UNIVERSITY OF MIAMI SCHOOL OF ARCHITECTURE GRADUATE CERTIFICATE PROGRAMS (August 2020)



Graduate students increasingly look to areas of concentration that can provide skill and knowledge bases for professional applications. Historic Preservation, Classical and Traditional Design, Construction Management, Design for Health and Wellbeing, Sustainable and Resilient Design, Hospitality Design, Urban Design, and Real Estate Development prove to be rapidly growing areas of professional specialization as they engage critical areas of investigation in contemporary architecture. The certificate programs address both the intellectual and academic needs of the School of Architecture, and the desire of the School to use its current curriculum as a platform to engage these specialized areas further.

Certificates require a total of 15 credits of core courses and related electives.

Certificate in Historic Preservation (not stand-alone certificate)

Coordinator: Prof. Jean-Francois Lejeune

The Certificate in Historic Preservation program provides a unique opportunity for both undergraduate and graduate students at U-SoA to expand their knowledge of historic preservation while completing their professional degrees. The program builds on U-SoA's strengths in history, urban design, communitybuilding, and regionalism.

Miami and its region, including South Florida and the Caribbean, serve as an ideal laboratory for the program. A diversity of characteristics and threatened buildings, urban districts, and landscapes provide the context for exploring the evolving issues in historic preservation.

The Certificate Program stresses an interdisciplinary approach and allows specialization in areas of regional significance, such as tropical and sub-tropical architecture. Program resources include Miami's professional community with its extensive experience in preservation in practice.

Plan of Study

Required Core Courses (9 credits)

ARC 608-609 Architecture Design Studio (Historic Preservation focus)

ARC 628 Introduction to Historic Preservation

Electives (6 credits) can be selected from the following and by semester offerings (choose two)

ARC 618 Documentation of Historic Preservation ARC 620 Responsible Architecture ARC 655 18th and 19th Century American Architecture and Architects ARC 674 Renaissance Architecture

ARC 676 19th and 20th Century Architecture

Certificate in Classical and Traditional Design (not stand-alone certificate)

Coordinator: Prof. Teofilo Victoria

For thousands of years, the Classical tradition has lain at the heart of western architecture, resulting in an enduring language of design of universal appeal that is readily understood by the general public. The growing appreciation for classical and traditional architecture has meant that the demand for traditional buildings, in both the public and private realms, is greater today than it has been for 50+ years. This is reflected in the hiring preference (by many architectural firms) to obtain graduates whose portfolios demonstrate a skill set in this field, along with conventional modernist idioms. It is our belief that giving students a training in classicism makes them better designers in all traditions, including modernism. The core of the certificate program is a studio in which the vocabulary (the orders) and the syntax (composition) of classical architecture are taught through a series of pedagogical exercises and esquisse (sketch) projects; in addition, students will take electives in history, theory, and documentary analysis.

The Certificate program engages the educational opportunities of two organizations: The Institute of Classical Architecture & Art (ICAA) and the Prince's Foundation for the Built Environment. A New York City-based organization with 14 chapters nationwide including one in the Southeast (Atlanta), The ICAA is the leading national non-profit organization dedicated to advancing the practice and appreciation of the Classical tradition in architecture and the allied arts. The Prince's Foundation for the Built Environment, a United Kingdom-based architecture school and trust, was founded by the Prince of Wales in order to promote a return of human values to architecture.

Plan of Study

Required Core Courses (6 credits)

ARC 608-609 Architecture Design Studio Classical and Traditional Design Focus

Electives (9 credits) can be selected from the following and by semester offerings (choose three)

ARC 655 18th and 19th Century American Architecture and Architects ARC 674 Renaissance Architecture ARC 676 19th and 20th Century Architecture

ARC 690 History of Cities

Certificate in Construction Management

Coordinator: Prof. Armando Montero

Growth in the construction industry is projected to outpace all other industries through 2030, creating a high demand for qualified professionals in the industry. The Certificate in Construction Management addresses the growing demand for professionals with the advanced knowledge, discipline, and skills needed to face the challenges of the construction industry and become future leaders of design and construction-related organizations worldwide. The certificate takes advantage of the culture and resources available at the School of Architecture as well as the Miami Herbert Business School and the School of Law. The Certificate in Construction Management prepares graduate architecture students for effective management leadership in the construction field. It provides a foundation for training in professional management of construction projects while focusing on three components that represent the functional areas of construction management:

- Management
- Project Controls
- Design and Construction Technology

Plan of Study

Required Core Courses (9 credits)

CMA 601 Fundamentals of Construction Management

CMA 640 Virtual Design and Construction

CMA 676 Interdisciplinary Design Studio/Integrated Project Delivery

Elective Courses (6 credits)

ARC 608-609 Architecture Design Studio/Design Build

CMA 630/ARC 617 Contract Documents

CMA 642 Emerging Technologies in Design and Construction

CMA 620 Construction Project Controls

CMA 632 Construction Risk Analysis and Control

Certificate in Design for Health and Well-Being

Coordinator: Prof. Joanna Lombard

As a growing body of research demonstrates the significant impacts of the built environment on health and well-being, new systems of building certifications and demands for evidence-based decision-making have expanded beyond the field of healthcare buildings to include the full spectrum of urban, institutional, commercial, and residential design. At the same time, the field of healthcare design is addressing fundamental change. As healthcare systems are in the midst of realignments with population health and community-based care, these realignments are moving beyond the walls of acute care facilities to encompass wellness beginning with behaviors, which research is showing to be highly influenced by the environment.

