

**University of Miami Bulletin, 2009 – 2010**  
**Graduate Course Listing**

\* 500 level courses appear in both the undergraduate and graduate course listing and may be considered undergraduate or graduate at the discretion of the department. Prerequisites, co-requisites and other course requirements are subject to change.

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**Graduate Course Listing**  
**SCHOOL OF ARCHITECTURE**  
**ARCHITECTURE**

**ARC501 Architecture Design and Theory I**

*6 credits*

*Fall Semester*

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

PREREQUISITE: GRADUATE STANDING.

**ARC502 Architecture Design and Theory II**

*6 credits*

*Spring Semester*

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

PREREQUISITE: ARC 501.

**ARC503 Architectural Design and Theory III**

*6 credits*

*Fall Semester*

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.

PREREQUISITE: ARC 502.

**ARC507 Architecture Design**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: ARC503

**ARC509 Architecture Design IX**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: ARC 408.

**ARC510 Architecture Design X**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: ARC 509.

**ARC511 Drawing**

*3 credits*

*Fall Semester*

Graphic representation and exploration of visual ideas through increased awareness of visual and graphic vocabulary, stressing projections, light, shade and shadow, perspective, and freehand sketching.

PREREQUISITE: GRADUATE STANDING AND PERMISSION OF INSTRUCTOR.

**ARC512 Advanced Visual Analysis**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 204, 112.

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**ARC513 Computing**

*3 credits*

*Spring Semester*

An introduction to new electronic design tools and technology available to architects today. Lectures on the history and future of computing in the profession.

PREREQUISITE: GRADUATE STANDING AND PERMISSION OF INSTRUCTOR.

**ARC514 Michelangelo**

*3 credits*

*Fall Semester*

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

PREREQUISITE: ARC 306, 112, 213 OR PERMISSION OF THE INSTRUCTOR.

**ARC515 Computer Modeling**

*3 credits*

*Fall & Spring Semester*

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

PREREQUISITE: ARC 213, 513 OR PERMISSION OF THE INSTRUCTOR.

**ARC516 Architectural Watercolor Renderings**

*3 credits*

*Fall Semester*

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).

PREREQUISITE: ARC 306 OR PERMISSION OF THE INSTRUCTOR.

**ARC517 Construction Documents**

*3 credits*

*Fall Semester*

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

PREREQUISITE: ARC 204 AND 261.

**ARC518 Documentation of Historic Architecture**

*3 credits*

*First & Second Summer Session*

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

PREREQUISITE: ARC 204.

**ARC519 Architecture and Color**

*3 credits*

*First & Second Summer Session*

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

PREREQUISITE: ARC 306 OR PERMISSION OF THE INSTRUCTOR.

**ARC520 Computer Modeling II**

*3 credits*

*Spring Semester*

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

PREREQUISITE: ARC 213 OR 513 AND 515 OR PERMISSION OF THE INSTRUCTOR.

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**ARC521 The Architecture of American Cities**

*3 credits*

*Fall Semester*

Study of theories on relationships between architectural objects and urban space based on works which include Sitte, Rossi, and Norberg-Schulz. Application of selected theoretical principles to the contemporary American cities.

PREREQUISITE: ARC 374.

**ARC522 Architecture Psychology**

*3 credits*

*Offered By Announcement Only*

Environmental behavior concepts and their application to an architecture focused on designing for people. Fundamental principles covered include proxemics, privacy, personalization, territoriality, defensible space, social interaction, aesthetics, symbolism, and spatial perception, reasons for individual and cultural differences in spatial actions are outlined. Psychological and social concepts are applied to the process of design and to residential environments, neighborhoods, and public spaces.

PREREQUISITE: PERMISSION OF INSTRUCTOR.

**ARC523 Interior Architecture Design**

*3 credits*

*Fall Semester*

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

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

**ARC524 Selected Topics in Interior Architecture Design**

*3 credits*

*Spring Semester*

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

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

**ARC525 Landscape Arch Design I**

*3 credits*

*Fall & Spring Semester*

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

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

**ARC526 Landscape Arch Design II**

*3 credits*

*Offered By Announcement Only*

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

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

**ARC527 Architecture Photography**

*3 credits*

*Offered By Announcement Only*

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

PREREQUISITE: ARC 204.

**ARC528 Historic Preservation**

*3 credits*

*Spring Semester*

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

PREREQUISITE: ARC 204.

