affiliated with the profession is encouraged. This promotes student involvement at the national level and exposes students to the diversity of student bodies at other professional schools. The use of study abroad programs and field trips will provide the opportunity for exceptionally rich faculty-to-student and student-to-student contact. The current undergraduate student population is actively involved in research with their professors as indicated by the awarding of numerous undergraduate assistantships and participation in paper presentation at major conferences. Students in the Master of Architecture program will actively engage in research with their professors and will participate in the dissemination of information by presenting papers and by co-authoring journal articles.
- Facilitate active learning. During the first semester of the program the student will have a choice of participating in one of two on-site learning experiences. Some of the students will participate in a regional experience that will focus on cultural, social, philosophical, religious, economic and political issues affecting the built environment. Students will prepare detailed studies and offer observations and suggestions to address issues of concern for the residents of the area. Some of the students will have the opportunity to participate in a study abroad semester that will

provide participants the opportunity to experience the diversity of cultures and study the built environment. This type of first-hand experience goes well beyond the traditional classroom and provides the student the opportunity to be immersed in a comprehensive learning experience. Students will also have the opportunity to participate in a shorter study abroad summer tour. The tour will take students to important architectural sights and provide brief glimpses of various cultures. Field trips are an integral and regular part of the program structure. This activity delivers students to a variety of locations and provides the opportunity for project specific investigation. Student involvement in service learning projects is welcomed and sought by faculty as a means of fostering active learning. The existing undergraduate program has established a history of working with communities in the region on various service learning activities. Students in the graduate program will take this activity to a higher level of skill and competence beyond the undergraduate skill level.

- Facilitate continued faculty development of teaching. Team teaching is used wherever possible to allow the senior tenured faculty to support and guide tenure-track faculty. Many courses provide opportunity for this. The Association of Collegiate Schools of Architecture conducts numerous regional and national conferences focusing on teaching. Faculty members are encouraged to participate in these conferences to share their innovative teaching techniques and to learn from others. Faculty members are encouraged to submit proposals both internally and externally that are designed to enhance the curriculum and develop faculty expertise. Faculty members are encouraged to conduct pedagogical research in assigned teaching areas and to share this information in the form of paper presentations and journal publications. This allows the faculty member to immediately incorporate their research findings into the classroom/studio.

RESOURCES

10. Complete Table I to show student enrollment projections for the program.
11. Complete Table II (even if no new state funding is requested in the budget year). Show all sources of funds, both state and non-state, and reallocations. Provide a narrative budget that includes the following:
 - Projected increments in total resource requirements (line 1) in terms of projected staff requirements, equipment and instructional materials, library requirements, and contractual services for internships, practica, or clinical placements.

The Total Resource Requirement is broken down as follows:

Head of Master of Architecture (12 mo. appointment)	=	\$108,000
2 Faculty Members (9 mo. appointment) @ \$54,000/ea.	=	\$108,000
Summer Salary (10 months) @ \$6000/mo	=	\$ 60,000
1 AP – LAN Administrator (12 mo. Appointment)	=	\$ 50,000
9 G.A.'s @ ¼ time (9 mo. appointment) @ \$5,140/ea.	=	\$ 46,260
Student Work	=	\$ 15,490
OTS	=	\$ 45,000
TOTAL	=	\$432,750

Funding for the program will come from existing state resources in the form of internal reallocation. During the Current Year (see Table II) all money not directed toward new hires will be used to cover the one-time cost of renovation of existing facilities and to purchase the necessary equipment for student use.

The College of Applied Sciences and Arts will internally reallocate \$70,750. Included in this amount is \$54,000 to cover the unit's twenty-five percent share of the cost for the Head of the Master of Architecture and two new faculty members through the Faculty Hiring Initiative program. The sources of revenue for the CASA share will come from the elimination of a term faculty position, recent faculty and civil service hires at lower salary than the individuals replaced and an allocation of a portion of the summer budget.

The SIUC internal reallocation is \$362,000. Included in this amount is \$162,000 to cover SIUC's seventy-five percent share of the cost for the Head of the Master of Architecture and two new faculty members through the Faculty Hiring Initiative program. Central Administration will fund the remaining \$200,000.

Justification for Resource Requirements:

Head of the Master of Architecture - \$108,000: Professors of architecture at peer institutions on average earn \$8,276 per month with a low of \$7,430 per month to a high of \$9,620 per month. We hope to attract an established professor with NAAB accreditation experience at \$9,000 per month for a twelve-month appointment.

