Architecture

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The Department of Architecture is dedicated to the education of future generations of ethical professionals, creative designers and informed citizens. We believe architecture to be a conceptually based intellectual 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, design is taught as a critical and creative enterprise.

The Department of Architecture prepares students for professional practice in the discipline of architecture with emphasis placed upon six thematic areas: architectural design, history/theory, building technologies, digital technology, ethics and professional business 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 roles in the making of the built environment and 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 new work by many of the world's leading architects. The challenges of rapid growth and urban development in Miami and the region have created an ideal environment for the study of these timely issues. The program takes advantage of Miami's position as one of the principal academic and commercial gateways to Latin America and Europe.

For students seeking to begin their design studies as undergraduates, The Department offers the **Accelerated Master of Architecture degree (M. Arch)** which integrates pre-graduate and graduate coursework in a single curricular path and which may be taken over five or six years. The accelerated Master of Architecture path begins freshman year with two years of pre-graduate coursework 73 credit hours, students in good standing move directly to 102 credit hours of graduate coursework. The accelerated Master of Architecture degree path concludes with the conferral of the accredited professional Master's degree. Transition to graduate study occurs without the conferral of an undergraduate degree and no bachelor degree is awarded at any point.

Students who have completed the AA in Architectural Studies may apply for transfer admission into the third year of this degree program as junior year transfer students.

Applicants to the Department should plan for the financial aspects of a design education. This includes the costs associated with required access to a laptop computer, as well as the cost 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. Students in the Department of Architecture are encouraged to participate in the Department's study abroad semester during the fourth year. For further information contact the Department.

Admission Requirements

Application Deadline: February 1

The department admits students once a year to begin their coursework in the fall semester; therefore, it is recommended that interested applicants meet with a member of the college's Student Services and Advising Center during the Fall semester prior to the application deadline. Admission to the department is competitive and is not guaranteed. Admission will be offered based on space availability to those applicants judged by the Department Faculty Committee to have the greatest potential for successful completion of the program.

The department offers professional degrees in Architecture. The curriculum is composed of two years of foundational, undergraduate coursework followed by three (or four) years of focused graduate course work leading to the professional accredited Master of Architecture (M. Arch). The department does not award the pre-professional bachelors degree.

Undergraduate students may apply for admission into the first year or the third year of the program. Students of the program are considered undergraduate students until they have accumulated 120 credit hours; therefore, freshman and transfer applicants must apply to both FIU's Undergraduate Admissions Office and to the department. Students accepted for admission in the first year or the third year of the department's program, and who are in good academic standing with a cumulative 3.0 GPA at completion of 120 credit hours, are automatically converted to graduate student status.

First Year Admission Requirements

Applicants must meet the University's admission requirements and submit a design portfolio – please refer to the Design Portfolio Requirements section.

Third Year Transfer Student Admission Requirements

Applicants for third year admission must meet the University's admission requirements and submit a design portfolio – please refer to the Design Portfolio Requirements section. Students who have completed an

AA in architectural studies must meet the following requirements: minimum cumulative GPA of 3.0; completed design studio courses 1 through 4 with a grade of 'C' or better; and be judged by the Faculty Admissions Committee to have passed a competitive portfolio review. Only grades of 'C' or higher (2.0 on a 4.0 grading scale) are accepted for transfer of applicable prerequisite and core courses from other institutions.

Transfer Students: University policy allows the transfer of 60 lower division credits. Additional upper-division transfer credits may be accepted. For most transfer students it will be necessary to take a certain number of undergraduate credits at FIU in order to achieve the minimum required to satisfy the degree requirements.

Third Year Native Student Admission Requirements

FIU undergraduate students who wish to change their major to architecture should check program requirements and be advised by the college's undergraduate advisors well in advance of application for admission.

Design Portfolio Requirements

As part of each department's admission review process, all students are required to submit a design portfolio demonstrating the candidate's creative abilities as well as their level of design. The design portfolio is evaluated based on a candidate's demonstrated sense of composition, attention to detail, graphic communication skills, expressive quality, and sense of space, accuracy, and observation. The design portfolio should be formatted on 8.5'' x 11" sheets, bound or carefully packaged, with a maximum thickness of 3". Applicants may also include 11' x 17" sheets provided they are folded to 8.5" x 11". Design portfolios may include two-dimensional storyboards (a sequence of still images that show a story), computer printouts, and photographs of small three-dimensional models/projects. The design portfolio cannot contain slides, videos, computer discs, or other formats that require electric power to view.

