

ARCHITECTURE

<http://www.arc.miami.edu>

Introduction

The School of Architecture offers a five-year, professional program leading to a Bachelor of Architecture degree. The program is accredited by NAAB (National Council of Architectural Registration Boards) and is designated as a STEM program, allowing international graduates to extend their F-1 visas to work in the United States for up to three years.

The first three years constitutes a core curriculum that focuses on Design, Visual Representation, History, Materiality and Assemblies. This foundation provides the basis for specialized architectural study in the fourth and fifth years, where students select from a wide array of elective studio and course offerings.

The School of Architecture's location in Coral Gables, within the Miami metropolitan area, provides an outstanding laboratory for research and advanced study; the challenges of conservation and development are intense in one of the nation's fastest growing urban areas. These challenges result in an increasing demand for skilled professionals. Students have the opportunity to work with faculty in the exploration of theoretical issues and the resolution of practical problems. The School of Architecture values and sustains a creative, open and supportive environment, emphasizing personalized instruction in small classes and studio courses.

Mission

- Prepare students for professional leadership and lifelong learning in architecture, urbanism and related fields.
- To advance knowledge and technology through research, and creative practice.
- To deploy knowledge and technology through professional engagement, real-world applications, and community service.
- To promote the goals of environmental responsibility, social equity, and economic sustainability.

The Strategic Orientation of the School of Architecture is:

To become a hemispheric leader in problem-based learning and project-based research while contributing solutions to the challenges facing urban environments locally and globally.

Accreditation

The school is a member of the Association of Collegiate Schools of Architecture and the Association of Collegiate Schools of Planning, and is fully accredited by the National Architectural Accreditation Board, who asks each school to include the following paragraph on professional degrees in all literature:

In the United States, most 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 professional degree programs in architecture offered by institutions with U.S. regional accreditation, recognizes three types of degrees: the Bachelor of Architecture, the Master of Architecture, and the Doctor of Architecture. A program may be granted an eight-year, three-year, or two-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 require a preprofessional undergraduate degree in architecture for admission. However, the preprofessional degree is not, by itself, recognized as an accredited degree.

The University of Miami School of Architecture offers the following NAAB-accredited degree programs:

B.Arch. (171 undergraduate credits)

M.Arch I (3-year Track – 105 graduate credits)

M.Arch I AP (2-year Track – 60 graduate credits)

The next accreditation visit for all programs will take place in 2023

Admission

Applications for incoming freshmen are processed and reviewed by the Office of Admission. Enrollment in the School of Architecture is selective and highly competitive. Applications to the Bachelor of Architecture program are requested by January 1st. Early applications are encouraged.

First-Year Students

Admission decisions are based on the following factors: secondary school record, SAT/ACT score, counselor's evaluation and the student essay. Portfolio submission is not required for entering first-year students, but is highly encouraged. Students that submit portfolios are evaluated for Talent Based scholarships and can opt-out of submitting SAT/ACT scores.

Transfer Students

The academic accomplishments of each transfer student will be evaluated on an individual basis. A 3.0 G.P.A. is required for transfer admission. A portfolio is required for advanced placement in the design sequence of the Bachelor of Architecture Program. Application deadline for the School of Architecture program is March 1st.

All transfer students requesting advanced placement in design must provide a portfolio of previous academic design and graphic work and three academic recommendations. Students accepted into third year design will be required to complete a design module during the summer prior to enrollment.

Student Responsibilities

Students in the School of Architecture are responsible for planning their own programs and for meeting degree requirements. It is the student's responsibility to understand and fully comply with all the provisions set forth in this Bulletin and written changes to their program of study. Students are provided assistance by advisors and faculty members. Written requests for variation from program or school requirements are reviewed by a faculty committee.

Academic Progress and Probation

The School of Architecture will review each student's record at the end of each semester. When a student's semester or cumulative average is less than stated below, or progress toward degree completion is unsatisfactory, the student will be placed on academic probation or warning in accordance with School of Architecture policies and procedures. Students on probation are not permitted to enroll in more than 13 credit hours, shall meet on a monthly basis with their academic advisor, and may have a STOP placed upon their future enrollment until grades for work-in-progress are reviewed. First semester freshmen who have a semester grade-point average below 2.0 shall be placed on probation.

Credit Hours Earned	CGPA
Fewer than 33 credit hours	2.0
33-64 credit hours	2.1
65-96 credit hours	2.2
More than 96 credit hours	2.3

Students must complete all Architecture Design studios with a grade of C- or higher. Students receiving two consecutive C- grades in architecture design studios will have to repeat the later course. Students receiving a grade of D+ or lower in an architecture design studio must repeat the studio and will be restricted to a 15 credit hour semester load. The student will meet with an academic advisor on a monthly basis and will be reviewed prior to continuation.

Academic Dismissal

A student in the School of Architecture whose CGPA or progress toward degree completion falls below the level of the minimum standards of the University of Miami may be dismissed. In the School of Architecture this includes a student who receives three grades of D+ or lower in design courses.

Class Attendance and Absences

Class attendance is mandatory for all architecture courses; three unexcused absences constitutes grounds for dismissal from the course and/or a failing grade. Students are required to be present for an entire design review, therefore, students arriving late or departing early from class will be considered absent. Excused absences require written notification and are granted by the instructor.

Failing Grades or Incompletes

A required architecture course in which a student receives a failing grade must be repeated during the first subsequent semester in which the course is offered. Incompletes can be given only for reasons of serious illness or exceptional hardship.

Advanced Writing and Communication Skills

Summary of the Communication Skills

The School of Architecture recognizes the significance of effective communication skills in preparing students for professional careers. The three areas of communication competency central to the profession of architecture, as recognized in the Student Performance Criteria in the National Architectural Accrediting Board (NAAB) Conditions for Accreditation, are drawing and graphic skills, oral presentation and writing.