Two faculty members at \$54,000 each - \$108,000: Six SIUC peer institutions identified in Southern @ 150 offer NAAB accredited architecture programs. Four offer the 5-year Bachelor of Architecture and two offer four-year pre-professional programs and one-year Master of Architecture programs. The student/faculty ratios at these peer institutions reported in the most recent NAAB Statistical Report is 14:1. They range from a low of 12:1 to a high of 17:1. The student/faculty ratio for this program, which includes the existing pre-professional program and the Master of Architecture programs, will be 15:1. Assistant professors of architecture at these peer institutions earn an average of \$5,410 per month and associate professors average \$6,402 per month. We have projected \$6,000 per month for nine month appointments for two assistant/associate professors. This will allow for some flexibility in hiring based on need, credentials, and appointment as assistant or associate professor.

Summer Salary (10 mo @ \$6000/mo) - \$60,000: The curriculum is set up to complete the forty-two credit hours in a summer, fall, spring, summer sequence. The first summer includes an off-site experience either abroad or regionally. The second summer will include a traditional design studio. There are benefits to the student and to the unit by offering the curriculum in this fashion. First, students will graduate sooner and be able to enter the work force and begin earning income. Second, the unit will benefit by hiring fewer faculty and utilizing facilities year around.

- For the students enrolled in the first summer semester of the curriculum we will offer two sections of ARC 444. This six credit hour course is an off-site experience. One section will provide an international travel study experience that will take the students and faculty member off campus and out of country for the

entire semester. Most architecture programs provide an opportunity for an international experience. The regional travel study experience will require students to spend an extensive amount of time off campus at a regional location. Each of the two faculty members will be given a three-month contract. The off-site experience requires an extensive amount of pre-planning annually (travel plans, lodging arrangements, project selection and development) and it requires the faculty member to spend an extensive amount of time away from campus during the delivery of the course. Two faculty members at three months each equals six months of summer salary.

- For the students enrolled in the second summer semester of the curriculum we will offer one section each of ARC 651 and ARC 652. These six credit hour courses are traditional studio-based courses. Each course will require one faculty member with a two month contract for delivery. Two faculty members at two month each equals four months of summer salary.

1 AP – LAN Administrator - \$50,000: This is twelve-month appointment at \$4,166 per month. This person will oversee the computer lab, computer-related requirements of both undergraduate and graduate students in the School of Architecture, the computer-related requirements of all faculty members in the School of Architecture, and all local area network requirements for the School of Architecture. All students in the architecture program are required to have a laptop computer by the time they start the 200-level courses. All students in the Master of Architecture program will be required to have a laptop computer. All faculty members have laptop computers. All dedicated facilities, except the freshmen-level studios, have wireless internet access. Both students and faculty require access to the large format plotters and printers housed in our Computer Graphics Lab. We also maintain a local area network that allows direct faculty/student interaction in order to facilitate the exchange of very large digital files associated with graphic software programs. We currently direct a large portion of a term faculty member's assignment to oversee current computer and LAN requirements. We propose to redirect the term faculty member's assignment to teaching only and to hire a LAN Administrator to oversee both the undergraduate and graduate computer-related needs and requirements. During the accreditation review both the graduate and undergraduate programs are reviewed. As might be expected, computer graphics-related integration in the curriculum is very important.

9 G.A.'s @ ¼ time - \$46,260: These are nine-month appointments at the standard pay scale. Four sections each of four different lower-division undergraduate studio/lab based courses will be delivered via faculty working with graduate teaching assistants. A faculty member will be assigned to each course with four teaching assistants, one for each of four sections. Two of the courses are sequenced (fall/spring, ARC 121 & 122) in the first year of the undergraduate program and two of the courses are sequenced (fall/spring, ARC 271 & 272) in the second year of the program. The faculty member will coordinate the structure of the classes, develop assignments and tests, deliver the major lectures in a common lecture format and assign final grades. The graduate assistants will oversee one section each of a studio/lab each semester to include grading projects and tests, delivering support lectures, and providing individual assistance in the lab portion of the class. This accounts for eight quarter-time appointments. The ninth graduate assistant will be assigned to the faculty member assigned to teach the structures sequence (ARC 361 and 362) in the third year of the undergraduate program. Instead of offering two sections of each course we will offer one section of each course

and the graduate assistant will assist the faculty member in grading and other classroom duties. These assistantships will be used to recruit students for the Master of Architecture program who are highly qualified and require financial assistance. The use of graduate assistants will free up continuing faculty to teach courses in the graduate program. Because architecture is so labor/time intensive, it is not possible for a graduate student in architecture to cover more than a quarter-time assistantship.