First Year Design Portfolio Requirements

All candidates' design portfolios must include a one-page (maximum) statement outlining your intentions, aspirations, and purpose in pursuing a professional degree. In addition, all candidates' design portfolios require three freehand drawings based on accurate observations: (1) a drawing of a stair or stairs, (2) a drawing of a bicycle or bicycles or a part of a bicycle or bicycles, and (3) a drawing of your own choice. These drawings may be in ink, pencil or charcoal. In addition to the three required freehand drawings, the first year design portfolio may contain reproductions of a two-or-three dimensional work.

Third Year Transfer Portfolio Requirements

All candidates' design portfolios must include a one-page (maximum) statement outlining your intentions, aspirations, and purpose in pursuing a professional degree. The design portfolio should include no more than 10 examples of your design work executed within the past two years. Examples include, but are not limited to, studies of buildings that demonstrate your analytical ability. Recent art and/or design projects that an applicant completed in collaboration with others are acceptable as long as the example contains an explanation of the applicant's role in the process. Portfolios should not contain samples of architectural or interior design construction documents either by hand or by computer.

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 current students without giving them a chance to reclaim them.

Students must petition the Department in writing for any deviation from the established policies.

Progression Requirements

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

Students must have a cumulative grade point average of 3.0 or higher at the conclusion of 120 credit hours to continue in the program.

Undergraduate to Graduate Standing

Students will be evaluated for matriculation to graduate status based upon their graduate GPA at the end of the spring semester of their 4th year (provided they have earned a minimum of 120 total credits). The criteria listed below must be satisfied:

1. A minimum of 120 earned credits (counting no more than 60 lower-division transfer credits),
2. 3.0 of higher GPA in graduate level coursework (5000 level of higher), and
3. Completion of undergraduate coursework.

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.

Study Abroad

Study abroad is an important component of the Department of Architecture. Our study abroad center is located in Genoa, Italy. The Genoa center is ideally situated in the historic center of the city in a renovated former convent dating from the 13th century. During the semester abroad in Italy, students are afforded an opportunity to study those artistic, architectural, landscape and interior spaces and artifacts that have long been acknowledged for their exceptional and enduring value to Western design culture. In addition to study abroad in Genoa during the Fall semester, study abroad opportunities are frequently made available during the summer.

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.

Accelerated Master of Architecture

Degree Program Hours: 175

The accelerated Master of Architecture program provides a seamless course of study leading from undergraduate freshman year to the conferral of the Professional Master of Architecture degree (M. Arch). The Accelerated M. Arch is comprised of 175 credit hours of integrated pre-graduate and graduate coursework. The degree consists of 73 credit hours of pre-graduate coursework which is taken over two years and is followed by 102 credit hours of graduate coursework which can be completed in either three or four years. Students in the accelerated M. Arch program are awarded the professional Master's degree without first having to earn an undergraduate degree. As such, no Bachelor's degree is awarded.

The accelerated path provides the student with a solid base of knowledge in the discipline of architecture and a broadly based general education. The first two years of pre-graduate coursework are characterized by a broad interdisciplinary framework, with emphasis placed upon six thematic areas; general education studies, architectural design studies, architectural history & theory, building & digital technologies, and ethics & professional practice. The goal of the educational experience is to develop critical thinking and synthetic design abilities using creative problem solving, analytic skills and the capacity for speculative design. The program is committed to educating students to form independent design judgments grounded in the larger contexts of intellectual inquiry and the general pursuit of knowledge. The fully integrated pre-graduate and graduate course of study covers the comprehensive knowledge and professional skills required for a professional career in the discipline of architecture. The program remains committed to design excellence by providing its students an unsurpassed professional education in architecture.

