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. The Department is committed to producing skilled makers who are versed in professional skills and who are conceptual thinkers grounded in the broad intellectual and societal values that engender the production and reception of architecture. 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 (MArch) 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.

The Graduate Program in Architecture prepares students for professional practice in the field of architecture. The program is characterized by a broad interdisciplinary framework, 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 student body and faculty 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 a fertile urban laboratory for the study of architecture. The great diversity of the region provides limitless possibilities for exploring historic architecture and urbanism, as well as unique and cutting edge new 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 crucible for the study of these timely issues. The program takes advantage of the fact that Miami is one of the principal academic and commercial gateways to Latin America and Europe.

The Master of Architecture 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.

Students with no previous experience in architectural study follow the Professional Three-Year MArch Path, consisting of 105 credit hours. It is usually completed in approximately three years.

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

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

Applicants who already hold a professional degree in architecture (BArch or MArch) 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, which is the sole agency authorized to accredit US 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 six-year, three year, or two-year term of accreditation, depending on its degree of conformance with established educational standards.

Masters 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.

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 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 February 1st 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. When the academic record is less than 3.0 GPA, a minimum score of 1000 on the Graduate Record Examination (GRE) is required.

Progression Requirements

No grade below a 'C' will be accepted for graduation in required courses or required electives.

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.

Prerequisites

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

First Year (Fall Semester)

ARC 5075	Formative Studio I	6
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)

ARC 5076	Formative Studio 2	6
ARC 5733	History of Design Renaissance to 1840	3
ARC 5582	Structures and Systems 1	3

ARC 5467	Materials and Methods of Construction	3

First Year (Summer Semester)

ARC 5077	Formative Studio 3	6
ARC 5744	History of Design 1840 to Present	3
ARC 5554	Structural Design	3
ARC Directed Elective		3

Second Year (Fall Semester)

ARC 5361	Integrated Comprehensive Design	6
ARC 5205	Adv. Design Theories	3
ARC 5483	Integrated Building Systems	3
ARC 5621	Environmental Systems in Architecture 2	3

Second Year (Spring Semester)

ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 5555	Structural Design 2	3
ARC 5176C	Computer Practice II	3
ARC Directed Elective		3

Third Year (Fall Semester) (Miami or Genoa Italy)

ARC 6356	Architectural Design 10	6
ARC 6910	Graduate Seminar	3
ARC Directed Elective		3
ARC Directed Elective		3

Third Year (Spring Semester)

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.

First Year (Fall Semester)

ARC 5361	Integrated Comprehensive Design	6
ARC 5205	Adv. Design Theories	3
ARC 5483	Integrated Building Systems	3
ARC Directed Elective		3

First Year (Spring Semester)

ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 6947	Research Methods	3
ARC 5176C	Computer Practice II	3
ARC Directed Elective		3

Second Year (Fall Semester) (Miami or Genoa Italy)

ARC 6356	Architectural Design 10	6
ARC 6910	Graduate Seminar	3
ARC Directed Elective		3
ARC Directed Elective		3

Second Year (Spring Semester)

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

Master of Arts in Architecture - 36 credits

Post-Professional Degree
(Not eligible for accreditation by NAAB)

The Master of Arts in Architecture is a post-professional degree for students with a 5-year professional Bachelor of Architecture degree from a program accredited by NAAB. This 36 credit hour degree prepares students who wish to conduct research, teach and undertake advanced studies in architecture and related topics. The program offers two Graduate tracks. One is based at our home campus in Miami and the other at our study abroad center in Genoa, Italy.

Genoa Italy Based Post-Professional Degree
First Year (Summer Modesto A. Maidique Campus Based)

ARC 5361	Integrated Comprehensive Design	6
ARC 6906	Independent Study: Italian Arch/ Urban Histories and Theories	3
ARC 5933	Special Topics: The Architectural Treatise	3

First Year (Fall Genoa Based)

ARC 5xxx	Alternative Studio	6
ARC 5756	Architecture and the City	3
ARC 5734	Italian Language and Culture	3

First Year (Spring Genoa Based)

ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 5745	Urban Architecture (Theory/History)	3
ARC 4450	Modern Art and Italy	3

Miami Based Post-Professional Degree
First Year (Fall Semester)

