Florida Board of Governors

Request to Offer a New Degree Program

Florida Atlantic University University Submitting Proposal	**Spring term, 2010 (January 11, 2010)** Proposed Implementation Date
College of Architecture, Urban and Public Affairs Name of College or School	**School of Architecture** Name of Department(s)
Architecture Academic Specialty or Field	**Master of Science in Architecture (CIP 4.0201)** Complete Name of Degree (Include Proposed CIP Code)

The submission of this proposal constitutes a commitment by the university that, if the proposal is approved, the necessary financial resources and the criteria for establishing new programs have been met prior to the initiation of the program.

Date Approved by the University Board of Trustees		President	Date
Signature of Chair, Board of Trustees	Date	Provost	Date

Provide headcount (HC) and full-time equivalent (FTE) student estimates of majors for Years 1 through 5. HC and FTE estimates should be identical to those in Table 1. Indicate the program costs for the first and the fifth years of implementation as shown in the appropriate columns in Table 2. Calculate an Educational and General (E&G) cost per FTE for Years 1 and 5 (Total E&G divided by FTE).

Implementation Timeframe	Projected Student Enrollment (From Table 1)		Projected Program Costs (From Table 2)		
	HC	FTE	Total E&G Funding	Contract & Grants Funding	E&G Cost per FTE
Year 1	8	3.00*	$ 113,765	$ 0	$ 37,922
Year 2	17	12.75			
Year 3	19	10.875			
Year 4	20	11.25			
Year 5	20	11.25	$ 195,547	$ 0	$ 17,382

** This program is proposed to begin in the spring term of the first year offered, so FTE reflects only one semester of study. The program will begin in the fall term of subsequent years.*

Note: This outline and the questions pertaining to each section must be reproduced within the body of the proposal to ensure that all sections have been satisfactorily addressed.

INTRODUCTION

I. Program Description and Relationship to System-Level Goals

A. Briefly describe within a few paragraphs the degree program under consideration, including (a) level; (b) emphases, including concentrations, tracks, or specializations; (c) total number of credit hours; and (d) overall purpose, including examples of employment or education opportunities that may be available to program graduates.

The Master of Science in Architecture is a post professional masters degree aimed toward students who already hold a professional degree in architecture (B.Arch. or M.Arch.) or a related design discipline and are interested in pursuing advanced study toward a design research specialization. First professional degrees in architecture do not usually include specialization. Typically emerging professionals and scholars must pursue graduate study or specialized practice to develop these areas of expertise.

The proposed program requires students to complete at least three semesters of graduate study and earn a minimum of 36 graduate level credits. The program is to conclude with a final paper or project and a thesis document. In keeping with the tradition of advanced design education the product of the thesis projects may be substantially realized as graphic works *or* written works as appropriate to design research project. All students will be expected to submit a summary document of the project, which in the case of visual design work would include comprehensive illustrations of the thesis project along with a detailed narrative.

Students must elect one of four concentrations for their studies (b): tropical architecture; housing and urban redevelopment; history, theory, and criticism; or digital design. The concentrations in tropical architecture, which emphasizes sustainable design for hot humid climates, along with the concentrations in housing and digital design are all valuable specializations for architectural design practice and allied professions in the broader construction industries. The history, theory and criticism focus is more traditionally aimed toward career opportunities in scholarship and research although this specialization can also provide valuable experience training for work in the field of historic preservation and conservation.

With a Master of Science in Architecture graduates of this program would meet the minimum education requirements to teach part-time in architecture schools across the country, would meet the minimum requirements for many full-time positions in architecture schools. The degree would also prepare students to pursue doctoral study particularly in areas of computational design, building performance (building science), architectural history, and theory.

B. Describe how the proposed program is consistent with the current State University System (SUS) Strategic Planning Goals. Identify which goals the program will directly support and which goals the program will indirectly support. (See the SUS Strategic Plan at http://www.flbog.org/StrategicResources/)

The proposed Master of Science in Architecture supports the following State University System Goals:

A.2. Access to and production of degrees, Master's

If initiated in the 2009/10 academic year this program is projected to graduate 27 new Master's of Science in Architecture by the target date of 2012/13. This will be the only active M.S.Arch. in south Florida providing greater access to emerging professionals who wish to remain in the region during their graduate studies.

A.5. Access/diversity: minority representation in SUS graduates as percentage of expected representation

130 of 213 students in the School's upper division sequence identify themselves as ethnic minorities: 61%. This far exceeds the national average and marks FAU's School of Architecture as one of the most diverse programs in the country. Since it is expected that half of the incoming graduate students will come from the existing undergraduate program we are expecting a similar level of diversity in the graduate sequence.

Further details of the School's plans for advertising and promoting this new program to a diverse student body are outlined in item II.E. of this report.

B.3.e. Meeting statewide professional and workforce needs, Economic development: emerging technologies, Design and construction

While a supplement to the professional bachelor's degree, the proposed program will include three concentrations that are of particular importance to contemporary practice: Tropical Architecture, Housing & Urban Redevelopment, and Digital Design & Fabrication.

B.3.f. Meeting statewide professional and workforce needs, Economic development: emerging technologies, Electronic Media and Simulation

The concentration in Digital Design will include research in advanced 3d modeling, visualization, and animation. The concentration in Tropical Architecture, which includes advanced topics in sustainable design, will include research using simulation tools for optimization and analysis.

C.1. Building world-class academic programs and research capacity, Research expenditures

Since the program has been shaped around existing faculty strengths and research expertise we are expecting student projects and contributions to faculty work to expand the opportunities for pursuing funded research projects particularly with regard to the *Tropical Architecture* and *Housing and Urban Redevelopment* concentrations.

The *Digital Design* concentration will include advanced work in digital fabrication. This is an area of growing importance within the design and construction industry. We also expect to develop funding avenues in support of this work.

D. Meeting community needs and fulfilling unique institutional responsibilities

The School has developed design studio project in support of real community issues and concerns since the School's inception. This provides a valuable way to teach students about the conditions and particular characteristics of our ecology and urban fabric and also provides community groups and municipalities with ideas for future development. Students in the *Housing and Urban Redevelopment* and *Tropical Architecture* concentrations will be developing design solutions that will provide similar value to communities in the region.

INSTITUTIONAL AND STATE LEVEL ACCOUNTABILITY

II. Need and Demand

A. Need: Describe national, state, and/or local data that supports the need for more people to be prepared in this program at this level. Reference national, state, and/or local plans or reports that support the need for this program and requests for the proposed program which have emanated from a perceived need by agencies or industries in your service area. Cite any specific need for research and service that the program would fulfill.

The United States Department of Labor Statistics Occupational Handbook, 2008-09 Edition includes the following captions with regard to architecture:

> "Employment of architects is expected to grow by 18 percent between 2006 and 2016, which is faster than the average for all occupations."
>
> "Current demographic trends also support an increase in demand for architects."

Of the four proposed concentrations in the proposed Master of Science program, two are particularly well supported by this document:

> "Prospects will also be favorable for architects with knowledge of "green" design. Green design, also known as sustainable design, emphasizes energy efficiency, renewable resources such as energy and water, waste reduction, and environmentally friendly design, specifications, and materials."

The *Tropical Architecture* concentration will focus on sustainable design research particular to the needs of warm humid climates. Most existing research and 'best practices' in sustainable design – including many LEED standards – are optimized for hot arid climates or cold dry climates and so there is particular need for specialists in this area.

> "Those involved in the design of institutional buildings, such as schools, hospitals, nursing homes, and correctional facilities, will be less affected by fluctuations in the economy. Residential construction makes up a small portion of work for architects, so major changes in the housing market would not be as significant as fluctuations in the nonresidential market."

The *Housing and Urban Redevelopment* concentration will include design research pertinent to design practice for housing, workforce housing, and assisted living facilities.

source:
Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2008-09 Edition, Architects, Except Landscape and Naval, on the Internet at http://www.bls.gov/oco/ocos038.htm (visited February 13, 2009).