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 (73 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: 2017

Pre-Graduate Level Course Requirements (73)

ARC 1131	Design Graphics 1	2
ARC 1132	Design Graphics 2	2
ARC 1301	Design Studio 1	4
ARC 1302	Design Studio 2	4
ARC 2303	Design Studio 3	4
ARC 2304	Design Studio 4	4
ARC 1461	Materials and Methods of Design	3
ARC 2580	Structures and Systems	3
ARC 2701	History of Design from Antiquity to the Middle Ages	3
ARC 2702	History of Design from the Renaissance to the XIX Century	3
ARC 4058	Fundamentals of Digital Design	3

Course requirements also include 38 credits of general education coursework.

Courses are selected from the following categories:
Verbal Communication (9)

ENC 1101	Writing and Rhetoric I	3
ENC 1102	Writing and Rhetoric II	3
COM 3110	Business and Professional Communication	3

Environmental Context (11)

MAC 1147	Pre-Calculus Algebra and Trigonometry	4
PHY 2053	Physics without Calculus I	4
EVR 1017	The Global Environment and Society	3

In addition to the courses above, students select 18 credit hours from the UCC catalog with Advisor's approval.

Graduate Level Course Requirements (102)

All accelerated M. Arch students must complete the following requirements or their equivalent. A minimum of 102 semester hours are required to graduate:

ARC 5329	Architectural Design 5	6

ARC 5335	Architectural Design 6	6
ARC 5340	Architectural Design 7	6
ARC 5343	Architectural Design 8	6
ARC 5361	Integrated Comprehensive Design	6
ARC 5362	Architectural Design 9: Sustainable Practices	6
ARC 6356	Architectural Design 10	6
ARC 6970	Master's Project	6
ARC 5744	History of Design from the XIX Century to Present	2
ARC 5249	Introduction to Design Theories	3
ARC 5205	Advanced Design Theories	3
ARC 5554	Structural Design 1	1
ARC 5555	Structural Design 2	3
ARC 5467	Materials and Methods of Construction	3
ARC 5176C	Computer Practices in Design II	3
ARC 5612	Environmental Systems in Architecture 1	3
ARC 5621	Environmental Systems in Architecture 2	3
ARC 5483	Integrated Building Systems	3
ARC 6910	Graduate Seminar	3
ARC 6280	Professional Office Practice	3
ARC 5XXX	ARC Professional Electives	9
SOA XXXX	Open SOA Electives	6
CARTA XXXX	Open College Elective	3

Certificate in the History and Theory of Architecture

The Architecture Department 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 Chair of the Architecture Department.

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 and in relation to other spheres of cultural 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 12 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 Chair of the Architecture Department.

Program Requirements

ARC 2701	History of Design from Antiquity to the Middle Ages
ARC 2702	History of Design from the Renaissance to the XIX Century
ARC 3243	Introduction to Design Theories
ARC 4030	Film and the Architecture of Modern Life
ARC 4227	Gender and Architecture
ARC 4730	Culture and Art in Italy
ARC 4752	Architectural History of the Americas
ARC 4754	Asian and African Architecture
ARC 4755	Architecture of the City
ARC 4783	History of Design from the XIX Century to Present
ARC 4910	Research Methods
ARC 4799	Architecture and Landscape Architecture of South Florida
ARC 4905	Independent Study

Professional Certificate in Sustainable Construction

Shahin Vassigh, *Associate Professor and Coordinator*

This interdisciplinary Professional Certificate provides both traditional students and practicing professionals with a unique learning experience that enhances their design and management capabilities in the emerging field of sustainable building design and construction. The program focuses on an integrated system approach to apply basic engineering science/architectural principles to practical applications through interdisciplinary teamwork. Interested applicants must contact the Program Coordinator prior to registering for the program.

The Certificate will be awarded to a student who successfully demonstrates competency in:

Four Core Courses

EML 4460	Mechanical Engineering Systems and Energy Utilization	3
BCN 4570	Sustainable Approach to Construction	3
ARC 3937/5939	GreeN: Designing for Sustainability	3
CGN 4510	Sustainable Building Engineering	3

One Interdisciplinary Design Course

(registered under one of the following discipline courses)

EML 4905	Senior Design Project	3
BCN 4910	Senior Project	3
ARC 4114	Special Projects	3
CGN 4802	Senior Design Project	3

One Elective

(choose one of the following courses)

EML 4911	Undergraduate Research Projects	3
BCN 4911	Special Projects	3
CGN 4911	Undergraduate Research Projects	3
ARC 3622/5623	Design Ecology and Technology	3
IND 4627/5628	Sustainable Interior Design Practices	3

NOTE: The program is co-listed in the undergraduate program catalogs under both College of Engineering and Computing and College of Architecture and The Arts.