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**ARC529 Research in Design-Methods and Procedures**

*3 credits*

*Fall & Spring Semester*

Application of research methods and procedures to design issues. Historical, descriptive, analytic, experimental research methods; tools for data manipulation and communication.  
PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

**ARC530 Architectural Principles of Harmony**

*3 credits*

*Fall & Spring Semester*

The study of the essential elements of architectural design including form, proportion, light, color, ornamentation and intention. Referring to historic precedents, students will investigate the relationship between these elements through the spectrum of harmonic ratios. Emphasis on understanding Greek and Roman principles of design through analytical drawing.

PREREQUISITE: ARC 382.

**ARC531 Building Structures I**

*3 credits*

*Spring Semester*

The structural behavior and tectonic form of the elements of buildings. Topics include loads, stability, equilibrium, strength, and the dimensions of structural form.

PREREQUISITE: PHY 103, GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC532 Building Structures II**

*3 credits*

*Spring Semester & First Summer Session*

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

PREREQUISITE: ARC 531.

**ARC533 Building Structures III**

*3 credits*

*Fall Semester & Second Summer Session*

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

PREREQUISITE: ARC 532.

**ARC534 The Palazzo in Italian Architecture**

*3 credits*

*Fall & Spring Semester*

Study of the development of the Renaissance and Baroque palazzo in Rome and other important centers of art and culture. Emphasis on the socio-political context.

PREREQUISITE: ARC 382.

**ARC535 Historic Italian Urbanism**

*3 credits*

*Fall & Spring Semester*

Study of Italian cities and towns from medieval to contemporary times, including a comparative analysis of history and form.

PREREQUISITE: ARC 382.

**ARC536 Italian Gardens**

*3 credits*

*Fall & Spring Semester*

Study of Italian garden design during the Renaissance, Baroque and Mannerist periods. Emphasis on historical and political context.

PREREQUISITE: ARC 382.

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**ARC537 Research in Rome**

*3 credits*

*Fall & Spring Semester*

An exploration of Roman history, architecture and urban form through lectures, on site study and drawing assignments. Emphasis on chronological and spatial sequence of development.

PREREQUISITE: ARC 382.

**ARC541 Seminar on Town Design**

*3 credits*

*Fall Semester*

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

**ARC542 Seminar on Housing**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 306 OR PERMISSION OF INSTRUCTOR.

**ARC543 Seminar on Retrofit of Suburbia**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 306 OR PERMISSION OF INSTRUCTOR.

**ARC544 The Architecture of Palladio**

*3 credits*

*Fall Semester*

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

PREREQUISITE: PERMISSION OF THE INSTRUCTOR.

**ARC545 Urban Composition**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 306, 502, OR PERMISSION OF INSTRUCTOR.

**ARC546 Studies of Havana**

*3 credits*

*Spring Semester*

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.

**ARC547 Architecture and Urban Identity**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 306 OR PERMISSION OF INSTRUCTOR.

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**ARC548 Seminar in Community Development**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 305, 502, OR PERMISSION OF INSTRUCTOR.

**ARC550 Professional Lecture Series**

*3 credits*

*Fall & Spring Semester*

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.

**ARC551 Contemporary Theories of Architecture**

*3 credits*

*Offered By Announcement Only*

Theoretical basis of modern architecture and different present currents and movements.

Agrarianism, technism, orthodoxy, brutalism, scientism, revivalism, consumerism, rationalism, classicism.

PREREQUISITE: ARC 204 OR PERMISSION OF INSTRUCTOR.

**ARC553 Structural Design Theory**

*3 credits*

*Offered By Announcement Only*

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

PREREQUISITE: ARC 306 AND CAE 313.

**ARC554 Architecture of South Florida**

*3 credits*

*Offered By Announcement Only*

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.

PREREQUISITE: ARC 204 OR PERMISSION OF THE INSTRUCTOR.

**ARC555 Design and Fabrication Techniques in Wood: The Lamp**

*3 credits*

*Spring Semester*

Design, construction and detailing of wood as applied to furnishings and interiors.

Focus: lamps and illumination. Workshop based course including research, exercises, measuring, documentation and a final project.

**ARC556 Design and Fabrication Techniques in Wood - The Clock**

*3 credits*

*Fall Semester*

Design, construction and detailing of wood as applied to furnishings and interiors.

Focus: Traditional Clock and Case Design. Workshop based course including research, exercises, measuring, documentation and a final project.

**ARC557 Design and Fabrication Techniques: Carved Panels**

*3 credits*

*First & Second Summer Session*

Design, construction and detailing of wood as applied to furnishings and interiors.

Focus: low and high relief carved wood panels. Workshop based course including research, exercises, measuring, documentation and a final project.