B. Demand: Describe data that supports the assumption that students will enroll in the proposed program. Include descriptions of surveys or other communications with prospective students.

The School of Architecture receives regular inquiries via email and phone regarding graduate study in the School of Architecture, typically one to three per month. This has been persistent for over three years. Twenty current fourth and fifth-year students attended an information session in November scheduled in response to requests for information and growing interest in graduate study.

On March 5, 2009 an online survey was posted to assess alumni interest in this new degree program. As of March 21st 35 alumni have responded. Of these, 18 expressed interested in pursuing graduate study at FAU next year, 13 expressed interested in pursuing graduate study in the next three years, and 7 additional respondents expressed general interest in graduate study in the future. Of the respondents, 26 asked for detailed information about this proposed program.

When asked about prospective interest in the proposed concentration areas 23 respondents expressed interest in Tropical Architecture; 17 expressed interest in Housing and Urban Redevelopment; 9 expressed interest in History, Theory, and Criticism; and 17 expressed interest in Digital Design and Fabrication.

The survey did include a question regarding other concentration areas of interest: 10 (28.5%) respondents answered this question. Most of the requested concentrations can be accommodated within the proposed study areas with the exception of Construction Management and Construction Administration. While these

areas have been discussed in the course of this planning process these topic areas aren't well supported by the existing full-time faculty.

A copy of the survey is included as Appendix A of this report.

C. If similar programs (either private or public) exist in the state, identify the institution(s) and geographic location(s). Summarize the outcome(s) of any communication with such programs with regard to the potential impact on their enrollment and opportunities for possible collaboration (instruction and research). Provide data that support the need for an additional program.

According to the ACSA Guide to Architecture Schools, 2008 edition, five Florida architecture schools (4 public and 1 private) currently offer graduate degrees, all of these programs are weighted heavily toward the Master of Architecture, first professional degree. The state provides very little capacity specifically aimed toward architects and designers seeking post-professional graduate study:

Florida A&M does have an MS degree on record, but this does not appear to be active and no students are currently enrolled in this program: all graduate students are first professional Master of Architecture students.

Florida International University does have a Master of Arts in Architecture on record but no students are enrolled, all graduate students are first professional Master of Architecture students.

University of Miami offers the first professional Master of Architecture only.

University of Florida offers both the Master of Architecture and a Master of Science in Architecture Studies with concentrations in architectural education, history and theory, preservation and building technology.

University of South Florida offers both a first professional and a post-professional Master of Architecture degree. Only 5 students are enrolled in the post professional degree program.

source:
ACSA Guide to Architecture Schools, 8th edition (2008 printed edition), on the Internet at: http://www.acsa-arch.org/guide_search/home.aspx (visited December 19, 2008).

D. Use Table 1 (A for undergraduate and B for graduate) to categorize projected student headcount (HC) and Full Time Equivalents (FTE) according to primary sources. Generally undergraduate FTE will be calculated as 40 credit hours per year and graduate FTE will be calculated as 32 credit hours per year. Describe the rationale underlying enrollment projections. If, initially, students within the institution are expected to change majors to enroll in the proposed program, describe the shifts from disciplines that will likely occur.

The Master of Science is a degree aimed at emerging professionals who typically have a professional degree and are seeking a background in design scholarship toward a career in academics or advanced experience towards a specialization applicable to design practice. Traditionally these programs cater to students who have already completed a professional degree, most typically the Bachelor of Architecture. In state both Florida A&M and FAU offer the Bachelor of Architecture degree, but FAU has the largest percentage of graduates. Since most are coming from FAU it is expected that a contingent of students in the proposed MS degree will consistently come from the School's own alumni: many have expressed interest in this program. In the United States approximately half of the architecture schools offer a Bachelor of Architecture degree so there is a reasonable expectation of students applying from outside of the state (both domestically and internationally) once the program has been advertised.

This program is intended to draw students specifically from architecture or, in limited cases, from allied fields of landscape or industrial design. Since FAU does not offer comparable graduate study in architecture or these allied fields it should not draw students away from any existing programs.

Regarding FTE projections: The degree requires students to take 12 credits each semester for three semesters beginning in spring 2010 for the first year of the program and in the fall semester of subsequent years. The FTE projections are conservative, taking into account that the first year of study will only include first year students and in subsequent years there will typically be first and second year students during the fall term, but only first year students in the spring term. The degree program will accommodate students undertaking more sophisticated research objectives who may require additional semesters to complete their theses, but these additional credits are not included in the projections.

E. Indicate what steps will be taken to achieve a diverse student body in this program, and identify any minority groups that will be favorably or unfavorably impacted. <u>The university's Equal Opportunity Officer should read this section and then sign and date in the area below.</u>

Considering the program's potential for interdisciplinary and interdepartmental areas of study it will be a valuable asset to this diverse university community at large as well as to the related professions such as landscape architecture, building construction, historic preservation, conservation, human health and sustainable environments, for example. Efforts will be made to partner with every level of FAU operation to attract ethnic minorities and international students.

Recruitment efforts will be extended to every member of the American Society of Collegiate Schools of Architecture (ASCA) but particular attention will be given to national and state Historic Black Colleges and Universities (HBCU) such as Florida Memorial University, Bethune Cookman University and Florida Agriculture and Mechanical University (FAMU).

There are several organizations and associations within the Architecture profession where information about the program can be placed. The American Institute of Architects Students (AIAS) for example, as well as the parent professional association (AIA) will be become partners in this endeavor. The National Organization of Minority Architects (NOMA) and the student affiliate chapters will also become potential partners. Each organization has a publication for placement of ads and announcements.

Financial assistance is most often necessary to assist with higher education and especially graduate studies. The FAU School of Architecture has several scholarships and fellowships each year including travel fellowships for students interested in the Study Program. Efforts will be made to increase scholarship opportunities and offerings.

Considering the program's potential for interdisciplinary and interdepartmental areas of study it will be a valuable asset to this diverse university community at large as well as to the related professions such as landscape architecture, building construction, historic preservation, conservation, human health and sustainable environments. Efforts will be made to partner with every level of FAU operations to attract ethnic minorities and international students.

Equal Opportunity Officer Date

III. Budget

A. Use Table 2 to display projected costs and associated funding sources for Year 1 and Year 5 of program operation. Use Table 3 to show how existing Education & General funds will be shifted to support the new program in Year 1. In narrative form, summarize the contents of both tables, identifying the source of both current and new resources to be devoted to the proposed program. (Data for Year 1 and Year 5 reflect snapshots in time rather than cumulative costs.)

The most significant costs of this program are the resources of reallocated faculty effort, .75 FTE in the first year of the program and 1.39 FTE in the fifth year (shown in DCU Table 4). The reallocation of staff effort is modest: .05 FTE in the first year and .08 FTE in the fifth year for technical support by the School's computer technician (A&P) and .06 FTE in the first year and .09 FTE in the fifth year for secretarial support (USPS).

Since most specialty equipment, library resources, and shop facilities already exist for the undergraduate program the only new resources listed in Table 2 are $9,360 for student assistantships and $19,000 for furniture and a projector to outfit the studio space.

The School has not had graduate students in the past: for the past several years we have been hiring fifth-year seniors (the B.Arch. degree is a five-year bachelor's degree) as course assistants: the $9,360 allocated for assistantships is comparable to the resources allotted in previous years, but with graduate students enrolled these CA positions would be assigned to Master of Science candidates. By the fifth year of the program we are hoping to increase the resources available for assistantships to at least $11,700 annually.

The only other notable resource allocation in Table 2 is $4000 in the fifth year allocated toward additional journals and reference material to support of M.S. research. While the library collection is already strong, we expect new material will be needed as the research concentrations evolve.

