

## Architecture

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The Department of Architecture is dedicated to the education of future generation of ethical professionals, creative designers and informed citizens. We believe architecture to be a conceptually based endeavor and a form of critical inquiry that addresses the physical environment from the scale of the city to the scale of furniture. To realize these objectives, architectural design is taught as a critical and creative enterprise.

The Department offers two graduate degrees: The accredited Master of Architecture (M. Arch) and the advanced post-professional Master of Arts in Architecture (MAA).

Applicants to the school should plan for the financial aspects of a design education. These include the cost associated with required access to a laptop computer as well as the costs of software, travel and field trips, tools and equipment, and modeling supplies. Students in the program must have access to a laptop computer through purchase, lease or other arrangements. For further information contact the Department.

A broad interdisciplinary framework characterizes the program, with emphasis placed upon six thematic areas: architectural design, history/theory, building technologies, digital technology, ethics and professional practice, and general education.

The program maintains a commitment to excellence in teaching, creative activity, research and scholarship and seeks to attract a diverse student body with a variety of academic backgrounds, experiences and interests. Our students and faculty members reflect the diverse areas of knowledge that play a critical role in the making of the built environment and in the establishment of successful design practices.

Miami is an urban laboratory for the study of architecture. The region provides limitless possibilities for exploring historic architecture and urbanism, as well as contemporary works by many of the world's leading architects. At the same time, the challenges of rapid

growth and urban development in Miami and the region have created an ideal environment for the study of these issues. The program takes advantage of Miami's position as one of the principal academic and commercial gateways to Latin America and Europe.

### Professional Degree

The Master of Architecture (M.Arch) is a professional degree accredited by the National Architectural Accrediting Board (NAAB). This degree is available to students with or without pre-professional degrees in architecture. The Department offers the following professional degrees:

#### Master of Architecture (non-pre-professional degree + 105 graduate credits)

Students with any undergraduate degree and no previous experience in architectural study follow the Professional Three-Year M. Arch Plan, consisting of 105 credit hours. It is typically completed in approximately three years.

#### Master of Architecture (pre-professional degree + 60 graduate credits)

Students who have earned an undergraduate pre-professional four-year degree in architecture follow the Professional Two-Year M. Arch Plan, consisting of 60 credit hours. It is usually completed in two years.

#### Master of Architecture (72 undergraduate credits + 102 graduate credits)

Students may also earn the M. Arch through the 175 credit hour track which begins freshman year with two years of pre-graduate coursework (72 credit hours) and concludes after an additional 102 credit hours of integrated graduate level credit hours taken over three or four years. Students will transition seamlessly between their pre-graduate and graduate study. The Professional Master of Architecture degree (M. Arch) is conferred at the conclusion of the entire course of study (174 credit hours). No undergraduate degree is awarded at any point in this plan.

### Post-Professional Degree

Applicants who already hold a professional degree in architecture (B. Arch or M. Arch) from a program accredited by the National Architectural Accrediting Board (NAAB) should apply for the One-Year Post-professional Master of Arts in Architecture (MAA) consisting of 36 credit hours. Students will pursue advanced and focused study and have the opportunity to work with faculty on research projects.

### NAAB Statement

In the United States, most state registration boards require a degree from an accredited professional degree program as a prerequisite for licensure. The National Architectural Accrediting Board (NAAB), which is the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted a 6-year, 3-year, or 2-year term of accreditation, depending on the extent of its conformance with established educational standards.

Doctor of Architecture and Master of Architecture degree programs may consist of a pre-professional

undergraduate degree and a professional graduate degree that, when earned sequentially, constitute an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

Florida International University, College of Architecture and The Arts, Department of Architecture offers the following NAAB-accredited degree programs:

**Master of Architecture (72 undergraduate credits + 102 graduate credits)**

**Master of Architecture (pre-professional degree + 60 graduate credits)**

**Master of Architecture (non-pre-professional degree + 105 graduate credits)**

Next accreditation visit for all programs: 2025

### Ownership of Student Work

Student work, submitted to the Department in satisfaction of course or degree requirements, becomes the physical property of the Department. However, students retain all rights to the intellectual property of such work. This work may include papers, drawings, models, and other materials. The Department assumes no responsibility for safeguarding such materials. At its discretion, the Department may retain, return, or discard such materials. The Department will not normally discard the materials of currently enrolled students without giving the student a chance to reclaim them.