Proficiency in Graphic Communication

Drawing and graphic skills are employed across the curriculum. The fundamental graphical communication skills are the focus of a sequence of three 3 credit Drawing courses, ARC 111, ARC 122 and ARC 213 in which graphic exercises are assigned, critiqued, revised and presented for final review.

Proficiency in Verbal Communication

Oral presentation skills are developed through the presentations in mandated sequence of six 6 credit Architectural Design Studios ARC 101, ARC 102, ARC 203, ARC 204, ARC 305 and ARC 306. Each student makes a ten minute oral presentation of their project at the end of each semester which is assessed using a rubric designed to include evaluations of content and style of both the oral and graphic presentations.

Proficiency in Written Communication

In addition to being able to communicate effectively both graphically and orally, architecture students are expected to be able to write persuasively, clearly and succinctly in a manner appropriate to subject, audience and circumstance. Written communication skills are developed in the mandatory sequence of two 3 credit Architectural History survey courses ARC 267 and ARC 268 which require students to complete substantive architecturally themed writing assignments which are assessed using a rubric, corrected for content, style, diction and syntax, and returned to the students with comments for revision.

Assessment

In addition to the periodic representation to the NAAB, assessments of proficiency in communication is reported annually in the Academic Assessment Report. In the Bachelor of Architecture PAR, the Student Learning Outcome assessing Graphic and Oral Communication Skills will be amended to include an additional assessment measure on Written Communication. The measure for this assessment will be derived from the first and last submissions in the Architectural History sequence, ARC 267 and ARC 268.

Written Communication Skills

Effective writing skills advance ideas efficiently and persuasively, so the expectation is that students become adept at using writing as an effective communication tool. Students fulfill this requirement by satisfactorily completing WRS 105 together with WRS 106 or WRS 107 or the equivalent. Appropriate Advanced Placement (AP) or International Baccalaureate (IB) scores in English composition may be used to satisfy this requirement. An appropriate score on the SAT or ACT examination may earn a student exemption from, but not credit for, WRS 105.

Students will be able to:

- Demonstrate effective written communication skills in relation to specific rhetorical tasks.
- Construct original, well-reasoned arguments using a range of materials.
- Integrate and synthesize appropriate and relevant primary and secondary sources in their writing.

Effective Fall 2017, new students without prior college credit in Written communication skills will be placed as follows:

- WRS 103: ACT English score below 18 or SAT Evidence-Based Reading and Writing or Critical Reading score below 430, or TOEFL iBT Writing score below 18.
- WRS 105: ACT English score 18-31 or SAT Evidence-Based Reading and Writing or Critical Reading score 430-690, or TOEFL iBT Writing score 18 or above.
- WRS 106 or WRS 107: ACT English score 32 or above or SAT Evidence-Based Reading and Writing or Critical Reading score 700 or above

Written Communication Skills General Education Requirements must be completed prior to attaining junior year classification.

Math Placement

Math Placement is based on ACT, SAT or ALEK placement score. You may refer to the Placement Guide (<https://www.math.miami.edu/undergraduate/math-placement/placement-guide/domestic/>) published by the Math Department for specific criteria. Note that math courses enrolled below MTH 130, Introductory Calculus, do not count toward the 171 credits required for the Bachelor of Architecture degree.

Quantitative Skills

In a world increasingly influenced by science and technology, it is important for students to acquire the capacity to understand and use essential quantitative skills. The Quantitative Skills Proficiency Requirement helps students learn to use quantitative skills and tools to solve problems, including the interpretation, manipulation, and application of quantitative data. Students fulfill this requirement by completing either a Department of Mathematics course numbered MTH 108 (<https://bulletin.miami.edu/search/?P=MTH%20108>) Precalculus Mathematics II or higher.

After satisfactory completion of the QSP courses, students will be able to:

- Select and use appropriate quantitative methods and tools to solve problems; and
- Interpret, manipulate, and apply quantitative data to solve problems.

Student Work

The University may retain selected student work and may place it in the architecture archives for exhibition, publication, or other use as the University deems appropriate. Each student in architecture is encouraged to maintain a design portfolio of every project undertaken throughout the five-year program.

Permission to Take Courses at Another University

A form is available from the Office of Academic Services and should be completed and approved PRIOR to off-campus enrollment. Students are encouraged to provide complete documentation for each course request form. Each student requesting transfer credit hour must supply the University of Miami registrar with certified transcripts. Additionally, each student should review transfer evaluations to be certain that all courses are correctly evaluated for credit hour. The proper transmission and transfer of credit hours is the responsibility of the individual student. The last 45 credit hours towards the degree must be completed at the University of Miami.

Changes to Academic Requirements

The School reserves the right to change academic requirements.

Computer Requirement

Undergraduate students entering the program are required to purchase their own computers for use in the design studio. The School of Architecture computing resources are accessible via a wireless network with an approved device and subject to School and University policy. Suggested system requirements are published on the School of Architecture web site.

Requirements for Graduation

As part of the 171 credits required for the Bachelor of Architecture curriculum, architecture students must complete a cognate in People and Society and a cognate in either Arts & Humanities or STEM.

Resources

The school's resources, including a Design-Shop, state-of-the-art computer lab, digital fabrication laboratories and model shop are enhanced by the interdisciplinary opportunities offered by the other schools and colleges of the University of Miami. A distinguished faculty is joined each semester by internationally renowned visiting scholars and designers.

Other programs that offer academic opportunities for undergraduate architecture students include:

- **Historic Preservation Certificate**
- **Classical Architecture Certificate**

Certificates require 15 credits. One related studio (6 cr) and 3 related electives (9 cr).

Dual Degree Programs

A six year dual degree program leading to a Bachelor of Science in Architectural Engineering and a Master of Architecture is also available (BASE/MARCH). The program is open to exceptional students who are admitted to the graduate program at the end of their junior year. Upon completion of this program, graduates are eligible for professional registration as both an engineer and an architect.