B. If other programs will be impacted by a reallocation of resources for the proposed program, identify the program and provide a justification for reallocating resources. Specifically address the potential negative impacts that implementation of the proposed program will have on related undergraduate programs (i.e., shift in faculty effort, reallocation of instructional resources, reduced enrollment rates, greater use of adjunct faculty and teaching assistants). Explain what steps will be taken to mitigate any such impacts. Also, discuss the potential positive impacts that the proposed program might have on related undergraduate programs (i.e., increased undergraduate research opportunities, improved quality of instruction associated with cutting-edge research, improved labs and library resources).

The program will increase the overall enrollment of graduate students in the college, particularly on the downtown Fort Lauderdale campus. In 2010 the program will begin in the spring term, but in subsequent years the program will start and end in a fall semester (first year fall, first year spring, second year fall) the impact of this would be more significant in the fall term wherein up to 20 students could be taking non-architecture electives (60 credits total) and then to a lesser degree in the spring wherein 10 students may be taking non-architecture courses (30 credits total). The four proposed concentrations would be very well supported by existing graduate courses in the other disciplines of the College (Urban and Regional Planning, Public Administration, Criminal Justice and Social Work) along with other units in the University. Since the program is small the additional student capacity is *not* expected to negatively impact other departments.

C. Describe other potential impacts on related programs or departments (e.g., increased need for general education or common prerequisite courses, or increased need for required or elective courses outside of the proposed major).

At capacity the program will include 10 students per level, 20 total. This will have no impact on general education courses nor is the compounded affect of this enrollment expected to grossly impact any other department. The most dramatic outside impact of this program may be the 20 additional cars on the Downtown Fort Lauderdale campus.

D. Describe what steps have been taken to obtain information regarding resources (financial and in-kind) available outside the institution (businesses, industrial organizations, governmental entities, etc.). Describe the external resources that appear to be available to support the proposed program.

Little progress has been made in this area, since we think it will be easier to seek industry partners to support student and faculty research, particularly in the areas of housing and tropical architecture, following the development of project proposals in these areas.

Determining appropriate partners in construction and building science are often defined by very particular characteristics of a research approach or proposal.

This spring is the second term when urban design research by students is being supported by county agencies. We are hoping to develop a pattern of annual grants to support similar work in the future. It is anticipated that design research in affordable and special needs housing, sustainable design and construction, and general tropical design methods will be valued by local agencies.

IV. Projected Benefit of the Program to the University, Local Community, and State

Use information from Table 1, Table 2, and the supporting narrative for "Need and Demand" to prepare a concise statement that describes the projected benefit to the university, local community, and the state if the program is implemented. The projected benefits can be both quantitative and qualitative in nature, but there needs to be a clear distinction made between the two in the narrative.

Benefits to the University

There is a genuine interest among alumni of the School to return to FAU for graduate study in Architecture. This program will provide a valuable opportunity for FAU Alumni of the Bachelor of Architecture program to further their relationship with FAU. By attracting students from outside of FAU and the state the program will broaden the influence of FAU within the building industry.

The addition of graduate students to the School will also provide another layer of mentoring for undergraduate students and allow current students to see a broader range of design research opportunities. By expanding the community of students conducting design research in the School new opportunities for scholarship in architecture will expand the range of publication and exposure in the field. Graduate students may also contribute to ongoing faculty research.

Benefits to the Local Community

Two of the program concentrations will provide valuable opportunities to engage real conditions within south Florida and the local communities:

The Tropical Architecture concentration is expected to provide new insights and design models for sustainable construction applicable to south Florida's subtropical climate. This program should provide better solutions and benchmarks for energy efficient design, passive cooling, and durable construction for hot humid climates, an underserved area of the "green design."

The Housing and Urban Redevelopment concentration will provide opportunities to examine several housing typologies that are of particular importance to the region including low-income housing, workforce housing, and accessible elderly housing. Additional capacity to test urban design scenarios should also be possible through this work.

Benefits to the State

These new programs will modestly increase the research capacity of the university, and therefore the state, but more importantly, this new program should help create a larger body of designers with advanced design research experience. As mentioned at the opening of this proposal, most of the architectural graduate study in the state is directed toward first-professional degree programs, which must be

V. Access and Articulation – Bachelor's Degrees Only

A. If the total number of credit hours to earn a degree exceeds 120, provide a justification for an exception to the policy of a 120 maximum and submit a request to the BOG for an exception along with notification of the program's approval. (See criteria in BOG Regulation 6C-8.014)

Not applicable.

B. List program prerequisites and provide assurance that they are the same as the approved common prerequisites for other such degree programs within the SUS (see Common Prerequisite Manual http://www.facts.org). The courses in the Common Prerequisite Counseling Manual are intended to be those that are required of both native and transfer students prior to entrance to the major program, not simply lower-level courses that are required prior to graduation. The common prerequisites and substitute courses are mandatory for all institution programs listed, and must be approved by the Articulation Coordinating Committee (ACC). This requirement includes those programs designated as "limited access."

If the proposed prerequisites ~~they~~ are not listed in the Manual, provide a rationale for a request for exception to the policy of common prerequisites. NOTE: Typically, all lower-division courses required for admission into the major will be considered prerequisites. The curriculum can require lower-division courses that are not prerequisites for admission into the major, as long as those courses are built into the curriculum for the upper-level 60 credit hours. If there are already common prerequisites for other degree programs with the same proposed CIP, every effort must be made to utilize the previously approved prerequisites instead of recommending an additional "track" of prerequisites for that CIP. Additional tracks may not be approved by the ACC, thereby holding up the full approval of the degree program. Programs will not be entered into the State University System Inventory until any exceptions to the approved common prerequisites are approved by the ACC.

Not applicable.

C. If the university intends to seek formal Limited Access status for the proposed program, provide a rationale that includes an analysis of diversity issues with respect to such a designation. Explain how the university will ensure that community college transfer students are not disadvantaged by the Limited Access status. NOTE: The policy and criteria for Limited Access are identified in BOG Regulation 6C-8.013. Submit the Limited Access Program Request form along with this document.

Not applicable.

D. If the proposed program is an AS-to-BS capstone, ensure that it adheres to the guidelines approved by the Articulation Coordinating Committee for such programs, as set forth in Rule 6A-10.024 (see Statewide Articulation Manual http://www.facts.org). List the prerequisites, if any, including the specific AS degrees which may transfer into the program.

Not applicable.

INSTITUTIONAL READINESS

VI. Related Institutional Mission and Strength

A. Describe how the goals of the proposed program relate to the institutional mission statement as contained in the SUS Strategic Plan and the University Strategic Plan.

The degree has been included in the SUS Strategic Plan. This new degree program supports the University's Strategic Plan goals 1, 2, 3, 4, and 7.

FAU Goal 1: Providing increased access to higher education

This new program will expand statewide access to advanced design study. While five Florida institutions offer the M.Arch. (first professional master's degree in architecture), only two offer the Master of Science (post-professional) degree. Particularly, this will serve students who already hold a Bachelor of Architecture degree.

FAU Goal 2: Meeting statewide professional and workforce needs

The M.S.Arch. will provide future practitioners and scholars with specialized knowledge applicable to sophisticated design practice. The concentration in tropical architecture, which will focus on sustainable building methods for subtropical climates, and the concentration in housing and urban redevelopment respond to urgent needs in our state and region.

FAU Goal 3: Building world-class academic programs and research capacity

The research foci of the Master of Science are carefully aligned to faculty scholarship and expertise so that the design research conducted by students can be supported and support expanding research initiatives in the School of Architecture.

FAU Goal 4: Meeting community needs and fulfilling unique institutional responsibilities

Graduate student research in the area of housing and urban redevelopment will allow us to expand on existing work in design studios designing in response to neighborhood, community, and municipality needs (and calls for assistance).