### Admissions Requirements for all Professional Graduate Degrees in the Department of Architecture

All applicants must meet University graduate admissions requirements. Applicants to the Department of Architecture degree programs must also submit a portfolio of creative work for review.

The portfolio review examines evidence of creative ability, academic success, and professional achievement. It is an important component of the admissions process. Please contact the Department of Architecture for specific portfolio requirements. The deadline for portfolio submission is January 15<sup>th</sup> of each year. Portfolios submitted after this date will be considered if studio space is available.

Students who have successfully completed the portfolio review process must also meet the minimum requirements of an undergraduate degree from an accredited college or university with undergraduate grade point average (GPA) of 3.0 on a 4.0 scale, or hold a graduate degree from an accredited institution or have completed the entirety of the pre-graduate component of the Department's Accelerated MArch track to be fully admitted in the graduate program.

### Progression Requirements

1. No grade below a 'C' will be accepted for graduation in required courses or professional electives.
2. Student must achieve an overall cumulative graduate GPA of 3.0 in order to apply for to graduation. Refer to Graduate Catalog and the University Graduate School Rules and Regulations for information on Academic Warning, Probation, and Dismissal.

### Academic Travel

The Architecture Department values academic travel both nationally and abroad. Immersion in other cities and cultures provides our students with critical experiences that enhance learning. The firsthand interaction with exemplary completed buildings and sites, as well as those under construction, enrich learning throughout the curriculum. It is a requirement of the academic program in Architecture that each student participate in at least one of the department's travel options before graduation. The department offers three options for travel: 1-Residence abroad for a full semester through our Genoa, Italy, program; 2- International travel through one of the many study abroad programs offered each summer; and 3- Domestic travel outside Miami as part of a design studio. Students must hold a 3.0 or higher cumulative graduate GPA to participate in Study abroad programs.

### Miami Beach Urban Studios (MBUS)

MBUS offers architecture students a unique opportunity to study in one of the nation's most vibrant and artistic urban centers. While studying at MBUS, students gain valuable professional experience working with local design practitioners, and with innovative public and private organizations in the area. Located in the iconic 420 Lincoln Road building, MBUS provides architecture students expansive gallery/exhibition spaces, design studios, and classroom space, that encourage collaborative explorations with students studying in other areas of study within the College of Architecture and The Arts, including: Music, Art, Art History, Theater, and Communication Arts. MBUS provides students with a base from which they may explore local fine arts, designs, performances, museums and galleries, including FIU's The Wolfsonian-FIU, located only blocks away. Important areas of study for architecture students at MBUS include, but not limited to, Sustainability, Historic Preservation, Urbanism, Hospitality Design, Community Design, and Architecture and Real Estate Development.

### Master's Project/Thesis Requirement

Graduate students in all masters degree programs are required to undertake a master's project or a master's thesis as part of their course of study in the Department of Architecture.

### Master of Architecture

#### Professional Degree Tracks (Accredited by NAAB)

#### THREE-YEAR TRACK – 105 Credits

A professional degree for students with a Bachelor of Arts or a Bachelor of Science, or equivalent, from an accredited institution.

#### Degree Track (105)

#### Prerequisites: (11)

PHY 2053	Physics w/o Calculus	4
MAC 2147	Pre-Calculus	4
ARC 4058	Fundamentals of Digital Design	3

#### First Year (Fall Semester): (15)

ARC 5075	Formative Studio I	6
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ARC 5711	History of Design from Antiquity to Middle Ages	3
ARC 5249	Introduction to Design Theories	3
ARC 5612	Environmental Systems in Architecture 1	3

**First Year (Spring Semester): (18)**

ARC 5076	Formative Studio 2	6
ARC 5733	History of Design Renaissance to 1840	3
ARC 5582	Structures 1	1
ARC 5582L	Structures 1 Lab	2
ARC 5467	Materials and Methods of Construction	3
SPC 5066	Presentation Skills for Architects	3

**First Year (Summer Semester): (15)**

ARC 5077	Formative Studio 3	6
ARC 5554	Structures 2	1
ARC 5554L	Structures 2 Lab	2
ARC 5176C	Computer Practice II	3
ARC Directed Elective		3

**Second Year (Fall Semester): (15)**

ARC 5361	Integrated Comprehensive Design	6
ARC 5205	Adv. Design Theories	3
ARC 5483	Integrated Building Systems	3
ARC 5744	History of Design from the XIX Century to Present	2
ARC 5744L	History of Design from the XIX Century to Present Lab	1