ARC 5361	Integrated Comprehensive Design	6
ARC 6947	Research Methods	3
ARC Directed Elective		3

First Year (Spring Semester)

ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 6910	Graduate Seminar	3
ARC Directed Elective		3

First Year (Summer Semester)

Elective		3
Elective		3

Second Year (Fall Semester)

ARC 6971	Master's Thesis	6

Urban Development Track
First Year (Summer Semester)

ARC 5370	Urban Development 1	3
ACG 6026	Accounting for Managers	3
REE 6435	Legal Environment of Real Estate	3
MAR 6805	Marketing Management in the Global Environment	3

First Year (Fall Semester)

ARC 5371	Urban Development 2	3
FIN 6428	Corporate Finance	3
ARC 6910	Graduate Seminar	3
MAN 6209	Organization Design and Behavior	3

First Year (Spring Semester)

ARC 6296	Professional Development	3
ARC 6970	Master's Project	6
LAA 6245	Theory of Urban Design	3

Certificate in History and Theory of Architecture

The School of Architecture offers a certificate in the history and theory of architecture to students currently enrolled in any of the school's programs at either the undergraduate or graduate level. In addition, motivated students in related areas of study throughout the university are permitted to pursue this certificate through written application to the Director of the Architecture Program.

The certificate involves course work in the history and theory of architecture. These courses examine the scope of ideas generated in the discipline in order to reveal and explain the production and reception of architecture. This certificate program focuses upon the historical and theoretical circumstances within the discipline and considers the discipline of architecture through its distinct modes of thought and production such as art, technology and politics. By treating architecture as a historical and ideological production as well as a material production, the course work in this certificate program explores the important cultural forces that have conditioned the development and transformation of the discipline of architecture.

Certificate Requirements

The certificate requires 18 semester hours of course work in history and/or theory. Courses must be selected from the following approved courses or by written petition to the Director of the Architecture Program.

Program Requirements

ARC 5035	Film and the Architecture of Modern Life
ARC 5205	Advanced Design Theories
ARC 5396	Case Studies in Architecture
ARC 5750	Architectural History of the Americas
ARC 5786	Urbanism: Social History of the Built Form
ARC 5803	Preservation Architecture: Issues and Practices
ARC 5933	Special Topics in Architecture
ARC 5xxx	Videospace
ARC 5xxx	Gender and Architecture
ARC 5xxx	Urban Architecture
ARC 6947	Graduate Research Methods
ARC 6xxx	Landscape of Architecture
LAA 5235	Theory of Landscape Architecture
LAA 5243	Regional Landscape Issues
LAA 5715	History and Theory of Architecture
LAA 5716	History of Landscape Architecture

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. (S)

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 2580 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. Prerequisite: ARC 3243, BCN 4561. (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 4553, ARC 3463. (F)

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. (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)

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 Structural Design (3). Exploration of structural specifications as outlined by appropriate codes and manuals to introduce structural analysis, loadings and structural elements commonly encountered in construction for architectural analysis and design. Explorations of related and causal ideologies will be covered. Prerequisite: ARC 5582.

ARC 5555 Structural Design 2 (3). Continuation of analysis and design of structural systems. Focus upon reinforced concrete structures, foundation systems and an overview of indeterminate, tensile systems and tall buildings. Prerequisite: ARC 5554.

ARC 5582 Structures and Systems 1 (3). Analysis of structural elements, fundamental principles of statics and strengths of materials, including basic concepts such as force, moment, rigid body equilibrium and structural properties of areas. Corequisite: ARC 5076.

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 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 (3). Survey of architectural, interior, and landscape design from the XIX century to the present, including western and non-western traditions. Explorations of related and causal ideologies will be covered in lecture.

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). To analyze the layering that composes Rome's urban form and to offer a necessary basis of historical and theoretical information in order to take advantage of the Roman experience. Different periods of history of Rome are presented in lectures and site visits. Additional readings and projects.

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 GreeN: 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 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 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: Graduate standing and ARC 5362. Corequisite: ARC 6910. (F)

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 6970 Master's Project (1-6). Coursework under the direction of faculty for the completion of project by candidate for the degree of Master of Architecture. Prerequisite: ARC 6910.

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.