Student Work – \$15,490: Student workers will be used to increase the number of hours of access time to our model shop, resource library, and computer graphics lab in support of the students in the Master of Architecture program.

OTS - \$45,000: This money will be used to cover the cost of operating the program, equipment, faculty support, annual accreditation dues, and the required periodic accreditation visits. A more detailed breakdown follows:

- **Contractual:** \$17,000 The NAAB annual accreditation fee is \$7,500. Accreditation site visits are required every three years, which will cost approximately \$6,000 (four team members at approximately \$1,500 each). During the years that do not require a site visit, the \$6,000 will be redirected to purchase computer related equipment for student use and renovations. We are required by accreditation criteria to bring in outside critics (to review student work), which will include honorariums, travel and lodging expenses. There will be periodic renovations of facilities and other common contractual expenses such as postage, insurance premiums, subscriptions, and printing and duplicating.
- **Commodities:** \$ 5,000 Office and shop supplies.
- **Equipment:** \$10,000 Computers, peripheral devices, shop equipment, digital fabrication equipment all need to be purchased/replaced/updated periodically.
- **Travel:** \$12,000 Director and faculty travel support to accreditation-related and professional conferences, on-site travel support for studios.
- **Telecom:** \$ 1,000 Phone service

12. Describe the institutional resources available to develop and maintain a quality program.

- There are currently ten tenured/tenure track faculty members who possess terminal degrees and teach courses in the existing undergraduate curriculum. In addition, there are two tenured faculty members who have related degrees and profession experience. The current faculty includes one tenured full professor, five tenured associate professors, two tenured assistant professor, and four tenure track assistant professors.

The Head of the Master of Architecture program and two new faculty members at the rank of full, associate, or assistant professor will be hired to support the program. Applicants for full professor are required to have gained tenure status at a peer, aspirational, or equivalent institution, have earned a Ph.D. in architecture or a closely related field, a Master of Architecture degree and an established national reputation in discipline related research/creative activities. Applicants for associate professor are required to have a Ph.D. in architecture or a closely related field, a Master of Architecture degree and an established national reputation in discipline-related research/creative activity. Applicants for assistant professor are required to

have a recognized terminal degree in architecture or closely related field and demonstrate potential for research/creative activity. Applicants will be required to demonstrate teaching experience and expertise. Professional licensure and office practice experience are preferred for all positions.

All tenured and tenure track faculty members are evaluated annually through a formalized process outlined in the School of Architecture's Operating Paper. This process reviews teaching, research/creative activities, and service. The results of these evaluations are directly tied to the merit portion of all salary increases. In addition, all tenure track faculty members are evaluated annually for progress toward tenure and promotion requirements.

- At our request in 2002, David Carlson, Dean, Library Affairs, contracted an outside consultant to survey the related library collection. Christopher Quinn, Associate Professor of Library Affairs and Assistant Librarian, Ricker Library of Architecture and Art, University of Illinois at Urbana-Champaign, performed this task. The impetus for this survey was to determine if the current Morris Library collection will support an NAAB accredited Master of Architecture program. Mr. Quinn determined the current collection of related materials is sufficient for the undergraduate program. However, he recommended a substantial annual increase in the budget to increase the monograph and technical books collection and to increase the number of journal subscriptions. The library will develop a plan to internally address these recommendations.
- SIUC provides a full array of academic and student support services dealing with language, writing, health, financial aid, and counseling. The College of Applied Sciences and Arts funds tutors. The School of Architecture oversees emphasis floors in the residence halls. Students will have access to a dedicated academic advisor. In addition, students will have access to a dedicated model shop and computer lab specifically equipped to support related needs. All students will be provided unlimited access to a dedicated studio space equipped with required furniture and technological features such as Internet access. An equipment line has been included in the OTS portion of the budget to purchase the necessary equipment to support both students and faculty.
- Demonstration of teaching/scholarship effectiveness and course evaluation; Current faculty members teaching in the undergraduate program who will also support the Master or Architecture program have been recognized for their teaching, research/creative activities, and service. Some of the awards include the Illinois AIA teacher-of-the-year award, the PCI Educator-of-the-Year award, and the College of Applied Sciences and Arts Scholar-of-the-Year, Teacher-of-the-Year and Research Paper-of-the-Year awards. Faculty members have also received various awards at conferences and exhibitions.

QUALITY ASSURANCE³

13. Program/Student Learning Outcomes Assessment

13.1. Describe the program's assessment plan, which should include the following elements:

³ Quality assurance processes are those ongoing reviews that maintain program and instructional standards.