Architecture Certificates

- Classical Architecture (<http://bulletin.miami.edu/undergraduate-academic-programs/architecture/classical-architecture-certificate/>)
- Historic Preservation (<http://bulletin.miami.edu/undergraduate-academic-programs/architecture/historic-preservation-certificate/>)

General overview of Foote Fellows

The Foote Fellows Honors Program recognizes the most educationally accomplished incoming students at the University of Miami. Foote Fellows have distinguished themselves both in and out of the classroom, are self-motivated, and think independently. Admission to the Foote Fellows Honors Program is by invitation.

Within the curricular framework of their school or college, Foote Fellows enjoy unmatched freedom and flexibility to explore a multitude of educational resources. Many Foote Fellows leverage this opportunity to take additional majors and/or minors and to study abroad.

At each of the nine undergraduate schools at the University of Miami, a dedicated advisor helps Foote Fellows chart their academic path and attain access to distinctive learning opportunities at the University, such as special school-based seminars, faculty-mentored research, networking opportunities, and off-campus internships.

Foote Fellows also will be invited to join advanced, interdisciplinary Foote Fellow seminars taught by leading faculty members from across the University. An example is Books That Matter, a rigorous seminar in non-fiction reading that is offered in sessions for first-year and for upper-class

students. Freshman Foote Fellows benefit from early move-in to the residential colleges. Further, Foote Fellows receive focused advising on post-baccalaureate distinguished fellowships and awards.

The Foote Fellows Honors Program reflects the educational vision of former University of Miami President Edward T. Foote, who retired in 2000 after serving the University for twenty years.

Foote Fellows at U_SoA

Foote Fellows at U_SoA benefit from priority advising, enrollment and design studio selection (including the *Partnership Studio* which places students in local firms as part of their academic experience). The English and Cognates general education requirements (24 credits) are replaced with course topics of their choice so they may explore the educational resources of the University and create their own program of study. Academic and professional career advising is personalized for each Foote Fellow to ensure a trajectory is established as early as the Sophomore year

Henry Adams Medal

Awarded in conjunction with the American Institute of Architects to the highest-ranking graduating student for scholarship and excellence in a professional architecture program.

Henry Adams Certificate

Awarded in conjunction with the American Institute of Architects to the second highest-ranking graduating student for scholarship and excellence in a professional architecture program.

Other honors, distinctions, and awards are presented annually for excellent student performance.

ARC 101. Architecture Design I. 6 Credit Hours.

Introduction to urban and architectural design as an intellectual and aesthetic discipline directed at the analysis, interpretation, synthesis, and transformation of the physical environment. Topics include concept, site analysis, urban form, analysis, building types, use of precedents, technique, and the ability to communicate design ideas.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 102. Architecture Design II. 6 Credit Hours.

Introduction to the elements of architecture. Architectural response to composition, space, shelter, and setting requirements. Topics include design thinking skills, site analysis, understanding of basic building details, use of precedents, anthropometrics, and human behavior.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Spring.

ARC 109. Introduction to Architecture. 3 Credit Hours.

(Includes Design & History) Introduction to architectural ideas and principles including composition, space, form, function, history and methods of exploring architectural and urban design problems. Students will learn the relationship between two dimensional and 3 dimensional spaces through analytical drawing and model making. Course pedagogy includes weekly lectures in history and theory to better inform the design process. This course will encourage intuitive action, rapid visual analysis and interpretation.

Components: LEC.

Grading: GRD.

Typically Offered: Summer.

ARC 110. Visual Studies. 3 Credit Hours.

Concurrent with the ARC 109 course, the visual studies course explores Architectural drawing as a means of discovery, exploration, analysis and representation. Coursework begins with freehand drawing, in which students explore and refine their observation and representational skills, followed by an introduction to digital drawing and 3-d fabrication used in the profession today. The students will develop a portfolio in book format that illustrates the body of work produced during the three- week program.

Components: LEC.

Grading: GRD.

Typically Offered: Summer.

ARC 111. Visual Representation I. 3 Credit Hours.

An introduction to architectural representation as exploration, selection coordination and acquisition of visual knowledge including analog and digital techniques. Topics include: orthographic and oblique projections, geometric constructions, sketching, shade and shadow, and basic knowledge of digital tools.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 112. Visual Representation II. 3 Credit Hours.

An intermediate course that continues methods integration introduced in Visual Representation I with an increased focus on three dimensional projections and various digital representation technologies.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Spring.

ARC 121. Architecture and Culture. 1 Credit Hour.

Architecture as an intellectual and aesthetic discipline. Focus on design theory, language, typology, image, form, context, and case studies.

Corequisite: ARC 101, 111.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 122. Architecture and Behavior. 1 Credit Hour.

The course focuses on the study of human behavior and its relationship to the design process. Topics include: cultural diversity, social equity and the application of psychological factors in the design of buildings and their environment.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 141. On-Site Survey of European Architecture and Urbanism. 3-6 Credit Hours.

On site introduction to architecture and the city with a historical review of European architecture and urban form from the classical to the contemporary. Students travel with faculty to survey selected European architectural and urbanistic precedents at specific locations. Elective course open to all majors; lecture and seminar format.

Components: LEC.

Grading: GRD.

Typically Offered: Spring & Summer.

ARC 203. Architecture Design III. 6 Credit Hours.

The design course focuses on the analysis and design of housing typologies within the context of the city. Emphasis on the production of houses and housing projects. Topics include understanding of the basic elements in the production of human dwellings, research, use of precedents, programming, diagramming, and design.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 204. Architecture Design IV. 6 Credit Hours.

A design course focused on the design of civic structures and civic spaces with an emphasis on building materials, techniques, and structures as active constituents of architecture design. Focus on orientation, enclosure, low-energy responses, selection, and assembly of construction materials, short and intermediate span structural systems. The studio course introduces issues of diversity and inclusion in the built environment.

Components: STU.

Grading: GRD.

Typically Offered: Spring.

ARC 213. Visual Representation III. 3 Credit Hours.