While there is growing interest in Florida regarding sustainable design many of the standards and best practices of LEED are optimized to cold climates and are not well suited to our building conditions. Progress in this area would be valuable throughout the building industry of Florida. Sustainable design detailing for humid subtropical climates is undeveloped compared to building science research for cold climates and hot dry climates. While subtropical sustainability is taught in the undergraduate curriculum, graduate student research should allow for expanded results and publications in this area.

FAU Goal 7: Increasing the University's visibility

Since its inception the School of Architecture has served a valuable role in the community by undertaking design studies founded upon real projects, real community concerns, and actual needs for building design in South Florida. The addition of graduate study and graduate design projects to the School will only expand the breadth and depth of these design interventions. This will also expand the opportunity for publications (both scholarly and public) related to this work.

B. Describe how the proposed program specifically relates to existing institutional strengths, such as programs of emphasis, other academic programs, and/or institutes and centers.

The M.S.Arch. will be based in the School of Architecture and has been written to build upon existing strengths of the facilities and faculty. We expect that students in this program will contribute to projects in at least two of the existing centers in the College of Architecture, Urban and Public Affairs: the Center for the Conservation of Architectural and Cultural Heritage (CCACH) and the Broward Community Design Collaborative (BCDC).

C. Provide a narrative of the planning process leading up to submission of this proposal. Include a chronology (table) of activities, listing both university personnel directly involved and external individuals who participated in planning. Provide a timetable of events necessary for the implementation of the proposed program.

This planning process began in the summer of 2007 with a retreat of the School of Architecture faculty. Initial planning and development was conducted between June 2007 and May 2008 by the whole full-time faculty. Since August of 2008 a faculty committee chaired by Professor Ralph Johnson and including Professor Deirdre Hardy, Associate Professors Anthony Abbate and Aron Temkin, and Assistant Professor Philippe d'Anjou have been developing the curriculum and new course materials, writing catalog text, developing the admission process, planning for faculty scheduling and assignments, and completing this proposal.

The following timetable is planned for the submission of this proposal and the initiation of the new program:

Planning Process

Date	Participants*	Planning Activity
Spring 2004	Deirdre Hardy, Ralph Johnson, Peter Magyar	Development of graduate level elective courses
April 2006	Aron Temkin, Rosalyn Carter (Dean)	Initial discussion about M.S.Arch. program and resources
October 2006	Rosalyn Carter (Dean), Jerry Clinton (Assistant Dean), Skip Cory-Scruggs (Associate Dean), Michelle Hawkins (Director, Social Work), David Kalinich (Associate Dean), Hugh (Director, Public Administration), Jaap Vos (Director, Urban & Regional Planning), Aron Temkin (Director, Architecture)	Discussed adding the Master of Science program at College Executive Committee meeting.
May 19, 2007	Anthony Abbate, Philippe d'Anjou, Deirdre Hardy, Ralph Johnson, Francis Lyn, John Sandell, Aron Temkin, Mate Thitisawat	School of Architecture faculty retreat regarding new master's degree program
May 21-25, 2007	Anthony Abbate, Philippe d'Anjou, Deirdre Hardy, Ralph Johnson, Francis Lyn, John Sandell, Aron Temkin, Mate Thitisawat	Course sequence drafted, v.1.
September 24, 2008	Anthony Abbate, Jean-Martin Caldieron, Philippe d'Anjou, Deirdre Hardy, Ralph Johnson, Vladimir Kulic, Francis Lyn, John Sandell, Aron Temkin, Mate Thitisawat	Faculty agree to develop preliminary course outlines for core courses.
August 20, 2008	Anthony Abbate, Jean-Martin Caldieron, Philippe d'Anjou, Deirdre Hardy, Henning Haupt, Ralph Johnson, Vladimir Kulic, Francis Lyn, John Sandell, Aron Temkin, Mate Thitisawat, Emmanouil Vermisso	Graduate Program Committee established to develop courseware, admissions guidelines, catalog copy, and complete new program paperwork.
November 12, 2008	Anthony Abbate, Philippe d'Anjou, Deirdre Hardy, Ralph Johnson, Aron Temkin	Review of syllabi and course outlines for new required lectures and studio courses, review of catalog text.
February 2009	Anthony Abbate, Philippe d'Anjou, Ralph Johnson, Aron Temkin	Editing and final composition of new required courses.
February 9, 2009	Aron Temkin	New course applications submitted to chair of College's GPC for review.
February 11, 2009	Aron Temkin, Elwood Hamlin	Comments returned to School.
February 13, 2009	Aron Temkin, Philippe d'Anjou, Anthony Abbate	New courses resubmitted to College GPC with revisions.
March 5, 2009	Rosalyn Carter (Dean), Jerry Clinton (Assistant Dean), Aron Temkin	Final review of new program proposal.

** All participants are full-time faculty within the School of Architecture unless noted otherwise*

Events Leading to Implementation

Date	Implementation Activity
February 13, 2009	Submit new graduate course applications to College Graduate Programs Committee (GPC)
February 23, 2009	Final review of New Degree Proposal by School committee
March 2, 2009	Submit Proposal draft to College Graduate Program Committee for Review
March 25, 2009	Submit Proposal to Academic Affairs, EEO, and University Librarys for Review
March 25, 2009	Transmit Proposal and courses to University Grad. Programs Committee (UGPC)
April 1, 2009	UGPC April Meeting, Review New Degree Proposal
April 14, 2009	University Faculty Senate (UFS) Steering Committee, Review New Degree Proposal
April 24, 2009	UFS Meeting, Review New Degree Proposal
May 27, 2009	Review of New Degree Proposal by FAU Board of Trustees
June 1, 2009	Post information about new program on SoA website with start date in Spring 2010
August 7, 2009	Submit schedule additions (as may be necessary) to registrar.
September 11, 2009	Postmark deadline for Fall 2009 admissions (first entering class)*
Sept. 18 -Oct. 2, 2009	Review of graduate application portfolios
October 23, 2009	Letter of admissions decisions mailed and emailed
January 11, 2010	First day of classes with initiating clas of M.S. Arch. students

** Applications will be due in March of subsequent years.*

VII. Program Quality Indicators - Reviews and Accreditation

Identify program reviews, accreditation visits, or internal reviews for any university degree programs related to the proposed program, especially any within the same academic unit. List all recommendations and summarize the institution's progress in implementing the recommendations.

The Bachelor of Architecture degree is reviewed every six years by the National Architectural Accreditation Board (NAAB). The School is responsible for annual reporting with regard to progress, advancements, and changes to this program, particularly with regard to *Causes for Concern* and any *Conditions Not Met* as listed in the Visiting Team Report.

The last accreditation visit was in 2005: at that time the School of Architecture was granted a six year re-accreditation (the complete term) with a focus evaluation in the third year. Since the focus evaluation team was not able to visit in fall of 2008 the visit was conducted in January of 2009.

In the summary of the Focus Visit team report, dated January 30, 2009, they remarked, "The Focus Evaluation Visiting Team appreciated the hospitality provided by the program Director and college Dean and also for the comprehensiveness in responding to the Conditions Not Met and Causes for Concern since the 2005 visit. The visiting team observed a young program that was making excellent use of limited resources but with great effect."

In a letter dated March 2, 2009 Douglas Steidl, the President of NAAB, states, "…the Directors of the National Architectural Accrediting Board (NAAB) have determined that the changes made or planned by the program to remove the identified deficiencies are satisfactory. Therefore there is no change to the term of accreditation."

What follows are the Conditions Not Met and Causes for Concern raised in the 2005 Visiting Team Report:

***Causes for Concern* in the March 2005 Visiting Team Report**

"Given that the University has recently completed a new strategic plan the School of Architecture needs to take its internal faculty discussions regarding their strategic mission and record them so they can be aligned with that of the University."