**Second Year (Spring Semester): (12)**

ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 5555	Structures 3	1
ARC 5555L	Structures 3 Lab	2
ARC 5621	Environmental Systems in Architecture 2	3

**Third Year (Fall Semester) (Miami or Genoa Italy): (15)**

ARC 6356	Architectural Design 10	6
ARC Directed Elective		3
ARC Directed Elective		3
ARC Directed Elective		3

**Third Year (Spring Semester): (15)**

ARC 6970	Master's Project	6
ARC 6280	Professional Office Practice	3
ARC Directed Elective		3
ARC Directed Elective		3

**TWO-YEAR TRACK – 60 Credits**

A professional track for students who have completed a 4-year pre-professional Bachelor of Arts in Architecture or Bachelor of Architectural Studies degree.

**Degree Track (60)****First Year (Fall Semester): (15)**

ARC 5361	Integrated Comprehensive Design	6
ARC 5205	Adv. Design Theories	3
ARC 5483	Integrated Building Systems	3
ARC 5554	Structures 2*	1
ARC 5554L	Structures 2 Lab*	2

**First Year (Spring Semester): (15)**

ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 5555	Structures 3*	1
ARC 5555L	Structures 3 Lab*	2
ARC 5621	Environmental Systems in Architecture	

	2*	3
SPC 5066	Presentation Skills for Architects	3

**First Year (Summer Semester): (3)**

ARC 5176C	Computer Practice II	3
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**Second Year (Fall Semester) (Miami or Genoa Italy): (12)**

ARC 6356	Architectural Design 10	6
ARC 5744	History of Design from the XIX Century to Present*	2
ARC 5744L	History of Design from the XIX Century to Present Lab*	1
ARC Directed Elective		3

**Second Year (Spring Semester): (15)**

ARC 6970	Master's Project	6
ARC 6280	Professional Practice	3
ARC Directed Elective		3
ARC Directed Elective		3

\*May be replaced with ARC elective if the content of these courses has been satisfied in the pre-professional degree program. A minimum of one of these 3 credit classes is to be satisfied in the pre-professional degree program.

**Master of Arts in Architecture - 36 credits****Post-Professional Degree****(Not eligible for accreditation by NAAB)**

The Master of Arts in Architecture is a 36-credit post-professional degree program that enables students to pursue advanced studies in three areas: theory, applied research and special topics in practice. Individual areas of concentration are pursued through course work and independent study and may include the philosophy and history of design, digital technologies and visualization, mapping, technology, sustainability, neuroscience and architecture, furniture and industrial design, advanced topics in design and sustainable development. These concentration areas are supported by focus topics in the FIU SOA curriculum and allow students to pursue advanced research combining cross-disciplinary course work with faculty areas of specialization.

**Admission Requirements**

The following is in addition to the University's graduate admission requirements:

1. Applicants seeking admission to the program must have either an accredited Professional BArch degree with a 3.0 GPA or an accredited Professional March degree.
2. Applicants seeking admission to the program must have either an accredited Professional BArch degree with a 3.0 GPA based on the last 60 hours of undergraduate study or an accredited Professional March degree.
3. Applicants must submit a portfolio of creative work for review. The portfolio review examines evidence of creative ability, academic success, and professional achievement.
4. Applicants must submit three letters of recommendation.
5. Applicants must submit a Statement of Intent clearly indicating which area of specialization they intend to pursue and why. The statement should include the

applicant's qualifications for research and a brief outline of their intent and goal. The statement should demonstrate the applicant's intellectual merit and motivation for pursuing advanced study. Applicants will be evaluated on strength of their statement, personal achievement, and their commitment to making a meaningful contribution to the field through their research.

- Applicants must submit a writing sample that demonstrates the candidates' written communication skills. The sample should be illustrative of their writing and does not have to be related to the proposed area of specialization.

### Graduation Requirements

The degree will be conferred when the following conditions are met:

- Recommendation of the Primary Advisor and faculty of the Department.
- Certification provided by the Department Chair, College Dean, and University Graduate School that all degree requirements have been met.
- Completed undergraduate course deficiencies if specified at admission with no grades below a "C" and a GPA  $\geq 3.0$ .
- No grade below a "C" will be accepted for graduation in required course or professional electives.
- Completed Research Option.

### Areas of Specialization

Students may choose a course of study that is either studio-based or non-studio-based. Any of the following areas of specialization may be chosen for either a studio-based or non-studio-based course of study.