An advanced representation course that builds on the tools and methods of visual Representation I & II while introducing students to more advanced techniques of final project representation, modeling, and post-digital representation techniques. This course integrates analog and digital techniques with an exploration of selected topics on artificial intelligence. Topics covered include composition, diagramming, research, free-hand sketching, graphic research, analytical drawing, perspective, and the role of final presentations in the overall environment of the studio.

Only ARCH_BARCH plan allowed to enroll in course.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 223. Architecture and the Environment. 1 Credit Hour.

Architectural response to natural environmental requirements. Focus on climate, control, natural energy use, ecosystems, energy flow, environmental intervention, case studies of vernacular building techniques.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 230. Building Technology I: Materials and Methods. 3 Credit Hours.

Material characteristics of enclosure and structural systems, case studies in traditional and modern building construction. Topics include properties of building materials: wood, masonry concrete, steel and glass construction techniques; on-site and off-site processes; exterior finishes; assemblies, detailing and basic building code concepts.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 231. Building Technology II: The Elements of Structure. 3 Credit Hours.

The tectonics and static behavior of the principal elements of building structure. Through an examination of individual elements, the goal is to develop a basis for deciphering structural forms leading towards the ability to compose structural systems. Topics include: Equilibrium, Vertical and Lateral Loads, Codes, Material Behavior, Cable, Arch, Truss, Beam, & Column.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 267. History of Architecture I: Ancient, Medieval and Renaissance. 3 Credit Hours.

Studies in the history of architecture and urban design. Focus on religious, civic and domestic buildings and their settings, and regional constructional and compositional traditions in the Middle East and the West from prehistory to the 17th century. Corequisite: ARC 203.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 268. History of Architecture II: Baroque through Contemporary. 3 Credit Hours.

Studies in the history of architecture and urban design. Focus on religious, civic and domestic buildings and their settings, and regional constructional and compositional traditions in the West from the 17th century to the present. Corequisite: ARC 204.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 292. Introduction to Architecture Design I. 3 Credit Hours.

Survey of the architecture profession and introduction to architecture design for non-architecture majors. Role, opportunities, vocabulary, visual awareness, techniques and procedures of design.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 293. Introduction to Architecture Design II. 3 Credit Hours.

Continuation of ARC 292 and an introduction to the interactions between architecture and the engineering disciplines for non-architecture majors. Theories of building and site design, technology as an integral component of design, program, site, climate and methodology.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 294. Introduction to the Development of Architecture. 3 Credit Hours.

Introduction to architecture for non-architecture majors. Vocabulary, themes, principles and processes of design, cultural, social, economic and technological influences demonstrated through historic examples.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 301. Architecture Design. 3 Credit Hours.

Comprehensive building and site design for students transferring into the architecture program at third year level. Topics include human, environmental, cultural and technological factors.

Components: STU.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 305. Architecture Design V. 6 Credit Hours.

The design course focuses on the production of adaptive reuse projects and other environmental concerns. Topics may include retrofit of buildings and cities, adaptive reuse, historic preservation, environmental interventions, landscape design, and/or explorations of resilience and adaptation of rural and urban environments. Emphasis on human behavior, building resiliency, structures, building materiality, and construction techniques.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 306. Architecture Design VI. 6 Credit Hours.

The design course focuses on the ability to demonstrate skills associated with making integrated architectural design decisions across multiple systems. Students must display an ability to make design decisions within a complex architectural project while demonstrating broad integration and consideration of environmental stewardship, technical documentation, accessibility, site conditions, life safety, environmental systems, structural systems, and building envelope systems and assemblies.

Only ARCH_BARCH plan allowed to enroll in course.

Components: STU.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 323. On Site Study of Selected Architecture and Urbanism. 3-6 Credit Hours.

On site study of specific architectural and/or urbanistic precedents at selected locations. Focus on specific period(s) and/or architect(s). Elective course open to all majors.

Components: LEC.

Grading: GRD.

Typically Offered: Spring & Summer.

ARC 324. On Site Graphic Analysis of Selected Architecture and Urbanism. 3 Credit Hours.

On site analysis and illustration of specific architectural and/or urbanistic precedents at selected locations. Diagrams, sketches, and drawings recording, analyzing and evaluating buildings and places. Focus on specific period(s) and/or architect(s). Elective course open to all majors.

Components: LEC.

Grading: GRD.

Typically Offered: Spring & Summer.

ARC 362. Environmental Building Systems I. 3 Credit Hours.

Course content aims to broaden enrolled student's understanding of energy, specifically the agency of energy to act as a design directive for architectural form making, spatial configuration, material selection and the surrounding environmental contexts— natural and constructed. The course will address fundamental design principles associated with site orientation, psychometrics, passive design, active systems, and building envelope and assemblies.

pre-req of ARC 203 completed.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 363. Environmental Building Systems II. 3 Credit Hours.

Directly building on Environmental Building Systems I, the course sets an agenda for the future architectural profession to formulate a more substantial and meaningful role for energy, both consumption and embodiment in the design of our constructed environment. Course content will address fundamental principles associated with natural and constructed lighting systems, passive, and active thermal systems, power generation and distribution, water management, and acoustics in architecture.

pre-requisite of ARC 204 completed.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 371. Ancient Architecture. 3 Credit Hours.

History of architecture and human settlements. Western European prehistory, Egypt, Mesopotamia, Persia, Aegean and Mediterranean, Greece, Rome.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 373. Early Christian, Byzantine, and Medieval Architecture. 3 Credit Hours.

History of architecture and human settlements. Early Christian and Byzantine architecture in Italy, the Near East, Greece, North Africa, Eastern Europe, Medieval architecture in Western Europe.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 382. Architecture and Culture in Italy. 3 Credit Hours.

A cultural and historical framework in preparation for participation in the Rome program. A range of topics, including architecture, art, history, cinema, literature and politics presented by University faculty from a variety of disciplines. Required for participation in the Rome Program.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 407. Architecture Design VII. 3-6 Credit Hours.