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**ARC558 Theories of Landscape Architecture**

*3 credits*

*Fall Semester*

Leading theories of landscape architecture which have influenced current considerations of nature, landscape and design.

PREREQUISITE: ARC 204 OR PERMISSION OF INSTRUCTOR.

**ARC559 Computer Aided Presentation Graphics**

*3 credits*

*Offered By Announcement Only*

Introduction to computer aided presentation graphics from the perspective of the design professional. Topics include: desktop publishing, image processing, and desktop presentations.

PREREQUISITE: ARC 213 OR PERMISSION OF INSTRUCTOR.

**ARC561 Building Construction**

*3 credits*

*Fall Semester*

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; interior and exterior finishes; assemblies, detailing and building codes.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC562 Building Systems I**

*3 credits*

*Fall Semester*

Environmental and Safety Systems. Topics include mechanical - HVAC and conveyors; plumbing - fixtures and pipes; electrical - equipment and wiring design; safety systems - fire safety and emergency and signal systems.

PREREQUISITE: ARC 561 OR PERMISSION OF INSTRUCTOR.

**ARC563 Building Systems II**

*3 credits*

*Spring Semester*

Principles and applications of light and acoustics. Topics include natural and artificial light - planning for sunlight, problems and solutions for interior and exterior illumination; sound - properties, problems and solutions in new and existing spaces electrical equipment and wiring design.

PREREQUISITE: ARC 562 OR PERMISSION OF INSTRUCTOR.

**ARC564 Building Systems III**

*3 credits*

*Offered By Announcement Only*

Direction, control and coordination of construction project activities. Topics include inspection, reporting, recording, safety standards.

PREREQUISITE: ARC 363 OR 563 OR PERMISSION OF INSTRUCTOR.

**ARC567 History of Architecture I: Ancient, Medieval and Renaissance**

*3 credits*

*Fall Semester*

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 prehistory to the end of the sixteenth century. Corequisite: ARC 501.

PREREQUISITE: GRADUATE STANDING. COREQUISITE: ARC 501.

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**ARC568 History of Architecture II: Baroque through Contemporary**

*3 credits*

*Spring Semester*

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.

PREREQUISITE: GRADUATE STANDING. COREQUISITE: ARC 502.

**ARC569 Directed Readings**

*3 credits*

*Fall & Spring Semester & First & Second Summer Session*

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.

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

**ARC570 Modern Architecture**

*3 credits*

*Spring Semester*

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

**ARC571 Ancient Architecture**

*3 credits*

*Fall Semester*

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

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC572 Selected Topics in World Architecture**

*3 credits*

*Fall Semester*

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

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC573 Early Christian, Byzantine, and Medieval Architecture**

*3 credits*

*Fall Semester*

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.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC574 Renaissance Architecture**

*3 credits*

*Fall Semester*

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

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC575 Colonial Architecture**

*3 credits*

*Fall Semester*

History of architecture and human settlements. Iberian and British Colonies from the 16th through the 19th centuries: North and South America, Caribbean, India and Africa.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

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**ARC576 19th and 20th Century Architecture**

*3 credits*

*Fall Semester*

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

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC577 The Architecture of Alvar Aalto**

*3 credits*

*Fall Semester*

An examination of the architecture of Alvar Aalto through the analysis of selected buildings.

PREREQUISITE: PERMISSION OF THE INSTRUCTOR.

**ARC578 Italian Rationalist Architecture**

*3 credits*

*Offered By Announcement Only*

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).

PREREQUISITE: ARC 305 OR PERMISSION OF THE INSTRUCTOR.

**ARC579 History of Architecture: The Natural and the Man-Made**

*3 credits*

*Offered By Announcement Only*

A review of the relationship between man, the landscape, and architecture from pre-history to the twentieth century.

PREREQUISITE: GRADUATE STANDING.

**ARC584 Special Problems**

*1- 3 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

**ARC585 Special Problems**

*1- 3 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

**ARC586 Special Problems**

*1- 3 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: PERMISSION OF PROGRAM DIRECTOR.

**ARC590 History of Cities**

*3 credits*

*Fall & Spring Semester*

Historical overview of the origin of cities and the development of cities in the East, West, and New World. Focus on the nature of the industrial revolution and the development of the industrial city and contemporary urban settlements.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

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**ARC592 Computing in Design Practice**

*3 credits*

*Fall Semester*

Introduction to computer applications specific to the design professional practice and management of computing resources in a design firm.

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

**ARC593 Computer Animation**

*3 credits*

*Spring Semester*

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

PREREQUISITE: ARC 415 OR PERMISSION OF INSTRUCTOR.