- Theoretical Research: Aesthetics and Politics, History and Philosophy of Design
- Applied Research: Digital Technologies and Visualization, Mapping with a GIS Certificate Option, Technology and Sustainability, Furniture and Industrial Design, Neuroscience and Architecture, Advanced Design Studies
- Advanced Topics in Design

### Course Requirements

Students in both studio-based and non studio-based options are assigned a primary faculty advisor upon entering who will work with them to formulate a formal course of 36 credit hours of study that is closely tailored to her or his specific area of specialization and directed by the primary faculty advisor.

All MAA students must take ARC 6947 Research Methods (3) in the first semester and ARC 6948 MAA Capstone in the last semester. The remainder of the courses shall be chosen from the electives in consultation with the student's primary advisor. A total of fifteen hours may be taken from courses offered by other departments.

### Research Options

#### Non Studio-Based Research

Students seeking to conduct non studio-based research have the option to complete either a thesis or a research project.

Students opting to complete a thesis must submit a thesis proposal prior to their final semester. A copy of the proposal signed by the primary advisor must be submitted

for approval to the Advanced Studies Committee. Students are permitted to register for the final term once the thesis proposal is approved. The primary advisor must be a full-time faculty member of the Department of Architecture. All Master's Theses must follow FIU University Graduate School Guidelines. Students opting to complete a thesis must enroll in the following course in their final semester:

ARC 6971	Master's Thesis	6
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Students opting to complete a non studio-based master's project must submit a master's project proposal prior to their final semester. The primary advisor will determine guidelines for the master's project. Prior to registering for the final semester a copy of the proposal signed by the primary advisor must be submitted for approval to the Advanced Studies Committee. Students are permitted to register for the final term once the research proposal is approved. The primary advisor must be a full-time faculty member of the Department of Architecture. All students on this track must enroll in the following course in their final semester:

ARC 6906	Independent Study	6
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#### Studio-Based Research

Students opting to complete a studio-based master project must register for the following course in their final semester of study:

ARC 6970	Master's Project	6
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**Study Abroad programs may be included in this degree in consultation with the student's primary advisor.**

### Healthcare Design Track

This track prepares students with a specialized healthcare design expertise. Students will interact with a variety of stakeholders to co-create spatial contexts in partnership with related academic disciplines (nursing, medicine, public health, occupational therapy, computer science and bio-medical engineering), health care professionals (interior architecture firms), and healthcare facilities (hospitals and nursing homes). The program is designed to provide students with research expertise, problem-solving skills, healthcare design thinking and prototyping skills while engaging with a multicultural urban community.

#### First Year (Fall Semester)

ARC 6947	Research Methods	3
ARC 6246	Design Thinking and Creative Process	3
ARC 6389	Env. & Behavior Theory	3
NGR/HAS	Directed Elective*	3

#### First Year (Spring Semester)

ARC 6386	Healthcare Design 1	6
ARC 5695	Environmental Sys. for Healthcare Environments	3
ARC 6257	Health care Theory	3

#### Second Year (Fall Semester)

ARC 6387	Healthcare Design Studio 2	6
ARC 6948	MAA Capstone	6

\*NGR 7830, Research in Health Care for Multicultural, Diverse, and Vulnerable Populations or HSA 6205, Hospital and Health Facilities Organization

## Certificate in History, Theory and Criticism of Architecture

The Graduate Certificate in History, Theory and Criticism of Architecture offers exceptional students from the School of Architecture and throughout the university community a chance to follow a rigorous course of study in history, theory and criticism, including a required seminar devoted to research methodologies. For architecture students, we offer the further option of a pedagogical apprenticeship, where faculty members mentor students seeking to become teachers. For students outside the School of Architecture, we offer an opportunity to supplement their studies in history, anthropology, environmental science, art history, literature, area studies and other fields with an intense and systematic engagement with cultural production and the visual arts. The certificate program helps students hone their critical skills as they generate new knowledge and embark on self-directed research. Students admitted to a graduate degree program at FIU may apply for admission to the Graduate Certificate in History, Theory and Criticism of Architecture. This certificate program is open to degree-seeking students only.

### Certificate Requirements

Participants must fulfill the requirements outlined for the Graduate Certificate in History, Theory and Criticism of Architecture and complete each course with a satisfactory grade.