Elective design studio course: student and faculty select areas of in-depth study. Topics are broadly defined and vary from semester to semester. ARCHITECTURE MAJORS.

Components: STU.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 408. Architecture Design VIII. 3-6 Credit Hours.

Elective component: student and faculty select areas of in-depth study. Topics are broadly defined and vary from semester to semester. ARCHITECTURE MAJORS.

Components: STU.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 452. Management of Professional Practice. 3 Credit Hours.

Overview of the practice and the profession, legal and ethical concerns, business types and management practices, traditional and non-traditional practices and services, contracts and contractual relationships.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 475. Colonial Architecture. 3 Credit Hours.

History of architecture and human settlements. Colonial Architecture from the 16th through the 19th centuries in North and South America, the Caribbean, India and Africa.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 476. 19th and 20th Century Architecture. 3 Credit Hours.

History of architecture and human settlements. America and Europe during the 19th and 20th centuries; cultural, technological and theoretical development.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 481. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 482. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 483. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 500. Architecture Theory. 3 Credit Hours.

Architecture and Culture/Architecture and the Environment Survey of primary texts in theory of architecture. Part 1: Focus on design theory, language, identity, tectonics and context. Part 2: Focus on environmental theory, sustainability, and ecosystems.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 501. Architecture Design and Theory I. 6 Credit Hours.

Cultural, human and environment component and architectural responses to these: Social and aesthetic concepts, architectural psychology, climatic principles, programming analysis and design.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 502. Architecture Design and Theory II. 6 Credit Hours.

Technology component; materials, structure, and environmental control systems as a framework for architectural design. Construction materials and methods, structural systems, mechanical systems.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 503. Architectural Design and Theory III. 6 Credit Hours.

Legal and economic component; government and finances as active constituents of architecture design. Zoning regulations, building codes, principles of public health, safety and welfare, market and feasibility studies.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 504. Architecture Design and Theory I. 6 Credit Hours.

Cultural, human and environment component and architectural responses to these: Social and aesthetic concepts, architectural psychology, climatic principles, programming analysis and design.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 507. Architecture Design. 6 Credit Hours.

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc.

Components: STU.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 509. Architecture Design IX. 3-6 Credit Hours.

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc. ARCHITECTURE MAJORS.

Components: STU.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 510. Architecture Design X. 3-6 Credit Hours.

Elective component: student and faculty select areas of in-depth study. Topics include building types, environment, energy, community design, etc. ARCHITECTURE MAJORS.

Components: STU.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 511. Visual Representation I. 3 Credit Hours.

Issues covered in the course will deal with the illustration of ideas in architectural manner. Students are to use the skill of drawing and model-making, either by hand or on the computer, as their new language. Topics will include how to read, understand, and create design drawings, to draw from observations and analyze their subject matter, to be able to distinguish the relevance of a particular drawing and to structure how they present their information. Students will be instructed to properly craft their work in and outside of studio in an effort to see their work evolve and improve.

Components: STU.

Grading: GRD.

Typically Offered: Fall.

ARC 512. Advanced Visual Analysis. 3 Credit Hours.

Drawing as a means of analyzing and recording visual experience. Composition, form, light, color and drawing as a primary device in the mental registration of visual experience.

Components: STU.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 513. Advanced Visual Representation. 3 Credit Hours.

Students will learn to carefully evaluate space, color, depth, hierarchy, balance and scale in all architectural visual representation. The assignments will explore different media as it is used in the profession including but not limited to: diagrams, renderings, plans, elevations, sections, and axonometric. Through lectures and workshops, the course will provide a combination of both theoretical and practical lessons encompassing the fundamentals of architectural visual representation. The course will also include parallel lectures on typography, architectural graphic design, and verbal presentation. The lectures will be given by highly regarded industry professionals who will address the way that students can be aware of and understand typography, verbal presentation, and graphic design fundamentals as it relates to architecture. The class will consist of three parts. Part I introduces students to the fundamentals of 3d modeling and drafting as part of a representation workflow. The exercise will include both urban and building scales. Part II concentrates on understanding and dissecting more complex geometries through advance use of digital parametric software such as Grasshopper. Part III focuses on visual representation based on a studio project with emphasis on graphic techniques for final presentations.

Components: STU.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 514. Michelangelo. 3 Credit Hours.

Drawing as a form of research across mediums to understand historical research and interpretation of Michelangelo's work.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 515. Computer Modeling. 3 Credit Hours.

Three-dimensional, computer modeling, and rendering. Lecture, problem solving exercises and laboratory.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 516. Architectural Watercolor Renderings. 3 Credit Hours.

This course will use freehand drawing and watercolor painting as a vehicle to study and record the urban and architectural conditions of Coral Gables and other South Florida sites. Particular emphasis will be placed on the analytical potential of sketches (recording space, light, surfaces and color).

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 517. Construction Documents. 3 Credit Hours.

Working drawings and specifications. Form, content and role of constituent parts of working drawings and specifications by using case studies.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 518. Documentation of Historic Architecture. 3 Credit Hours.

Principles of preservation and restoration, research methods, measured drawings, surveying methods, and case studies.

Components: LEC.

Grading: GRD.

Typically Offered: Summer.

ARC 519. Architecture and Color. 3 Credit Hours.

This course focuses on the theory and practice of color and its application to architectural design. Topics include color history from Newton through Albrecht, the relationship between color practice in science versus art, and the discipline of color in architecture from the Neoclassical movement through the Modern Movement.

Components: LEC.

Grading: GRD.

Typically Offered: Summer.

ARC 523. Urban Design Competition. 1-3 Credit Hours.

Intensive, collaborative urban design project, combining master planning and real estate development expertise, to be submitted to international peer reviewed competition. Project teams are comprised of students from several different degree programs, such as architecture, urban design, real estate development, business, and law.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 524. Selected Topics in Interior Architecture Design. 3 Credit Hours.