Course Descriptions

Definition of Prefixes

ARC-Architecture; HUM-Humanities
F-Fall semester offering; S-Spring semester offering; SS-Summer semester offering.
Courses that meet the University's Global Learning requirement are identified as GL.

ARC 1001 Introduction to Design (3). A practical introduction to the professional, technical, and aesthetic aspects of architecture, interior design, landscape architecture, and environmental and urban systems.

ARC 1131 Design Graphics I (2). An introduction to the development of graphic skills for the conception and communication of design ideas. Subject areas emphasize orthographic and presentation techniques. Corequisite: ARC 1301. (F)

ARC 1132 Design Graphics II (2). A continuation of Design Graphics I with the exploration of broader graphic tools of conceptual representation. Subject areas emphasize computer graphics and multiple media. Prerequisite: ARC 1131. Corequisite: ARC 1302 (S)

ARC 1171 Introduction to Computer Applications in Design 1 (3). A practical exploration to introductory computer applications appropriate to design disciplines.

ARC 1172 Introduction to Computer Applications in Design 2 (3). A continuation of introduction to computer applications in Design 1 with a broader exploration of introductory computer applications appropriate to design disciplines.

ARC 1190 Portfolio Design 1 (3). An introduction to creating, binding and reproducing graphic materials for presentation.

ARC 1191 Portfolio Design 2 (3). The second course in Portfolio Design. Students will develop their own portfolios using a variety of techniques. Prerequisite: Portfolio Design 1.

ARC 1213 Design Concepts 2 (3). A continuation of Design Concepts 1 with a broader exploration design principles, environmental and human factors, as well as the examination of design ideas.

ARC 1244 Introduction to Design 2 (3). A continuation of Introduction to Design 1 with broader explorations of professional, technical, and aesthetic aspects of architecture, interior design, landscape architecture, and urban systems. Prerequisite: ARC 1001.

ARC 1301 Design Studio 1 (4). An introduction to concepts, fundamental design elements, and systems of order that inform two and three-dimensional design. Corequisite: ARC 2701. (F)

ARC 1302 Design Studio 2 (4). A continuation of Design 1 (ARC 1301). An introduction to principles of proportion and scale with an emphasis on the relationship between the body and three dimensional space. The design process is emphasized. Prerequisites: ARC 1131, ARC 2701. Corequisite: ARC 2702. (S)

ARC 1461 Materials and Methods of Design (3). An introduction to materials and methods. In this course properties of materials and performance in a variety of light building, interior and environmental assemblies are explored. (F)

ARC 1930 Special Topics/Architectural Design I (4). An introduction to the basic perceptual, social, cultural, environmental and technical issues of architectural design. Basic architectural design projects.

ARC 2210 Design Concepts (3). Introduction to principles of design and perception, study of user's need for relationship with environmental and human factors. Examination of design ideas and their development. (S)

ARC 2303 Design Studio 3 (4). A continuation of Design Studio 2. Site, social, cultural and environmental issues are the generator for design projects with repetitive spatial and programmatic issues. Prerequisites: ARC 1302, ARC 1132, ARC 2702. Corequisites: ARC 1461, ARC 4058. (F)

ARC 2304 Design Studio 4 (4). A continuation of Design Studio 3. Structure, material, design details, human factors and interior architecture are explored for small scale infill urban buildings project. Prerequisite: ARC 4058. Corequisite: ARC 2580. (S)

ARC 2580 Structures and Systems (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. (S)

ARC 2701 History of Design from Antiquity to the Middle Ages (3). Survey of architectural, interior, and landscape design from antiquity to the Middle Ages, including Western and non-Western traditions critical reading and writing course. Written work meets the state composition requirement. (F)

ARC 2702 History of Design from the Renaissance to the XIX Century (3). Survey of architectural, interior, and landscape design from the Renaissance to the XIX century, including Western and non-Western traditions. Critical reading and writing course. (S)

ARC 2931 Architectural Design 2 (4). Proportioning systems for architecture students stressing the understanding of human proportions in a three-dimensional space research on modulating techniques and integration of interior and exterior spaces. Prerequisite: ARC 1930.