### Program Requirements (18 credits):

#### Required Courses: (9 credits)

ARC 5205	Advanced Design Theories
ARC 5744	History of Design from the XIX Century to Present
ARC 6947	Graduate Research Methods (offered during fall semester)

#### Electives: (9 credits)

The nine remaining credits hours may be drawn from a variety of courses. The following list represents examples of elective courses appropriate for the completion of the certificate program. Students should consult with faculty and advisors since new courses are frequently added. Up to six course credits in departments other than architecture may be included, as approved by the graduate advisor.

ARC 5035	Film and the Architecture of Modern Life
ARC 5381	Architecture and the Performing Arts
ARC 5396	Case Studies in Architecture
ARC 5711	History of Design Antiquity to Middle Ages
ARC 5733	History of Design Renaissance to XIX Century
ARC 5935	Special Topics
ARC 5943	Pedagogy Seminar
ARC 5744	History of Design from the XIX Century to Present
ARC 5745	Urban Architecture and the 20th Century
ARC 5786	Urbanism: Social History of the Built Form
ARC 5798	Hotels: Miami and La Habana at Mid-Century
ARC 5803	Preservation Architecture: Issues and

### Practices

ARC 5933	Special Topics in Architecture
ARC 5776	Modern Architecture - Projects and Polemics
ARC 5037	Architecture and Video Media
ARC 5175	Contemporary Digital Strategies
ARC 5745	Urban Architecture and the 20th Century
ARC 6947	Research Methods
IND 5138	History of Modern Interiors
IND 5164	History of 21st Century Furniture Design
LAA 5235	Theory of Landscape Architecture
LAA 5243	Regional Landscape Issues
LAA 5716	History of Landscape Architecture
LAA 6247	Modern Landscape Architecture

### Teaching Opportunities

Full-time graduate students have the opportunity to work as Graduate Assistants in courses related to the student's area of focus, including courses in history, theory and criticism, as well as design studios. Students enrolled in the Pedagogy Seminar discuss teaching methods with faculty members from the School of Architecture and from other disciplines across the university.

## Course Descriptions

### Definition of Prefixes

ARC-Architecture; HUM-Humanities

F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.

**ARC 5035 Film and the Architecture of Modern Life (3).** Critical overview of social and spatial implications of film on architecture and design over the course of the 20th century.

**ARC 5036 Miami in Film (3).** How the natural and built environment of South Florida are portrayed in films.

**ARC 5037 Architecture and Video Media (3).** This course will examine intersections between architecture and video media from critical historical and contemporary perspectives.

**ARC 5075 Formative Studio (6).** Introduction to concept development, spatial expression, and representational techniques in architecture. (F)

**ARC 5076 Formative Studio 2 (6).** A continuation of Architectural Design investigations begun in Formative Studio. Prerequisite: ARC 5075. (S)

**ARC 5077 Formative Studio 3 (6).** An Architectural Design Studio that builds upon concepts and approaches presented in Formative Studio and Formative Studio 2. Prerequisite: ARC 5076. (SS)

**ARC 5165 Graduate Digital Fabrication (3).** This course considers digital design and fabrication methodologies and techniques in architecture with an emphasis upon the use of laser cutting, cnc milling and 3d printing at the graduate level. Prerequisite: ARC 4058.

**ARC 5175 Contemporary Digital Strategies (3).** Study of advanced digital techniques as generative tools for design and representation. Focus on surface and spatial modeling and parametric relationships. Prerequisites: ARC 4058, ARC 5176.

**ARC 5176C Computer Practices in Design II (3).** Advanced study in concepts, issues and methods in computer-aided architectural design. Prerequisites: ARC 4058 or equivalent. Corequisite: ARC 5362.

**ARC 5177 Topology and Performance (3).** Exploration of the relationship between form and performance through the use of animation and scripting techniques. Prerequisite: Program approval.

**ARC 5184 Architecture and the Virtual Environment (3).** Implementation of virtual reality technology in architectural representations of existing and proposed built environments for presentation and design research. Prerequisites: ARC 4173, ARC 4174.

**ARC 5186 Interactive Media (3).** Presentation of digital images through an interactive and animated interface online or offline, as well as exploration of ideologies of interactive media.

**ARC 5189 Visual Effects (3).** Introduction of digital video and audio post-production techniques that add sound, text and visual effects to animations, as well as exploration of ideologies of digital animation.

**ARC 5193 Design Presentation Graphics (3).** Exploration of design presentation techniques and portfolio design through the use of digital photography, digital illustration, desk top publishing and web page.