Principles and technical components of interior design. Topics include interior volumetrics, finishes, furnishings and lighting.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 525. Landscape Arch Design I. 3 Credit Hours.

Analysis and design of landscape spaces. Studies in historical precedent, gardens, parks, plazas, squares, and response to urban and architectural context.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 526. Landscape Arch Design II. 3 Credit Hours.

Analysis and design of landscape spaces. Topics include ecological principles, landforms and plant materials.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 527. Architecture Photography. 3 Credit Hours.

Photography with emphasis on architectural subjects. Introduction to visual principles, photographic equipment, materials, and techniques.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 528. Historic Preservation. 3 Credit Hours.

Basic design principles for the rehabilitation of historic buildings and districts. Evaluating character-defining details; significance analysis; context of setting issues within historic districts; applying the Secretary of the Interior's Standards for rehabilitation.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 529. Research in Design-Methods and Procedures. 3 Credit Hours.

Application of research methods and procedures to design issues. Historical, descriptive, analytic, experimental research methods; tools for data manipulation and communication.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 531. Building Technology II: Structural Systems. 3 Credit Hours.

Structural systems: The tectonics, patterns and behavior of the elements of building structures. Topics: Equilibrium, stability, vertical and lateral loads, building envelope and financial considerations.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 532. Building Structures I. 3 Credit Hours.

The structural behavior of simple frame structures. Topics include techniques to determine basic system layout and preliminary dimensioning of key subsystems and members.

Components: LEC.

Grading: GRD.

Typically Offered: Summer.

ARC 533. Building Structures II. 3 Credit Hours.

The structural behavior of complex structures. Topics include prestressed systems, waffle and space trusses, curved structures and longspan buildings.

Prerequisite: ARC 532.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Summer.

ARC 534. Walking and Drawing the Roman City. 6 Credit Hours.

This course is an immersive experience ranging from specialized walking tours of the original and founding parts of the ancient Roman City to the drawing of its architecture and urban spaces. The course is organized into two parts delivered simultaneously: Part 1: Walking the Roman City: The purpose of this course is to discover the layers of Rome, combining archaeology with architecture and urban history. The goal is a thorough and direct knowledge of the Roman and Medieval urban landscape, and the way this landscape has sometimes survived until today. Special attention is given to Roman and Medieval building typology, both private and public, and the development of the urban infrastructure (street system, water supply, fortifications, etc.). Strong emphasis is placed upon continuity, use / reuse and transformation of buildings and spaces. Every session a different site is explored relevant to Rome's early urban history during antique and Middle Ages. Materials Required: Notebook, drawing pens & pencils Part 2. Drawing the Roman City: Students will learn to observe and record the urban and architectural conditions of Rome using a variety of drawing types and media. Drawing will be taught as a means of analysis and recording visual experience in terms of shape and relationships, including light, shade, shadow form, perspective, surface qualities, color, and composition. Materials Required: H, HB, B Pencils, sharpening device of your choice, A5 watercolor paper block, watercolor paint, watercolor brushes S, M L, small rag, eraser, palette with water containers. Recommended Text: Drawings of Rome 1991-2001- T.A. Spain.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 535. The Other Rome. 3 Credit Hours.

This course will provide a core of knowledge of the architecture and urban history of The Other Rome, the Rome re-born in the 19th century. The unification of Italy in 1861 will serve as the point of departure and catalyst for the transformation of Rome as it became the new capital of a unified Italy. Special attention will be given to the reshaping of Rome during the period of Fascist rule (1922-45) a period during which new architecture and public projects were built in the name of politics and the Italian Rationalist movement which advocated for the marriage of aesthetics and function. Although much of this work has been explored in terms of its political, architectural, social and cultural significance, very little has been unturned regarding the significance of the interiors. The course will examine the interior spaces of select buildings constructed during the modern and contemporary periods. Lectures and site visits will highlight the discourse between politics, art, architecture and design. Additional themes presented are the diverse artistic currents of modern Italy and their impact on design culture such as Futurism, Valori Plastici, Metaphysical Painting, Magical Realism, Novecentismo and the Scuola Romana.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 536. Piazze D'Italia Town and Square. 3 Credit Hours.

This course explores the relationship between architecture, art, and the city through and in-depth study of the Italian square. The course will introduce students to relevant examples of Roman squares and a selection of Italian examples. Case Studies include ancient, medieval, renaissance, baroque and neoclassical examples. The class will examine the configuration, size and proportions of squares and their architectural elements, parts, materiality, and urban interrelation with the city.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 537. Rome 1347 - 1764 Shaping City and Territory. 3 Credit Hours.

This course tracks the emergence and development of a distinct conception of the cosmos—Humanism—and the ways in which architects in Rome participated in shaping the built environment in its image. Students will learn about the understanding of the built environment that consolidated during the rise of Humanism. They will then trace the evolution of a variety of building and spatial typologies from the Black Death of 1347—which brought the Middle Ages to a close—up until the publication of Winckelmann's *The History of Art in Antiquity* in 1764—which formally inaugurated the Neoclassical culture that represented yet another reformulation of the cosmos: the Enlightenment. This course is founded on an understanding of the term 'built environment' that contains city and territory, two inseparable elements of the sanctum within which a social unit actively shapes the physical world it inhabits. This means students will study palaces and villas; plazas and gardens; churches and monasteries; public art and infrastructure. This collection of typological lineages will allow students to question architecture's broader role in—or its capacity to—manifest our most fundamental worldviews in space. Materials Required: Sketchbook (B6 size min.), divider (drawing instrument), 2B pencil, one color pencil of preference.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 538. Interior Architecture Design. 3 Credit Hours.

Principles and technical components of interior design. Topics include activity, analysis, finishes, furniture, fixture, lighting, and acoustics.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 539. Adaptation to Climate Change. 3 Credit Hours.