The program is designed to meet the thirty objectives currently evaluated as part of the NAAB accreditation review. Graduates from this program will satisfy education requirements for becoming a licensed architect. The assessment plan calls for the evaluation of four elements. First, the program will be reviewed periodically by NAAB to insure the program is meeting accreditation standards. Second, each student is required to produce a thesis design project that will undergo rigorous review by faculty members and professionals. A review instrument will be used to document a level of achievement for each stated objective. Third, graduates who intend to become licensed architects will be required to complete a post graduation internship experience called the Intern Development Program (IDP). A licensed practicing architect must oversee the IDP experience and make documented reports to NCARB. Upon completion of the IDP experience the intern architect must take the Architectural Registration Examination (ARE). ARE results are maintained and tabulated by NCARB for graduates from NCARB accredited programs. Fourth, follow-up surveys of graduates and employers will document preparation for employment and satisfaction.

The Head of the Master of Architecture program will prepare an annual report that includes data from the four review elements. The faculty will recommend changes and additions to the curriculum based upon this review process.

13.2. Identify measures to be used to assess and improve student learning, curriculum, and instruction.

The following assessment tools and indicators will be used to measure student success in achieving objectives of the proposed program:

- All students will be required to produce, present, and defend a thesis project. The project must include sufficient documentation to clearly present and justify the process and product.
- The program will adhere to SIUC Graduate School guidelines for grades and grade point averages. Students will be required to maintain a minimum of a 3.0 GPA. Only courses for which the grades of A, B, C, or S have been received are acceptable in fulfillment of graduate degree requirements. A graduate faculty member will counsel any student who receives a grade of C or lower in a course.
- Student work will be evaluated as part of the National Architectural Accrediting Board's (NAAB) accreditation review process of the program every six years to determine if the students are achieving the required objectives.
- The pass rate of all graduates taking the National Council of Architectural Registration Board (NCARB) examination will be reported.
- Systematic follow-up studies of both graduates and employers will be conducted.

The faculty will use all of these measures to evaluate the entire student experience from entrance expectations to the practice of architecture. Patterns that emerge will be identified and used to identify areas of both strength and weakness. Necessary modifications and additions will be incorporated to ensure the student has achieved the stated objectives of the program and is prepared to perform at the level of professional expectation.

Table I**STUDENT ENROLLMENT PROJECTIONS FOR THE NEW PROGRAM**

	Budget Year	2nd Year	3rd Year	4th Year	5th Year
Number of Program Majors (Fall headcount)	30	30	30	30	30
Annual Full-Time-Equivalent Majors	30	36	36	36	36
Annual Credit Hours in EXISTING Courses ¹	0	0	0	0	0
Annual Credit Hours in NEW Courses ¹	1080	1260	1260	1260	1260
Annual Number of degrees Awarded	0	30	30	30	30

¹Include credit hours generated by both majors and non-majors in courses offered by the academic unit directly responsible for the proposed program.

Table II**TOTAL RESOURCE REQUIREMENTS FOR THE NEW UNIT**

		Current	Budget	2 nd	3 rd	4th
		Year	Year	Year	Year	Year
1	Total Resource Requirements	\$232,750	\$432,750	\$432,750	\$432,750	\$432,750
2	Resources Available from Federal Sources ¹					
3	Resources Available from Other Non-State Sources ¹					
4	Existing State Resources ²	\$232,750	\$232,750	\$432,750	\$432,750	\$432,750
5	Resources Available through Internal Reallocation ³		\$200,000			
6	New State Resources Required ⁴					
	Breakdown: New State Resources Required					
7	FTE Staff ⁵					
8	Personal Services					
9	Equipment and Instructional Needs					
10	Library					
11	Other Support Services ⁶					

¹These lines reflect funds available (not incremental funds) from non-state sources in any given year

²Existing state resources in each successive year are equal to the sum of the previous year's existing state resources (line 4); plus resources made available through internal reallocation (line 5); plus new state resources (line 6). If state resources allocated to a program in any given year (line 4) exceed state resource requirements needed to support the program in the following year, state resource requirements should be reduced with a negative dollar adjustment on line 5. The sum of lines 2 through 6 will always equal line 1.

³Numbers can be either positive (allocated to the program) or negative (allocated away from the program).

⁴Reflects the level of state funding requested in the referenced year. Dollars reported are incremental.

⁵Reflects the number of FTE staff to be supported with requested funds. Not a dollar entry.

⁶Other dollars directly assigned to the program. Do not include allocated support services.