**ARC 5205 Advanced Design Theories (3).** This seminar analyzes western and non-western examples of critical ideology through the investigation of key historical moments and current architectural theory and practice. (F)

**ARC 5249 Introduction to Design Theories (3).** Introduction to the environmental parameters, morphological concepts and ideological principles that generate form and meaning in architecture. Explorations of related spheres of cultural production will also be explored in lectures, readings, and student assignments. Corequisite: ARC 5075.

**ARC 5311 Building Information Modeling (3).** This course will familiarize students with numerous foundational concepts such as parametric modeling, assembly modeling, associativity generative and interactive drafting.

**ARC 5329 Architectural Design 5 (6).** Integration of structure and construction techniques in the production of a small to mid-sized public project that incorporates site considerations, materials and structure. Prerequisites: ARC 2304, ARC 4586 and admission to the major. (F)

**ARC 5335 Architectural Design 6 (6).** This studio focuses on housing and related components including the repetitive spatial and structural elements, circulation and contextual considerations. Prerequisites: ARC 5329 (S)

**ARC 5340 Architectural Design 7 (6).** A flexible framework for appropriate investigations of complex spatial, programmatic, contextual, constructional and ethical issues involved in design projects. Course content varies with instructor. Prerequisites: ARC 5335 (F,S,SS)

**ARC 5343 Architectural Design 8 (6).** Architectural design explorations of site, building codes, community objectives will be undertaken through individual programming, process and design initiatives for a complex building project. Prerequisite: ARC 5340 (F,S)

**ARC 5361 Integrated Comprehensive Design (6).** Exploration of arch systems; structural, environmental, life-safety, assembly and enclosure on building form, content and expression. Students will assess and integrate systems into the design process. Corequisite: ARC 5483. (F,SS)

**ARC 5362 Architectural Design 9: Sustainable Practices (6).** Architectural projects of medium scale. Exploration and application of sustainable practices emphasizing relation of site and environmental issues to architectural production and design methodology. Prerequisites: Graduate standing and ARC 5361. (S)

**ARC 5370 Urban Development 1 (3).** Introduction to the planning and management of urban development projects.

**ARC 5371 Urban Development 2 (3).** Advanced planning and management of urban development projects. Prerequisite: ARC 5370.

**ARC 5381 Architecture and the Performing Arts (3).** This seminar will consider what architects might learn from the performing arts, particularly how stagecraft can inform design for social spaces in the city.

**ARC 5392 Urban Vertical Surface (3).** Analysis of the mechanisms of surfaces: wall section, the bay, frame, grid, and their transformations.

**ARC 5396 Case Studies in Architecture (3).** The course explores the vast array of decisions that create the architectural experience of outstanding built works.

**ARC 5467 Materials and Methods of Construction (3).** Study of the types of construction and materials used in institutional, residential, and office building assemblies. How materials are installed and inspected, including the use of special equipment. Explorations of the theories and histories of construction will be explored.

**ARC 5483 Integrated Building Systems (3).** Exploration of arch systems integration and specifications in design and construction processes; structural, environmental, life-safety, assembly and enclosure systems are included. Corequisite: ARC 5361. (F)

**ARC 5486 Architectural Installations (3).** This course will examine the traces of history of architectural fabrications and its relations to the visual arts, media, and technology.

**ARC 5554 Structures 2 (1).** This is the second course in the structures sequence and will introduce fundamentals of structural analysis and design for timber and steel buildings using quantitative process. Prerequisites: ARC 2580 or ARC 5582 or ARC 4586.

**ARC 5554L Structures 2 Lab (2).** The lab sessions will supplement lectures through additional practice and hands-on exercise problems that are designed to enhance the application of structural concepts. Prerequisites: ARC 2580 or ARC 4586 or ARC 5582. Corequisite: ARC 5554.

**ARC 5555 Structures 3 (1).** This is the third course in the structures sequence. It is focused on analysis and design of reinforced concrete structures and lateral resistive systems. Prerequisite: ARC 5554.

**ARC 5555L Structures 3 Lab (2).** The lab sessions will supplement lectures through additional practice and hands-on problems that are designed to enhance the

application of structural concepts. Prerequisite: ARC 5554. Corequisite: ARC 5555.

**ARC 5582 Structures 1 (1).** Through the study of statics and strength of materials this course provides a scientific basis for understanding structural systems behavior. Prerequisites: PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147.