Introduction to the phenomena and related discussion on the topic of climate change. Review of current scientific evidence, tactics for mitigation of emissions and other causal actions, followed by study of the adaptation required by changing conditions. Class assignments include creative proposals for adaptation action.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 540. Tropical Architecture. 3 Credit Hours.

A discussion of tropical architecture and the theme of tropicalism. Research, analysis and documentation in drawing of selected case studies

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 541. Seminar on Town Design. 3 Credit Hours.

Introduction to the lexicon of urbanism; analytical presentations of the concepts of: region, town, neighborhood, corridor, district, and building type; inter disciplinary presentations, review, and criticism of current town and urban design projects.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 542. Seminar on Housing. 3 Credit Hours.

Introduction to domestic building typology; exploration of the concepts of low, medium, and high density housing with attention to social, environmental, and economic issues; presentations of current case studies.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 543. Seminar on Retrofit of Suburbia. 3 Credit Hours.

Introduction to the critical reconstitution of the city; theory and history of the concepts of revitalization and redevelopment; presentations, review, and criticism of current case studies.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 544. Architecture of Palladio. 3 Credit Hours.

On site study of the architecture and urbanism of Andrea Palladio. Emphasis on the artistic precedents of the Veneto Region.

Components: LEC.

Grading: GRD.

ARC 545. Urban Composition. 3 Credit Hours.

Survey and analytical review of urban rooms as the vessel of human activity in urban culture. Study of proportional and compositional aspects of urban rooms together with economic, social, and cultural factors. Readings and discussion format.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 546. Studies of Havana. 3 Credit Hours.

Analysis of the physical structure of a major city and its environments including an exploration of its history and iconographic themes, mapping and building studies.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 547. Architecture and Urban Identity. 3 Credit Hours.

Study of the relationship between architecture and urbanism focusing on the ways by which architecture provides urban identity and image of place. Case studies relating monuments, fabric and urban plans to their culture, time and place. Lecture and seminar format.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 548. Seminar in Community Development. 3 Credit Hours.

Study of the contemporary context for the development of the physical environment. Examination of public, private and third sector implementation of building and community design. Format: guest speakers, readings, discussions, and seminar.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 549. Construction and Project Management. 3 Credit Hours.

Management of construction projects including legal considerations and techniques of management science applied to construction. Includes engineering methods of cost and time estimating, and exercises in applications of engineering economics, flow charts, tracking progress, construction contracts, indemnity agreements, and network planning techniques including CPM and PERT.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 550. Professional Lecture Series. 3 Credit Hours.

Exposure to the various professional disciplines in South Florida that make contributions to the design process. Case study analysis and evaluation of current building project, from time of initial formulation through completion, including research, diagrammatic studies, site visits and lectures.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 551. Contemporary Theories of Architecture. 3 Credit Hours.

Theoretical basis of modern architecture and different present currents and movements. Agrarianism, technism, orthodoxy, brutalism, scientism, revivalism, modernism, rationalism, classicism.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 553. Structural Design Theory. 3 Credit Hours.

Relationship of structural systems to architectural design. Case studies in theories of structure, form and construction.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 554. Architecture of South Florida. 3 Credit Hours.

History of architecture and human settlements. Studies of significant architectural landmarks and urban design of the South Florida Region, chronological growth of Miami, Miami Beach, Coral Gables, Key West and Palm Beach.

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 555. 18th and 19th Century American Architecture and Architects. 3 Credit Hours.

The course concentrates on the development of early American architecture, Architecture and Urbanism, primarily but not exclusively to 17th, 18th and 19th centuries with particular emphasis on theoretical, technological and cultural developments in America.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 556. Parametric Tectonics. 3 Credit Hours.

From simulating the nuances of physics to visualizing precise climate data, computational tools are enabling the architect to do more and to think differently. This introductory course to computational design will expose students to a parametric-based approach to architectural making. The course will involve the use of visual scripting tools (Grasshopper for Rhino3D) for iterative design explorations and building performance analysis to both generate and evaluate design outcomes.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 557. Design and Fabrication Techniques. 3-6 Credit Hours.

Design, construction and detailing of wood and other materials as applied to furnishings and interiors. Workshop includes research, exercises, documentation and a final project.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 558. Theories of Landscape Architecture. 3 Credit Hours.

Leading theories of landscape architecture which have influenced current considerations of nature, landscape and design, including concerns such as urban heat island effect, climate change resilience, and health impacts of landscape.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 559. Sustainability and LEED Exam Prep. 1-3 Credit Hours.

Study of U.S. Green Building Council standards for environmental efficacy in building and neighborhood design. Emphasis on fundamental knowledge of green building concepts, including transportation, energy, water and air quality. Includes preparation for LEED Accreditation Exam and registration for exam that provides the credential signifying expertise in green building and a LEED rating.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 560. Contemporary Latin American Architecture. 3 Credit Hours.

An examination of Contemporary Latin American Architecture and Urbanism from the turn of the 20th Century to the present day. The work of some of the great figures on Latin American Modernism such as Niemeyer and Barragan, to contemporary figures such as Paulo Mendes da Rocha and Isay Weinfeld will be discussed. The influence of the Modern Movement in Europe and Le Corbusier will be reviewed. Large scale City Plans such as Lucio Costa's Plan for Brasilia and Roberto Burle-Marx's designs for Flamengo Park and Copacabana in Rio de Janeiro will be analyzed.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 564. Intro to Hotel Design and Development. 1-3 Credit Hours.

Specialization component: This course will provide an introduction to hotel design and development in a seminar format that brings a variety expertise from guest speakers involved in the design, development, market and operational aspects of hotel and resort development.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 566. Architecture Portfolio. 3 Credit Hours.

The course focuses on the development and production of an architecture portfolio with emphasis on fundamental techniques in layout, image composition, and other graphical representation skills. Through a series of assignments, students learn to evaluate color, depth, hierarchy, and scale within a layout. While focus is centered on creating a design portfolio, the topic of online presentation, individual brand, and job interviews are addressed.