**ARC594 Geographic Information Systems in Urban Design**

*3 credits*

*Spring Semester*

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

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

**ARC595 Database Management Systems and Programming**

*3 credits*

*Fall Semester*

Introduction to principles of database management and programming. Instruction of a selected database management program and a programming language.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF INSTRUCTOR.

**ARC596 Interactive Multimedia in Design**

*3 credits*

*Spring Semester*

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

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

**ARC597 Computer Visualization**

*3 credits*

*Spring Semester*

Focus: Explores the use of various advanced visualization techniques in design.

Topic will change from semester to semester. Format: lecture, laboratory and exercises.

PREREQUISITE: ARC 593 OR 596 OR PERMISSION OF INSTRUCTOR.

**ARC601 Town Design**

*6 credits*

*Fall Semester*

Exploration of town design as an alternative to suburban sprawl.

PREREQUISITE: GRADUATE STANDING.

**ARC602 Housing Design**

*6 credits*

*Spring Semester*

Exploration of low and medium density housing with attention to social, environmental, and market issues. Design of housing in different social and environmental conditions.

PREREQUISITE: ARC 601.

**ARC603 Redesign of Suburbia**

*6 credits*

*First & Second Summer Session*

Exploration of design issues and problems related to growth management and the re-development of suburbia.

PREREQUISITE: ARC 602.

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**ARC607 Architecture Design**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

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

PREREQUISITE: ARC 503.

**ARC608 Architecture Design**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

Specialization component: student and faculty select areas of in-depth study in housing. Low-income housing, elderly housing, suburban housing, housing types, etc.

PREREQUISITE: ARC 607.

**ARC609 Architecture Design**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

Comprehensive project. Programming, design development, formulation of alternative solutions, detailing, presentation.

PREREQUISITE: ARC 608.

**ARC610 Architecture Design Degree Project**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

Special component: student/faculty selected area of special study.

PREREQUISITE: ARC 609.

**ARC611 Architecture Design and Research**

*6 credits*

*Fall Semester*

Documentation, investigation and research of the stylistic and constructive characteristics of Roman buildings and monuments. Focus on factual documentation.

**ARC612 Architecture Design and Research**

*6 credits*

*Spring Semester*

Research and investigation of urbanism and the construction of the city through compositional exercises.

**ARC621 Seminar on Town Design**

*3 credits*

*Fall Semester*

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

Corequisite: ARC 601.

PREREQUISITE: COREQUISITE: ARC 601.

**ARC622 Seminar on Housing**

*3 credits*

*Spring Semester*

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. Corequisite: ARC 602.

PREREQUISITE: COREQUISITE: ARC 602.

**ARC623 Seminar on Redesigning Suburbia**

*3 credits*

*First & Second Summer Session*

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. Corequisite: ARC 603.

PREREQUISITE: COREQUISITE: ARC 603.

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**ARC624 Architecture Theory**

*3 credits*

*Spring Semester*

Review and criticism of current theoretical work in architecture. Design theory, language, typology, image, form, context.

PREREQUISITE: GRADUATE STANDING OR PERMISSION OF THE INSTRUCTOR.

**ARC625 Roman Architecture and Urbanism I**

*3 credits*

*Fall Semester*

Historical overview of architecture and town planning in ancient Rome, from the Etruscan period through the Imperial period.

**ARC652 Management of Professional Practice**

*3 credits*

*Fall Semester*

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, disputes and risk management.

PREREQUISITE: ARC 502. LIMITED TO ARCHITECTURE STUDENTS.

**ARC691 Seminar in Computing and Design**

*3 credits*

*Fall Semester*

Exploration of a range of topics related to computing and design. Future of computing in design, electronic communications, computing and design theory and methods, etc.

PREREQUISITE: ARC 213 OR 513 OR PERMISSION OF INSTRUCTOR.

**ARC695 Advanced Topics**

*3 credits*

*Fall & Spring Semester*

Subject matter offerings based upon student demand and availability of faculty.

Subtitles describing the topics will be shown in the printed class schedule, following the title "Advanced Topics".

PREREQUISITE: PERMISSION OF THE PROGRAM DIRECTOR.

**ARC696 Advanced Topics**

*3 credits*

*Spring Semester*

Subject matter offerings based upon student demand and availability of faculty.

Subtitles describing the topics will be shown in the printed class schedule, following the title "Advanced Topics".

PREREQUISITE: PERMISSION OF THE PROGRAM DIRECTOR.

**ARC699 Directed Research**

*1- 6 credits*

*Fall & Spring Semester & First & Second Summer Session*

Individually supervised projects. Required 6 credit course for all Master of Architecture in Computing students who exercise final project rather than thesis option.