**ARC 5582L Structures 1 Lab (2).** The lab sessions will supplement lectures through additional practice and hands-on problems that are designed to enhance the application of structural concepts. Prerequisites: PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147. Corequisite: ARC 5582.

**ARC 5612 Environmental Systems in Architecture 1 (3).** This course considers thermal, electrical, mechanical and conveyance systems and their integration in the architectural design process. Prerequisite: ARC 2304.

**ARC 5621 Environmental Systems in Architecture 2 (3).** This course considers the role of acoustic and luminous behaviors in architecture and the architectural design process. Topics including daylighting, artificial lighting, electrical systems and acoustics. Prerequisite: ARC 2304.

**ARC 5623 Design Ecology and Technology (3).** This course explores the environmental impact of design decisions, their philosophical underpinnings and the role played by technology.

**ARC 5695 Environmental Systems for Healthcare Environments (3).** Study of building environmental systems and building performance issues that impact the design of Healthcare environments.

**ARC 5711 History of Design: Antiquity to Middle-Ages (3).** Survey of architectural, interior, and landscape design from antiquity to the middle ages, including Western and non-Western traditions. Explorations of related and causal ideologies will be covered in lectures, readings, and student assignments. Corequisite: ARC 5075.

**ARC 5733 History of Design: Renaissance to XIX Century (3).** Survey of architectural, interior, and landscape design from the Renaissance to the nineteenth century, including Western and non-Western traditions. Explorations of related and causal ideologies will be covered in lectures, readings, and student assignments. Corequisite: ARC 5076.

**ARC 5734 Culture and Art in Italy (3).** Course describes the evolution of culture and aesthetics and their immediate relationship with the creation of these works. Consists of site visits and class lectures. Additional readings and project for graduate students.

**ARC 5744 History of Design from the XIX Century to Present (2).** Survey and advanced analysis of architecture, interior architecture, and landscape architecture from the XIX century to the present, including western and non-western traditions. Explorations of related and causal ideologies will be covered in lecture. Corequisite: ARC 5744L.

**ARC 5744L History of Design from the XIX Century to Present Lab (1).** Laboratory section for ARC 5744. Reading and discussion of course texts and writing assignment. Laboratory work in conjunction with set lab.

Prerequisites: ARC 2701, ARC 2702. Corequisite: ARC 5744.

**ARC 5745 Urban Architecture and the 20th Century (3).** The course will examine debates on urban architecture surrounding the rise of Modernism in the 1920s and will follow those lines of thought into current discussions of architectural design in cities.

**ARC 5750 Architectural History of the Americas (3).** Historical analysis of the development of built forms and styles in tropical and subtropical Americas, investigating its socio-political and artistic context. Prerequisite: Permission of the instructor.

**ARC 5756 The Architecture of the City (3).** The study of urban architecture in Genoa, Italy, with emphasis on analysis and representation using manual drawing, digital photography, and conceptual model.

**ARC 5770 Historiographic Methods in Architecture (3).** Seminar course designed to introduce graduate students to historiographic methodologies in architecture through close readings of key texts. Prerequisite: Graduate standing.

**ARC 5776 Modern Architecture - Projects and Polemics (3).** This seminar focuses on close readings of primary sources drawn from key works of architectural theory. The course also explores key historical text, architectural theory and criticism. Prerequisite: ARC 5744.

**ARC 5786 Urbanism: Social History of the Built Form (3).** This course introduces students to historical analysis, theories, techniques and aesthetics as they relate to urban design.

**ARC 5798 Hotels: Miami and La Habana at Mid-Century (3).** A research-based, in-depth study of mid-century modern hotels constructed in Miami/Miami Beach, Florida and La Habana, Cuba just prior to the Cuban revolution.

**ARC 5803 Preservation Architecture: Issues and Practices (3).** This course explores issues and practices of architectural preservation as an integral concern of architecture.

**ARC 5905 Solar Decathlon (1).** Research based course to develop the architectural and engineering concepts for the solar decathlon house.

**ARC 5933 Special Topics (1-6).** Coursework on a particular aspect of architecture under the direction of faculty in a classroom format. Prerequisite: Program approval.

**ARC 5935 Special Topics (3).** Coursework on a particular aspect of architecture under the direction of faculty in a classroom format.

**ARC 5936 Cejas Eminent Scholar Graduate Seminar (1-3).** Seminar/workshop course taught by distinguished educators, scholars, and designers. Lectures, critical readings and discussions of thematic topics make up the course.