ARC 3031 Miami in Film (3). How the natural and built environment of South Florida is portrayed in films.

ARC 3057 Computer Graphics in Design (3). An intensive hands-on introduction to software for processing text and graphics, as it relates to the field of graphic design. Various computer applications in design. Prerequisite: CGS 2060.

ARC 3181 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. Prerequisite: ARC 4058.

ARC 3182 Design and the Virtual Environment (3). Implementation of real-time, three-dimensional virtual

reality technology into existing and proposed design works.

ARC 3192 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 3220 Case Studies in Architecture (3). This course explores the vast array of decisions that create the architectural experience of outstanding built works.

ARC 3243 Introduction to Design Theories (3). Introduction to the environmental parameters, morphological concepts and ideological principles that generate form and meaning in architecture and landscape architecture. Prerequisites: ARC 2701 and ARC 2702. (F)

ARC 3310 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 3380 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 3390 Urban Vertical Surface (3). The study of buildings' vertical surfaces will focus on analyzing the mechanisms of surfaces: wall section, the bay, frame, grid and their transformations.

ARC 3463 Materials and Methods of Construction 2 (3). A study of the types of construction and materials used in building interiors. How materials are properly installed and inspected, including the use of special equipment, in accordance to drawings, specifications, codes, standards, and agencies' recommendations. Prerequisite: ARC 1461. (S)

ARC 3485 Architectural Installations (3). During this course we will examine the traces of history of architectural fabrications and its relations to the visual arts, media, and technology.

ARC 3622 Design Ecology and Technology (3). This course explores the environmental impact of design decisions, their philosophical underpinnings and the role played by technology.

ARC 3741 Urban Architecture and the 20th Century (3). This course will examine debates on urban architecture surrounding the rise of Modernism in the 1920s and will follow those lines of thought into current discussion of architectural design in cities.

ARC 3775 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 4783.

ARC 3797 Hotels: Miami and La Habana at Mid-Century (3). A study of mid-century modern hotels constructed in Miami/Miami Beach, Florida and La Habana, Cuba, just prior to the Cuban revolution.

ARC 3905 Solar Decathlon (3). Research based course to develop the architectural and engineering concepts for the solar decathlon house.

ARC 3919 Architectural Research Methods (3). Survey of research methods applicable to the study of the cultural, spatial, material and aesthetic implications of architecture. The emphasis of the course is on involvement in original research. (F)

ARC 3932 Special Topics Design Studio (4). An architectural design studio based on a particular aspect of architectural design under the direction of appropriate faculty.

ARC 3934 Special Topics (3). Coursework on a particular aspect of architecture under the direction of faculty in a classroom format.

ARC 3937 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: Upper division standing.

ARC 4030 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 4058 Fundamentals of Digital Design (3). Introduction to two dimensional and three dimensional computer-aided design. Focus upon skill and knowledge creation through the analysis and representation of case-studies. (F,S,SS)

ARC 4114 Special Projects (3). Will focus on the development of adequate drawing skills in relationship to the understanding of a building and a site through sketching, graphic analysis, measured drawings, rendering and presentation. The course consists of site visits and workshops.

ARC 4173 3D Computer Modeling (3). This course will explore computer modeling in architecture. Prerequisite: Program approval.

ARC 4174 Computer Rendering in Architecture (3). This course will explore three-dimensional rendering in architecture. Prerequisite: Program approval.

ARC 4183 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 and ARC 4174.

ARC 4185 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 4188 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 4227 Gender and Architecture (3). A theoretical, visual and professional exploration of women's and men's

roles, identities, and histories in public and private built environments.

ARC 4270C Professional Office Practice (3). Assignments in office administration, negotiation of contracts, fee structure, professional ethics, client and public relations. Business organization, procedure scheduling and task allocation within design professional practices. Prerequisite: Senior standing. (F)

ARC 4320 Architectural Design 5 (4). Integration of structure and construction techniques in the production of a small to mid-sized public project that incorporates basic consideration of site, structure, materials and assembly systems. Prerequisites: Admission to the major, ARC 2304, ARC 2580.