PREREQUISITE: ARC 529 OR EQUIVALENT, APPROVED THESIS OR FINAL PROJECT PROPOSAL AND PERMISSION OF INSTRUCTOR.

**ARC701 Masters Final Project**

*6 credits*

*Fall & Spring Semester & First & Second Summer Session*

Individually supervised projects. Required as a 6 credit course for all Master of Architecture in Computing students electing a final project.

PREREQUISITE: AN APPROVED FINAL PROJECT PROPOSAL AND PERMISSION OF SUPERVISING FACULTY.

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**ARC710 Master's Thesis**

*1- 6 credits*

*Fall & Spring Semester & First & Second Summer Session*

The student working on his/her master's thesis enrolls for credit, in most departments not to exceed six, as determined by his/her advisor. Credit is not awarded until the thesis has been accepted.

PREREQUISITE: PERMISSION OF THE PROGRAM DIRECTOR.

**ARC720 Research in Residence**

*0 credit*

*Fall & Spring Semester & First & Second Summer Session*

Used to establish research in residence for the thesis or final project for the master's degree after the student has enrolled for the permissible cumulative total in ARC 699 or ARC 710 (usually six credits). Credit not granted. May be regarded as full-time residence.

PREREQUISITE: PERMISSION OF THE PROGRAM DIRECTOR.

**REAL ESTATE DEVELOPMENT**

**RED601 Introduction to Real State Development and Urbanism.**

*3 credits*

*Fall Semester*

**RED610 Financing Urban Real Estate Development**

*3 credits*

*Fall Semester*

Concepts and techniques for analyzing financial decisions in property development and investment including: real estate economics and investment performance measurement, leasing and property income streams, pro forma analysis, basics of equity and debt valuation, income tax and leverage considerations, mortgages, and deal structures. Emphasis financing individual projects.

**RED620 Real Estate Law**

*3 credits*

*Fall Semester*

Fundamentals of law and the entitlement process, including contractual aspects of real estate development, finance, management and ethical issues and a real-world overview of the review and approvals process.

**RED630 Market Analysis for Urban Markets**

*3 credits*

*Fall Semester*

Identification of critical market factors that determine development opportunities. Topics include business and construction cycles, regional and urban growth trends, commercial and industrial location theories, and advanced demographic analysis and projection techniques to project and analyze occupancy, rental growth, absorption, and competitive supply.

**RED640 National Charrette Institute (NCI)**

*1 credits*

*Spring Semester*

**RED650 Complex Urban Real Estate Transactions**

*3 credits*

*Spring Semester*

Real estate finance, law, and deal structuring from the perspective of developers. Using the case study method, the course explores the legal components and the skills needed for drafting the documentation involved in sophisticated real property transactions, as well as complex original financings. prerequisite: Successful completion of Real Estate Finance and Real Estate Law.

PREREQUISITE: REAL ESTATE FINANCE AND REAL ESTATE LAW

**University of Miami Bulletin, 2009-2010**  
**Graduate Course Listing**  
**SCHOOL OF ARCHITECTURE**  
**REAL ESTATE DEVELOPMENT**

**RED660 Urban infill, Preservation & Mixed Use Development.**

*3 credits*

*Spring Semester*

Builds students' competencies for infill and redevelopment practice focusing on: mixed-use development, transit oriented development, barriers and solutions for urban infill development, urban site analysis, repositioning of urban land, vacant and underutilized properties, long-term land leases, tax incentives, historic preservation, public-private partnerships, business improvement districts, tax increment financing, community (re)development districts, parking strategies, and urban housing types.

**RED670 construction and Project Management**

*3 credits*

*Spring Semester*

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.

**RED680 Entrepreneurship: Building A Real Estate Development Company**

*3 credits*

*Spring Semester*

Focuses on management and business practices for building new urban real estate firms capable of leading the industry and assuming competitive advantages over conventional models.

**RED690 Integrated Real Estate Development Case Studies Practicum**

*3 credits*

*First & Second Summer Session*

Students integrate and apply their learning and skills to complex problem-solving involving a series of intensive real world cases of urban real estate development. Focuses on project feasibility and helps hone the required set of development skills.

**RED699 Capstone: Real Estate Development and Urbanism Charrette**

*3 credits*

*First & Second Summer Session*

An intensive real estate development and urban design studio in which students are part of a multi-disciplinary team on an urban development project. Focuses on comprehensive analysis, project planning, feasibility and program development through the application of advanced development skills in an urban context.