"As noted in the previous visiting team's report, development of additional resources continues to be a concern. Intermittent staffing and lack of an alumni base from a young program have prevented resolution of this concern. The University has developed a plan in conjunction with the College of Architecture, Urban and Public Affairs to address development activities but that plan has yet to be implemented."

"The program's representation within the College of Architecture, Urban and Public Affairs should be strengthened to be more effectively secure adequate resources to assure conformance with conditions for accreditation."

"There is a lack of a University, College, or School plan to reconcile the growing student populations with the fixed physical resources and dwindling financial resources."

"While Human Resource Development was deemed met, the program has little to no funding available for faculty research, scholarship, release time and creative activities. Faculty who need to travel outside of Fort Lauderdale for their development and growth opportunities pay for most, if not all, of their expenses."

Compliance with the Conditions for Accreditation

5. Human Resources

1. "While there have been some new faculty added within the last year directly ahead of the Accreditation

Team's visit, the School's total enrollment, relative to the number of faculty, yields a ratio that requires faculty to stretch their time and energy in order to support a professional degree program in Architecture"

2. "The administration and faculty of the School are supported by one full-time assistant. This person, who is extremely dedicated and competent, cannot fully support needs for the entire School particularly in light of the growing student population and resulting increasing administrative load."

3. "The lack of sufficient teaching faculty requires the Director to take on additional teaching responsibilities at the expense of administrative duties."

8. Physical Resources

1. "The program at FAU is particularly unique in the number of working students it attracts. As a result, the students prefer to maintain part-time student status. To accommodate these working students, design studios are taught after the "normal" workday ends. This reality of the student population distorts the School's Full Time Equivalent (FTE) population so the true picture of the pressure put upon its facilities is difficult to ascertain.

2. Particularly hard pressed is studio space where each student is provided a desk, but little else. In order to provide a studio experience for the multitude of students entering the program consideration is being given to extraordinary scheduling approaches including a "hot desk", which would deny dedicated studio space to each student. Such approaches may not comply with NAAB Conditions and Procedures should they be implemented."

3. When support spaces other than the design studios are considered, their number, type and location are not appropriate for a program serving and enrollment of this size. In particular, jury spaces do not meet the school's need. Building operations do not support the students well, as illustrated by the mechanical systems being turned off while students are occupying studio space. The School, College, and University need to clearly define how they intend to reconcile physical resources provided, particularly studio space, with the continuing growth of the student population."

10. Financial Resources

"The program budget has not kept pace with the growth in student enrollment. This is particularly true when the Architecture program is compared with other professional programs at FAU."

12.19 Life Safety Systems

"There is no evidence in written work and insufficient evidence literally illustrating in graphic work to demonstrate that information about this important aspect of architectural design is provided to students to make decisions relative to this Student Performance criteria."

The 2009 Focus Evaluation Team Report cited satisfactory progress with regard to all Causes for Concern and determined that all Conditions Not Met in 2005 were now "Met" and in compliance.

VIII. Curriculum

A. Describe the specific expected student learning outcomes associated with the proposed program. If a bachelor's degree program, include a web link to the Academic Learning Compact or include the document itself as an appendix.

Students in this program are expected to develop advanced research and design skills toward the following learning outcomes:

- Understanding of research methods pertinent to design, theory, and criticism in the qualitative or quantitative methods of analysis as appropriate

- A foundation in the literature pertaining to the concentration area (housing and urban redevelopment; tropical architecture; history, theory, and criticism; or computational design)
- The ability to construct a viable research plan.
- The ability to identify a significant research question pertinent to the study of design and identify appropriate methods of testing or evaluation.
- The ability to effectively communicate thesis project results through oral presentation, writing, and graphic representation.

B. Describe the admission standards and graduation requirements for the program.

Prospective students will be required to have at least a 3.0 GPA from their prior degree, a minimum combined score of 1000 on the GRE, submit a portfolio of design work and a statement of research intent. These are widely used standards for graduate admissions in the discipline.

Students meeting the minimum requirements for admission will be ranked as a product of their GPA, their GRE score, the faculty Admissions Committee's evaluations of the portfolio and their statement of research intent. These criteria will be weighted as per the following proportions: 20% GPA, 15% GRE, 45% portfolio, and 20% research intent statement.

The room intended for the graduate design studio can accommodate up to 20 students. The program will aim to admit and enroll up to 10 students per academic year.

C. Describe the curricular framework for the proposed program, including number of credit hours and composition of required core courses, restricted electives, unrestricted electives, thesis requirements, and dissertation requirements. Identify the total numbers of semester credit hours for the degree.

The Master of Science in Architecture is a post professional degree aimed toward students interested in pursuing advanced study toward a design research specialization. Students must choose one of four concentrations for their studies: Tropical Architecture; Housing and Urban Redevelopment; History, Theory, and Criticism; or Digital Design and Fabrication.

The program requires students to complete at least three semesters of graduate study, earn a minimum of 36 graduate level credits, and complete a thesis paper or thesis project. Whether the thesis project is primarily graphic or written will be particular to each project objective. It is expected that projects in the areas on Digital Design, for example are more likely to conclude with 3d visualization or built artifacts whereas a design theory project may be more appropriate as a written treatise. If projects do conclude is built or graphic works a summary publication with annotated images and a narrative of the method will be required.

In the first semester students must take two required lecture courses and two electives. *Design Research Paradigms and Methods* provides an introduction to design research techniques. *Design Research Seminar* is a survey course that is team taught by faculty in all four concentration areas. Students are exposed to design projects and research projects from each area, the different methods and sources are discussed, and the students are expected to complete one project pertaining to each focus area. Students must confirm their project concentration by the conclusion of the term.

In the second term students take two elective courses that support their concentration and take the 6 credit *Design Research Studio*. This studio course is conducted by each student's thesis advisor, a faculty member appropriate to the student's concentration area, and is intended to provide a foundation of research leading to a specific design hypothesis.

In the third term students take one elective course and one 9 credit Design Thesis Studio. The *Design Thesis Studio* is conducted with oversight by each student's thesis advisor. During this term students are expected to develop a coherent thesis that tests the hypothesis developed during the Design Research Studio. If a student requires additional semesters to complete the thesis they may register for this class again for 6 to 12 credits in subsequent terms.

D. Provide a sequenced course of study for all majors, concentrations, or areas of emphasis within the proposed program.

Course sequence - 36 credits total
A table illustrating the course sequence is attached to this application as Appendix B.

Semester one: 12 credits
Design Research Paradigms & Methods (ARC 6368) - 3 credits
Design Research Seminar (ARC 6367) - 3 credits
Elective, graduate level, in Architecture - 3 credits
Elective, graduate level, in Architecture or other - 3 credits

Semester two: 12 credits
Design Research Studio: 6 credits
Elective, graduate level, in Architecture - 3 credits
Elective, graduate level, in Architecture or other - 3 credits

Semester three: 12 credits
Design Thesis Studio: 9 credits
Elective, graduate level, in Architecture or other - 3 credits

E. Provide a one- or two-sentence description of each required or elective course.

REQUIRED COURSES

Design Research Paradigms and Methods (ARC 6368) 3 credits
Prerequisite: Graduate standing
Corequisite: Design Research Seminar ARC 6367
The course aims to introduce students to the objectives, norms, forms, methods, expectations, and consequences of research and to examine the specific issues of research in design and architecture.

Design Research Seminar (ARC 6367) 3 credits
Corequisite: Design Research Paradigms and Methods ARC 6368
This course introduces students to the research concentrations of the graduate program and introduces the tools and processes needed to construct a research plan with a well-defined research problem, question, and method.

Design Research Studio (ARC 6970) 6 credits
Prerequisite: Design Research Seminar (ARC 6367), Design Research Paradigms and Methods (ARC 6368)
Advanced design research is conducted through independent student projects leading to a concise design hypothesis and an approved research plan in preparation for the design thesis.