ARC 4321 Architectural Design 6 (4). Focus upon architectural housing typologies and related issues of inhabitation. Spatial, structural and assembly systems and circulation issues specific to housing as well as context are presented. Prerequisites: Admission to the major, ARC 4320, ARC 3243. Corequisite: ARC 3463.

ARC 4322 Architectural Design 7 (4). A flexible framework for appropriate investigations of complex spatial, programmatic, contextual, constructional, or ethical involved in the architectural design process. Prerequisites: ARC 4321, ARC 4553.

ARC 4323 Architectural Design 8 (4). A continuation of Design 7 with investigations of complex spatial, programmatic, contextual, constructional, or ethical issues involved in the architectural design process. Prerequisites: ARC 4321, ARC 4553.

ARC 4553 Structural Design 1 (1). Investigation of structural materials, connections and details as outlined by appropriate codes and specifications for conducting analysis and design of structures under gravity loads. Prerequisites: ARC 2580 or BCN 2402, and PHY 2053, and MAC 2233 or MAC 1114 or MAC 1147. (SS)

ARC 4553L Structural Design 1 Lab (2). This lab will provide a venue for application and experimentation with basic structural concepts for designing wood and steel buildings. Prerequisites: ARC 2580 and PHY 2053 and MAC 2233 or MAC 1114 or MAC 1147. Corequisite: ARC 4553.

ARC 4696 Basic Utilities and Housing (3). The study of the importance of basic utilities (such as roads, sewer and water supply systems) in housing planning and construction. A relative cost analysis. Health problems and sociological effects of lack of basic utilities. Innovative concepts to incorporate basic utilities to all housing projects in developing countries. Prerequisite: Permission of the instructor.

ARC 4730 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.

ARC 4752 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: ARC 2701.

ARC 4754 Asian and African Architecture (3). This course is a comprehensive study of architectural forms, styles, and construction techniques in Asia and Africa. Prerequisites: ARC 4783, ARC 2702.

ARC 4755 The Architecture of the City (3). To analyze the layering that composes urban form and to offer a basis of historical and theoretical information in order to take advantage of particular experience. Different periods of urban history are presented.

ARC 4783 History of Design from the XIX Century to Present (2). Survey of architecture, interior architecture, and landscape architecture from the XIX century to the present, including western and non-western traditions. This is a critical reading and writing course. Corequisite: ARC 4783L. (F)

ARC 4783L History of Design from the XIX Century to Present Lab (1). Laboratory section for ARC 4738. Reading and discussion for course texts and writing assignment. Laboratory work in conjunction with the set lab. Prerequisites: ARC 2701, ARC 2702. Corequisite: ARC 4783.

ARC 4796 Social History of the Built Form (3). The art of urbanism, its roots in society, its techniques and aesthetics. Latest trends and theories. Real urbanism, the appropriate contemporary process to achieve the recovery of place in our society.

ARC 4799 The Architecture and Landscape Architecture of South Florida (3). Overview of the natural resources, cultural traditions and architectural precedents which have fomented the regionalist architecture and landscape architecture of South Florida. Prerequisite: Program approval. (SS)

ARC 4905 Independent Study (1-5). Specialized individual studies under supervision of faculty advisor. Consent of faculty advisor required. Prerequisite: Departmental approval. (F,S,SS)

ARC 4910 Research Methods (3). Survey of architectural research methods that use primary and secondary sources and materials to study historical and contemporary issues involved in the built environment. Prerequisite: ARC 2304. (F)

ARC 4940 Architecture Internship (3). Advanced issues in architecture practice learned through work experience with licensed professionals. Prerequisite: ARC 4321.

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 is 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.

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 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. Prerequisites: 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,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. (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 Structural Design 1 (1). Investigation of structural materials, connections and details as outlined by appropriate codes and specifications for conducting analysis and design of structures under gravity and lateral loads. Prerequisite: ARC 5582.

ARC 5554L Structural Design 1 Lab (2). This lab will provide a venue for application and experimentation of structural concepts for designing wood and steel buildings with the inclusion of lateral load resistive systems. Prerequisite: ARC 2580. Corequisite: ARC 5554.

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 (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: Program approval.

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

HUM 3257 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.

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.