**ARC 5938 Special Topics Design Studio (6).** An architectural design studio based on a particular aspect of architectural design and relevant ideologies under the direction of appropriate faculty.

**ARC 5939 GreenN: Designing for Sustainability (3).** This course will review established and emerging principles of sustainable design/construction, and test strategies for their implementation in design practice. Prerequisite: Graduate standing.

**ARC 5941 Internship Experience (0).** Experience in architectural practice learned through work with licensed professionals.

**ARC 5943 Pedagogy Seminar (3).** Seminar course designed to train graduate teaching assistants, who lead discussion sections and evaluate undergraduate student assignments in the accompanying undergraduate history survey course.

**ARC 5945 Architecture Internship (1-3).** Advanced issues in architecture practice learned through work experience with licensed professionals.

**ARC 6184 Advances Studies in Technology (3).** This course explores the role of emerging technologies including robotics, digital fabrication, sensing, and advanced visualization tools for innovation in design and architectural production. Prerequisite: admission to doctoral program

**ARC 6204 Architectural Philosophy (3).** This course explores how ideas from contemporary continental philosophy and other related fields might inform a discourse about architecture and urbanism. Prerequisite: ARC 6229

**ARC 6229 Theories of the Digital (3).** This course explores theories of the digital. The aim is to develop a theoretical framework to understand the impact of the digital on architectural design, fabrication and urban life. Prerequisite: Admission to the doctoral program.

**ARC 6246 Design Thinking and Creative Process (3).** Using literature on design methods, design cognition, cognitive psychology and design protocol studies, students will learn about the various models of creative process in design.

**ARC 6257 Health Care Theory (3).** Exploration of health care theory, it's manifestation in specific health care models and delivery systems, plus, its implementation in design of healthcare environments.

**ARC 6280 Professional Office Practice (3).** Study of the ethical, legal, financial, and managerial aspects of professional practice in architecture.

**ARC 6296 Professional Development (3).** In-depth exploration of current legal, administrative and financial aspects of architectural practice.

**ARC 6356 Architectural Design 10 (6).** Architectural project emphasizing design development preparation of details and design documents for buildings of intermediate complexity. Prerequisites: ARC 5362. Corequisite: ARC 6910. (F)

**ARC 6375 Resilient Urbanism (3).** This interdisciplinary course examines concepts of urban resiliency for disaster management. Students will study disaster vulnerability, building resilience, and the role of green infrastructure.

**ARC 6386 Healthcare Design 1 (6).** Advanced design studio addressing prevailing and future issues in healthcare design.

**ARC 6387 Healthcare Design Studio 2 (6).** Students explore application of theoretical issues in order to create 'what-if scenarios in health care design that might not be currently addressed in industry.

**ARC 6389 Environment and Behavior Theory (3).** Students explore, analyze, and interpret various environment and behavior theories appropriate for designing healthcare environments.

**ARC 6761 Miami Urban Studies (3).** Studies concerning the social, political, economic and environmental of Urbanism in Southern Florida in general and Miami in particular. Prerequisite: Admission into the Doctoral Program.

**ARC 6906 Independent Study (1-6).** Coursework on a particular aspect of Architecture under the direction of faculty in an individual study format. Prerequisite: Program approval.

**ARC 6910 Graduate Seminar (3).** Coursework under the direction of faculty in preparation for a master's thesis or master's project in architecture. Prerequisite: ARC 6947. Corequisite: ARC 6356.

**ARC 6947 Research Methods (3).** Methods of data acquisition, analysis, and interpretation used in architecture research. Corequisite: ARC 5362.

**ARC 6948 MAA Capstone (6).** Coursework under the direction of faculty for completion of research or design project for the Master of Arts in Architecture degree. Prerequisite: ARC 6947

**ARC 6970 Master's Project (6).** Coursework under the direction of faculty for the completion of project by candidate for the degree of Master of Architecture. Prerequisite: ARC 5361, ARC 6356, ARC 5555, ARC 5621, ARC 5744, ARC 5205, ARC 5176.

**ARC 6971 Master's Thesis (1-6).** Coursework under the direction of faculty for the completion of a research or design thesis by candidate for the degree of Master of Architecture. Prerequisite: ARC 6910.

**HUM 5258 Ways of Seeing: Modern Perception in Literature and Architecture (3).** Interdisciplinary elective on modern definition of perception in literature, architecture and the arts in the first half of the 20th century.