Design Thesis Studio (ARC 6972) 6 to 12 credits
Prerequisite: Design Research Studio (ARC 6970)
Advanced design research is conducted through independent student projects leading to an original and distinctive design research project and thesis.

ELECTIVE COURSES

M.S.Arch. candidates must take at least 6 credits of ARC electives (5XXX or higher) and 9 credits of ARC or non-ARC electives (5XXX or higher).

Literature and Criticism in Architecture (ARC 5221) 3 credits

An investigation of the ways architecture is encompassed in other art fields and humanities including a critical analysis of the major theoretical positions influencing contemporary architectural thought.

Advanced Media Applications for Architectural Design (ARC 6187) 3 credits

Prerequisite: Graduate standing

This course examines how digital tools may be applied to design analysis, systems simulation, and advanced design visualization. Students will be exposed to several different modeling and analysis packages and then complete several instructional exercises. Students will also develop a project objective to be resolved as a detailed model, user interface, or system simulation.

Ethics in Architecture (ARC 6203) 3 credits

Prerequisite: Graduate standing

Using the AIA Code of Ethics as a guide, course examines standards of ethical conduct in a variety of situations such as those found in a contemporary architectural practice. Studying a variety of case studies concerning topics such as conflicts of interest, safety, and confidentiality conveys an understanding of the profession's standards of conduct and ethics so that students are prepared to uphold those standards.

Contemporary Architecture Theory (ARC 6209) 3 credits

Prerequisite: Graduate standing

An introduction to the basic frameworks of contemporary critical and cultural theory using examples of contemporary architecture as the vehicles of study, either as material artifacts or theoretical premises.

Introduction to Urban Design (ARC 6305) 3 credits

This course examines various urban theories and architectural conceptualizations, and their relationship to the spatial structure of the urban environment. Lectures and seminar presentations will permit investigation and critical evaluation of urbanism as seen through various professional contexts and philosophies. By situating the analyses in the wider domain of culture, architecture, planning and governance, discussions will range from personal to institutional.

Design in Urban Redevelopment (ARC 6365) 3 credits

Prerequisite: Graduate standing

Beginning with an overview of the processes that control change in the built environment, the course analyzes current and future opportunities for Broward County as they are influenced by the wide range of decision-makers including financiers and public agencies. Students will develop design concepts that meet public goals and offer enhanced opportunities for the improvement of the quality of life.

Sustainability and Tropical Architecture (ARC 6598) 3 credits

Prerequisite: Graduate standing

Introduction to sustainable design concepts related to the climactic conditions of the local region. Topics cover old/new technologies, protection of the environment, health and safety of occupants, and durability of materials that are affected by the tropical climate. Students develop a set of design guidelines incorporating these concepts in response to a location in the south Florida/Caribbean region.

Design for Human Health (ARC 6691) 3 credits

Prerequisite: Graduate standing

Investigation the "Consensual Essence of Architectural Spaces." Readings examine ancient myths, non-Western beliefs and building practices, and recent achievements of medical science and brain research. Guest lecturers, class discussions, and student research help answer the course's fundamental question: Is

architecture and its product—a building—capable of influencing the prevention and cure of illnesses in a positive way?

Historic Building Documentation (ARC 6810) 3 credits
Prerequisite: Graduate standing
This course teaches methods of documentation and assessment for historic buildings through research, analysis, measurement, drawing, and photography. Course relies on standards and guidelines of both the National Park Service and the Historic American Buildings Survey (HABS) for fieldwork, formatting, and archival preparation of documents.

F. For degree programs in the science and technology disciplines, discuss how industry-driven competencies were identified and incorporated into the curriculum and identify if any industry advisory council exists to provide input for curriculum development and student assessment.

In the field of architecture industry driven-standards are mandated and defined by the National Architectural Accrediting Board (NAAB). This is the discipline's only accrediting body and its board includes representatives of the academy and the profession. NAAB only accredits professional degree programs: this is a post-professional degree that follows after the accredited Bachelor of Architecture already offered by the School. No other discipline-particular agency has oversight over Master of Science in Architecture degrees.

G. For all programs, list the specialized accreditation agencies and learned societies that would be concerned with the proposed program. Will the university seek accreditation for the program if it is available? If not, why? Provide a brief timeline for seeking accreditation, if appropriate.

The academic society in architecture is the Association of Collegiate Schools of Architecture (ACSA). The other organizations in the discipline are the American Institute of Architecture (AIA), the National Council of Architecture Registration Boards (NCARB), and the National Architectural Accreditation Board (NAAB). NAAB is the only agency that accredits architecture degrees in the United States and they do not accredit post-professional degrees.

Both NAAB and ACSA have been informed of the School's work to develop this new program. The School's Director is a member of the AIA Florida Board of Directors, along with the heads of the other Florida architecture schools: the AIA will provide a venue for advertising this new program to design professionals in the state following its approval.

H. For doctoral programs, list the accreditation agencies and learned societies that would be concerned with corresponding bachelor's or master's programs associated with the proposed program. Are the programs accredited? If not, why?

Not applicable.

I. Briefly describe the anticipated delivery system for the proposed program (e.g., traditional delivery on main campus; traditional delivery at branch campuses or centers; or nontraditional delivery such as distance or distributed learning, self-paced instruction, or external degree programs). If the proposed delivery system will require specialized

services or greater than normal financial support, include projected costs in Table 2. Provide a narrative describing the feasibility of delivering the proposed program through collaboration with other universities, both public and private. Cite specific queries made of other institutions with respect to shared courses, distance/distributed learning technologies, and joint-use facilities for research or internships.

The anticipated delivery system for the proposed program is based on a traditional Architectural program and consistent with the format of the existing professional FAU program. There will be an advanced studio program with dedicated space for each student. While the proposed Master of Science in Architecture will not be a professional degree program it will however follow established protocol of the typical design studio approach.

There will also be a thesis requirement. The thesis will begin in the second semester with the development of a proposal by the student and completed in three semesters. The student will have the opportunity to take full advantage of the myriad of related disciplines and subject matter embraced by the School of Architecture faculty as well as the College of Architecture, Urban and Public Affairs. In addition, limited required courses as well as elective courses are structured to facilitate student research.

The opportunity for potential collaboration with other universities is already incorporated in the University and the School of Architecture Study Abroad Programs. The School has established a working relationship with Anhalt University of Applied Science and their graduate program, the Dessau Institute of Architecture.

IX. Faculty Participation

A. Use Table 4 to identify existing and anticipated ranked (not visiting or adjunct) faculty who will participate in the proposed program through Year 5. Include (a) faculty code associated with the source of funding for the position; (b) name; (c) highest degree held; (d) academic discipline or specialization; (e) contract status (tenure, tenure-earning, or multi-year annual [MYA]); (f) contract length in months; and (g) percent of annual effort that will be directed toward the proposed program (instruction, advising, supervising internships and practica, and supervising thesis or dissertation hours).

Please see Table 4

B. Use Table 2 to display the costs and associated funding resources for existing and anticipated ranked faculty (as identified in Table 2). Costs for visiting and adjunct faculty should be included in the category of Other Personnel Services (OPS). Provide a narrative summarizing projected costs and funding sources.

The staffing requirements for the new Masters program can be supported with existing faculty. The proposed program is designed to be compact and efficient: staffing the required courses in the graduate program does not impact faculty assignments for required lecture courses in the undergraduate program. While a small number of faculty will begin teaching required and elective lecture courses, the most significant faculty role will be through graduate studio advising distributed widely across the faculty. The one new faculty line noted in Table Two is anticipating the retirement of Professor Ralph Johnson in 2011.

Typically two to four full time faculty members will have course assignments that include required graduate seminars and electives. Faculty will be assigned to these courses in place of undergraduate elective classes. By redistributing the enrollment from these courses to other elective courses we do not anticipate a decline in undergraduate student access or total enrollments.