Components: LEC.

Grading: GRD.

Typically Offered: Summer.

ARC 568. History of Architecture II: Baroque through Contemporary. 3 Credit Hours.

Studies of the history of architecture and urban design. Focus on religious and secular monuments and their settings, domestic architecture and infrastructure, regional constructional and compositional traditions from the end sixteenth century through to the present. Corequisite: ARC502.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 569. Directed Readings. 3 Credit Hours.

A structured program of readings and essays organized by the student and his/her graduate supervisor constituting a preparation for graduate research in the student's chosen area of interest.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 570. Modern Architecture. 3 Credit Hours.

History of architecture, landscape, and city design in the modern era.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 572. Selected Topics in World Architecture. 3 Credit Hours.

History of architecture and human settlements. Islamic Near East, North Africa, Hindu and Buddhist India, Nepal, S. E. Asia, China, Japan, Pre-Columbian America.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 574. Renaissance Architecture. 3 Credit Hours.

History of architecture and human settlements. Renaissance and Baroque architecture in Italy, France, Spain and Portugal, Great Britain, Austria, Germany, and neighboring countries.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 577. Roman Neighborhoods. 3 Credit Hours.

This course is an immersion into the city through the observation and analysis of the distinct neighborhoods of Rome. Each “quartiere” is unique for its urban form, architectural and social qualities, and character. Students will learn about the architectural history of Rome through the lens of these neighborhoods whose buildings display the Ancient, Medieval, Renaissance, Baroque and Modern heritage together. Students will learn of the great transformation of the city following the unification of Italy during the late 19th century. Topics will include Metaphysical and Novecento artistic theories, Rationalism, Post Modernism, and contemporary culture. Class sessions will consist of lectures and walking tours. Students are expected to sketch on site and observe independently as well as during group sessions. Materials Required: 5 x 7 sketchbook, drawing pencils, color rendering media of choice such as: color pencils, pastels, watercolors, bristol paper or watercolor paper. Required readings will be announced in class.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 578. Italian Rationalist Architecture. 3 Credit Hours.

History of Italian architecture and urban design between 1914 and 1950: cultural, technological, and theoretical developments; relationship between architecture, politics and propaganda; related survey of the period in other countries (France, German, Soviet Union).

Components: LEC.

Grading: GRD.

Typically Offered: Offered by Announcement Only.

ARC 579. An Introduction to Resilient Building and Community Design. 3 Credit Hours.

This course introduces students to the relationships between climate, resiliency, architecture and urbanism; building awareness of the growing challenges and opportunities ahead, and the intersections between these disciplines. What does resilience mean in this broader context, and how should escalating stressors and shocks be addressed? Students learn about climate sciences, then research, document, and analyze evolving resilient design strategies, at the scale of buildings, neighborhoods and cities, in the end, applying those lessons to a given case study site; developing a holistic set of resilient design recommendations. During the course, students interact with specialists in the fields of architecture and urban design, as well as related fields, such as engineering, social, marine and environmental sciences, and/or policymakers, to better comprehend first-hand the interwoven scientific, social, environmental, and governmental ramifications to resilient design. Lastly, students learn the mechanics of participatory design methods employed to engage communities in related efforts.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 580. Professional Advancement, Internship + Research (PAIR). 3 Credit Hours.

Research Component of PAIR program. Student, host office and faculty collaboratively develop a focused, in-depth research project related to the tasks the student is completing as part of the Internship Component of the PAIR program. Application and PAIR committee acceptance required prior to enrollment.

Components: RSC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 581. Special Problems. 1-3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 582. Special Problems. 3-6 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 583. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 584. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 585. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 586. Special Problems. 3 Credit Hours.

Group or individual investigations of significant architectural issues, offered by special arrangement only.

Components: LEC.

Grading: GRD.

Typically Offered: Fall, Spring, & Summer.

ARC 590. History of Cities. 3 Credit Hours.

Historical overview of the origin and development of cities around the world. Emphasis on intentional form of settlements (the ideal) as well as response to economic and political imperatives such as trade and defense (the real).

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 592. Cinema and Architecture. 3 Credit Hours.

The class studies the relationship between architecture and cinema. Lectures, film screenings, and readings, explore the origin and development of filmic space with an emphasis on its relation to the real and poetic image of the city. The class analyzes selected films as they relate to, comment, criticize, and anticipate the development of contemporary concepts of space, urban space, interior space, etc.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 593. Computer Animation. 3 Credit Hours.

Explores the use of computer animation and advanced visualization techniques in architecture with emphasis on texture and lighting, spatial choreography and story-boarding.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 594. Geographic Information Systems in Urban Design. 3 Credit Hours.

Exploration of Geographic Information Systems (GIS) in urban design. Principles of GIS and their application to spatial analysis, data management and visualization.

Components: LEC.

Grading: GRD.

Typically Offered: Fall & Spring.

ARC 596. Interactive Multimedia in Design. 3 Credit Hours.

Integration of text, video, sound, and computer graphics to create an interactive electronic information medium.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.

ARC 597. Designing for the Internet of Things. 3 Credit Hours.

This course examines how current research and development in embedded computation bears on architecture, landscape, and urbanism. Students will explore the implications and impact of ubiquitous computing in its potential to change the way we conceive, construct, inhabit and interact with our buildings, landscapes, and cities.

Components: LEC.

Grading: GRD.

Typically Offered: Fall.

ARC 598. Introduction to Programming for Architects. 3 Credit Hours.

As digital tools continue to play an increasing role in the Architect's toolkit, it is becoming increasingly important that Architects not only understand how to use and navigate these tools but to customize and adapt them to their specific needs. Learning how to program allows Architects to start to fully utilize the potential in digital tools by maximizing the possibilities in not only 3D modeling and digital fabrication but in responsive architecture, embedded computation and animating spaces contributing to a more dynamic and potentially inter-connected built environment.

Components: LEC.

Grading: GRD.

Typically Offered: Spring.