C. Provide the number of master's theses and/or doctoral dissertations directed, and the number and type of professional publications for each existing faculty member (do not include information for visiting or adjunct faculty).

Faculty as Noted in Table 4	Master's Theses Advised?	Evidence of Scholarly Productivity
Anthony Abbate	*	1 book, 1 book chapter, 1 book edited, 1 editorial board, 4 peer reviewed papers, 2 non-refereed articles, 1 keynote address, 1 national design award, 2 regional design awards, 17 local design awards
Jean-Martin Caldieron	5	1 book edited, 1 editorial board, 2 journal articles, 5 peer reviewed papers, 1 non-refereed article, 6 keynote addresses, 1 national design competition prize, 3 regional design competition prizes, 1 regional design award
Philippe d'Anjou	*	1 book chapter, 3 journal articles, 6 peer reviewed papers
Deirdre Hardy	1	1 conference proceedings edited, 6 journal articles, 2 other peer reviewed papers, 2 invited articles, 1 national design competition prize, 1 local design award
Henning Haupt (new hire)	*	1 peer reviewed paper
Ralph B. Johnson	*	1 editorial board appointment, 20 peer reviewed papers, 2 keynote addresses
Vladimir Kulic (new hire)	*	4 book chapters, 3 journal articles, 11 invited articles
Francis Lyn	*	1 conference proceedings edited, 7 peer reviewed papers, 1 national design competition prize, 1 regional design award, 2 local design awards
John Sandell	*	4 peer reviewed papers, 1 invited article, 3 regional design awards
Aron Temkin	*	1 book edited, 5 peer reviewed papers, 4 non-refereed articles, 1 regional design award, 3 local design awards
Mate Thitisawat	*	2 journal articles, 6 other peer reviewed papers
Emmanouil Vermisso (new hire)	*	4 peer reviewed papers

** The proposed degree would be the first graduate program in the School. Faculty have not had the opportunity to advise masters students while at FAU.*

D. Provide evidence that the academic unit(s) associated with this new degree have been productive in teaching, research, and service. Such evidence may include trends over time for average course load, FTE productivity, student HC in major or service courses, degrees granted, external funding attracted, as well as qualitative indicators of excellence.

Research productivity

The School of Architecture faculty's research productivity increased by 150% between the 2004/05 and 2005/06 academic year and has since consistently included 30+ publications, presentations, and exhibits per year. While the faculty continues to earn design awards for excellence, the most recent being a citation by the Florida Association of the American Institute of Architects for a "Luminous Sign", a design research project by Assistant Professor John Sandell for the Piazza Duca d'Aosta in Milan, Italy. This increase also includes a book publication, "Subtropical Sustainable: A Context Sensitive Design Approach to Redevelopment in Broward County" [ISBN# 978-0-615-25556-9], and wider publication in primary architecture journals.

FTE productivity and degrees awarded

The Schools FTE production increased considerably between 2002 and 2007 due to increased enrollment. Since the undergraduate program became limited access in 2007[1], FTE's have dropped modestly from 167.6 when the School's headcount was 352 to last year when the FTE was 151.3 and the headcount was 280. It is expected that the FTE productivity of the undergraduate program will not change considerably from year to year unless additional design studio facilities become available. Enrollment interest as indicated by the number of architecture applicants has consistently been between three and four times the amount of space available in the lower division and upper division undergraduate design studios.

Due to more careful management of course availability and advising the number of graduates per year has also increased from 31 students in 2003/04 to a high of 75 in 2006/07 and 59 during the past academic year.

A table of FTE production and graduation rates is included as Appendix C.

X. Non-Faculty Resources

A. Describe library resources currently available to implement and/or sustain the proposed program through Year 5. Provide the total number of volumes and serials available in this discipline and related fields. List major journals that are available to the university's students. Include a signed statement from the Library Director that this subsection and subsection B have been reviewed and approved for all doctoral level proposals.

The FAU School of Architecture is in a unique partnership with the Broward County Library System wherein the Library serves as the repository of the School's architectural books and references. This partnership was established as one of the provisions of the School's location in Broward County. The Library is located only one block away from FAU's Fort Lauderdale campus, where the School of Architecture is based.

As a condition of the National Architectural Accrediting Board (NAAB) sanction, the School of Architecture had to demonstrate ownership of at least 5,000 volumes in its library. That number has increased over the School's twelve years of existence to over 21,000 books with some 17,000 titles. A total of 23,000 items include books, DVD's, videos, and other resources comprise the School's total library collection. There is also a rare book section included in this collection.

[1] As recommended by our accrediting body, NAAB, due to enrollment well beyond the capacity of the design studios and support space.

There are 73 serial publications in architecture and design related fields included in the current library collection. 57 of these are in Architecture and 16 are in related design disciplines. These secondary subjects include interior design, decoration, printing, and graphic arts.

Of these, the major journals include:

- Journal of Urban Design
- Journal of Architectural and Planning Research
- Architectural Research Quarterly (ARQ)
- Journal of the Society of Architectural Historians (JSAH)
- International Journal of Architectural Computing (IJAC)
- Journal of Architectural Education (JAE)
- RIBA Journal

B. Describe additional library resources that are needed to implement and/or sustain the program through Year 5. Include projected costs of additional library resources in Table 3.

The library resources in the Broward Main Library, which houses a majority of the University's architecture collection is extensive enough to support the initial demands of the graduate program. The existing annual expenditures for architecture materials are expected to accommodate most of the modest shift in reference texts. As indicated in Table 2, four thousand dollars is budgeted in year five of the program to accommodate additional scholarly journals and online databases as may be required to support the research concentrations.

_____ _____

Library Director Date

C. Describe classroom, teaching laboratory, research laboratory, office, and other types of space that are necessary and currently available to implement the proposed program through Year 5.

Space, room AT 417 in the Askew Tower, has already been dedicated to this prospective program. The initial furnishings required for this graduate design studio have been taken from existing surplus in the university. Due to the modest class sizes lecture courses should be easily accommodated in FAU's Downtown Fort Lauderdale campus. Class scheduling for large (over 50 students) lecture sections are much more limited on this campus, but will not be needed to support this program.

The most important new space required for this program will be room to house the graduate design studio. The Vice President for Broward campuses has already committed two rooms in the Askew Tower building (AT 417 and 417A) for this purpose.

No additional office space is needed for this program as planned. If demand is high enough in the future and more studio space were to become available additional faculty and office space may be needed.

D. Describe additional classroom, teaching laboratory, research laboratory, office, and other space needed to implement and/or maintain the proposed program through Year 5. Include any projected Instruction and Research (I&R) costs of additional space in Table 2. Do not include costs for new construction because that information should be provided in response to X (J) below.

Classroom space, studio space, and faculty offices for this program already exist. Due to the compact size of the program the staffing requirements are accommodated through a modest redistribution of existing faculty lines and a change of assignments to include project studio advising (for 2nd semester students) and thesis advising (for 3rd semester students). One additional adjunct faculty position in the fall and spring ($10,320), to support a faculty member displaced from an undergraduate course, may be needed.

E. Describe specialized equipment that is currently available to implement the proposed program through Year 5. Focus primarily on instructional and research requirements.

The School of Architecture maintains a woodworking shop on the 7th floor of the Higher Education Complex with hand tools, power tools and machinery appropriate to model building, furniture-scale design and assembly, and building-scale detail studies. This is supplemented by a second shop space on the 8th floor which includes small machinery for model building, a panel saw (for cutting large boards) and a 48"x60" CNC router table for digital fabrication.

There are two tabloid size laser printers, three tabloid size color inkjet printers, and three large wide format plotters for outputting large design drawings and illustrations. All of these printing devices are networked and therefore available to all the architecture students on the Downtown campus.

The School maintains seven computers in the upper division design studios with a broad range of software titles for graphics, drafting, design, digital modeling, videography, and animation. Comparable software is available in the university computer lab on the Downtown campus (HE 611) and in one of the teaching labs (AT 826). Most architecture students own or purchase computers: design students use these shared resources when they need specialized software or computers for faster rendering.

In the spring (2009) the School plans to purchase a laser cutter for additional digital fabrication work and model building. This will not be networked, but will be available students senior level and graduate students.

The School may purchase an additional plotter for the graduate design studio (Askew Tower 417) if required to support student volume.

F. Describe additional specialized equipment that will be needed to implement and/or sustain the proposed program through Year 5. Include projected costs of additional equipment in Table 2.

Most of the required equipment exists in the School. $19,000 has been indicated in Table 2, to support the addition of a ceiling mounted projector in the graduate studio, 3 dedicated computers, and one new wide-format printer.

G. Describe any additional special categories of resources needed to implement the program through Year 5 (access to proprietary research facilities, specialized services, extended travel, etc.). Include projected costs of special resources in Table 2.

Not applicable.

H. Describe fellowships, scholarships, and graduate assistantships to be allocated to the proposed program through Year 5. Include the projected costs in Table 2.

The School typically supports two .5 FTE course assistants per academic year. In 2008/09 we had three due to larger lecture sections. In the past these students have been fifth-year architecture students (the Bachelor of Architecture is a five-year program) since there were no graduate students in the School. Following the initiation of the Master of Science program first and second year graduate students would fill these positions.

We are trying to raise additional funds to support three additional graduate assistants for a total of 2.5 FTE annually. These additional course assistants will benefit both the graduate and undergraduate programs.

I. Describe currently available sites for internship and practicum experiences, if appropriate to the program. Describe plans to seek additional sites in Years 1 through 5.

Not applicable.

J. If a new capital expenditure for instructional or research space is required, indicate where this item appears on the university's fixed capital outlay priority list. Table 2 includes only Instruction and Research (I&R) costs. If non-I&R costs, such as indirect costs affecting libraries and student services, are expected to increase as a result of the program, describe and estimate those expenses in narrative form below. It is expected that high enrollment programs in particular would necessitate increased costs in non-I&R activities.

Not applicable.

Appendix A

Alumni survey regarding the proposed Master of Science in Architecture program.

FAUSoA Master of Science in Architecture

1. Alumni Survey for M.S. Architecture

The School of Architecture is seeking approval for a new Master of Science in Architecture program that we plan to initiate in Spring of 2010. This three-semester, thirty-six credit program is intended to provide emerging and experienced professionals an opportunity to study toward advanced specialization in the following areas: Tropical Architecture; Housing and Urban Redevelopment; History, Theory, and Criticism; and Digital Design.

Please assist us in gauging alumni interest in this program by completing this short survey.

1. Would you be interesting in pursuing graduate study at FAU?

	Strongly Agree	Agree	Disagree	Strongly Disagree
Yes, next year.	○	○	○	○
Yes, in the next three years.	○	○	○	○
Yes, in the future, but I don't know when.	○	○	○	○

2. Are you planning to apply to any other graduate programs in the state?

- ○ Yes, for next year.
- ○ Yes, in the future.
- ○ No, not at this time.

3. Are you planning to apply to any other graduate programs outside of Florida or the United States?

- ○ Yes, next year.
- ○ Yes, in the future.
- ○ No, not at this time.

4. The M.S.Arch. program has been designed around four concentrations of study. If you are considering this new program which of these topic areas are of interest to you?

- ☐ Tropical Architecture (tropical sustainability)
- ☐ Housing and Urban Redevelopment
- ☐ History, Theory, and Criticism
- ☐ Digital Design

5. Are there other concentrations you would be interested in studying that are not included in the current program plan? Is so, please comment below.

6. If you would you like to receive more detailed information about the new Master of Science in Architecture program please include an email address below.

FAUSoA Master of Science in Architecture

1. Would you be interesting in pursuing graduate study at FAU?

	Strongly Agree	Agree	Disagree	Strongly Disagree	Response Count
Yes, next year.	**60.0% (12)**	30.0% (6)	0.0% (0)	10.0% (2)	20
Yes, in the next three years.	35.7% (5)	**57.1% (8)**	7.1% (1)	0.0% (0)	14
Yes, in the future, but I don't know when.	33.3% (3)	**44.4% (4)**	22.2% (2)	0.0% (0)	9
				answered question	**35**
				skipped question	**0**

2. Are you planning to apply to any other graduate programs in the state?

	Response Percent	Response Count
Yes, for next year.	22.9%	8
Yes, in the future.	17.1%	6
No, not at this time.	**60.0%**	**21**
	answered question	**35**
	skipped question	**0**

3. Are you planning to apply to any other graduate programs outside of Florida or the United States?

	Response Percent	Response Count
Yes, next year.	2.9%	1
Yes, in the future.	20.0%	7
No, not at this time.	**77.1%**	**27**
	answered question	**35**
	skipped question	**0**

4. The M.S.Arch. program has been designed around four concentrations of study. If you are considering this new program which of these topic areas are of interest to you?

	Response Percent	Response Count
Tropical Architecture (tropical sustainability)	**65.7%**	**23**
Housing and Urban Redevelopment	48.6%	17
History, Theory, and Criticism	25.7%	9
Digital Design	48.6%	17
answered question		**35**
skipped question		**0**

5. Are there other concentrations you would be interested in studying that are not included in the current program plan? Is so, please comment below.

	Response Count
	10
answered question	**10**
skipped question	**25**

6. If you would you like to receive more detailed information about the new Master of Science in Architecture program please include an email address below.

	Response Count
	26
answered question	**26**
skipped question	**9**

Appendix B

Three semester course sequence diagram

School of Architecture

current as of 2.5.09

Master of Science in Architecture

Course sequence *36* credits

Master of Science in Architecture

year 1, fall	*year 1, spring*	*year 2, fall*
Design Research Paradigms & Methods 3 ***ARC 6368*** required core course	**Elective** 3 (existing) ARC Advanced Seminar	**Elective** 3 ARC or other discipline, 5XXX or higher
Elective 3 (existing) ARC Advanced Seminar	**Elective** 3 ARC or other discipline, 5XXX or higher	**Design Thesis Studio** 9 **ARC 6972** (technically 6 to 12 credits)
Elective 3 ARC or other discipline, 5XXX or higher	**Design Research Studio** 6 **ARC 6970**	
Design Research Seminar 3 **ARC 6367** required core course	required project studio	required project studio
Total Credits: 12	**Total Credits:** 12	**Total Credits:** 12
in state *$3,245*	*in state* *$3,245*	*in state* *$3,245*
out of state *$10,990*	*out of state* *$10,990*	*out of state* *$10,990*
studio fee *$75*	*studio fee* *$75*	*studio fee* *$225*

Overall Credits

36

$10,109

$33,346

total

$270.40 *per credit in state tuition & fees*

$915.87 *per credit out of state tuition & fees*

Appendix C

Table of annual FTE production and graduate rates

Appendix D.
FTE Production and Degrees Awarded
School of Architecture

FTE Production Over Six Years

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Lower Division	4.2	6.3	20.9	33.0	32.4	29.8
Upper Division	71.2	87.9	98.7	89.8	89.7	77.2
Grad I	29.7	34.7	28.5	44.8	39.7	44.3
Grad II	0	0	0	0	0	0
Total	**105.1**	**128.9**	**148.1**	**167.6**	**161.8**	**151.3**
Δ over prev year		123%	115%	113%	97%	94%

Number of Degrees Awarded Over Six Years

	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007	2007-2008
Bachelors	41	31	45	43	75	59
Total	**41**	**31**	**45**	**43**	**75**	**59**
Δ over prev year		76%	145%	96%	174%	79%

Data for both of the above tables provided by Kevin Doherty, FAU Institutional Effectiveness & Analysis
January 20, 2009