The University of Miami Built Environment Behavior and Health Research Group, with faculty in the Department of Public Health Sciences and the School of Architecture, has conducted an ongoing program of funded research in this area of inquiry since 1999. In 2015, research group members Professor Joanna Lombard and Public Health Sciences Research Associate Professor Scott Brown were selected as Charter Members of one of eleven founding university teams selected by the American Institute of Architects (AIA), AIA Foundation, and the Association of Collegiate Schools of Architecture for the AIA Design + Health Research Consortium. The work of the research group has been widely disseminated to include informed public policy that has been integrated into both architecture and urban design studios in the School of Architecture.

Focusing more specifically on healthcare environments, in 2009, Professor Joanna Lombard initiated the School's first Healthcare Design Studio and aligned with the School of Business, the first healthcare focused symposium, "Future Directions: Health Care and the Built Environment." Over the last 9 years, subsequent studios and related colloquia have been associated with healthcare systems and urban environments, addressing the rapidly changing world of healthcare and engaging topical research in public health. Alumni from these studios have found positions around the United States working in this vanguard area of the intersection of health and well-being. Applying to building and healthcare design specifically, this intersection has extended to other larger issues of community design.

Plan of Study

One required studio course from the following (6 credits)

ARC 608-609 Architecture Design/Healthcare or Healthy Community Focus or

ARC 601 Urban Design Studio

One required seminar course from the following (3 credits)

ARC 682 Evidence-based Design Research Seminar

EPH 651 Research Methods

ARC 684 Capstone Project

Elective course selected from the following (6 credits)

ARC 681 Interdisciplinary Course: Hospitals, Healthcare Services and Access

EPH 640 Urban Environment and Public Health

EPH 646 Climate & Health

EPH 647 Community-Based Participatory Research

EPH 648 Climate, Cool Cities, Healthy Communities

MGT 684 Analysis of Healthcare Delivery and Policy

MGT 687 Healthcare Organization Economics and Ethics

BUS 655 Public Policy and Health

Certificate in Sustainable and Resilient Design

Coordinator: Prof. Sonia Chao

Environmental impacts of building practices, climate change, and rising sea levels are changing the landscape of architecture as a profession. Architects play a central role in selecting material and technology strategies, as well as developing robust adaptation strategies by addressing material impacts and climate stressors in their designs. Research, innovation, and community outreach are central and connected aspects of sustainable and resilient building practices. South Florida is ground zero for issues of coastal resiliency in particular. SoA has developed a coastal resiliency curriculum that capitalizes on civic and scholarly partnerships and aims to better familiarize students with these and other interrelated design, planning, regulatory issues, and the responding strategies under development. SoA faculty have been awarded significant research grants by the National Endowment for the Arts, the National Science Foundation, the W. K. Kellogg Foundation, and the Knight Foundation, resulting in the publication of related findings that aim to foster solutions.

Plan of Study

Required Core Courses (12 credits)

ARC 608-609 Architecture Design Studio (Sustainable & Resilient Design Focus)

ARC 679 An Introduction to Resilient Community Design

ARC 685 Sustainable Design in Context

Elective Courses selected from the following (3 credits)

ARC 639 Adaptation to Climate Change

ARC 640 Tropical Architecture

ARC 663 Environmental Building Systems II

ARC 684 RAD LAB-UM related course

ARC 694 GIS in Urban Design Theory & Practice

EPH 623 Development & Change in Community Organizations

Certificate in Hospitality Design

Coordinator: Prof. Allan Shulman

The hospitality industry is a foundational building block of modern urban centers. Hospitality has emerged in the last 10 years as a critical area of lifestyle innovation and brand development as well as a laboratory for the application of new ideas about resilience and sustainability. Supported by the School's Real Estate Development + Urbanism program, the Certificate in Hospitality Design will provide a foundation in hospitality design training for interested graduate students.

Miami, as one of the major US hotel and hospitality markets, is well-suited as a center of research and practical application of hospitality design. Many local architectural firms specialize in hospitality design and export these services within the region and around the world.

Since its inception in 2014, the SoA Hotel Studio has consistently attracted students seeking to explore the specialized field of hospitality architecture. The Hospitality Studio engages the program and function of hotels, but also the very important role of hotels in responding to and enriching their context. Urban hotels and resort hotels present a set of critical issues that require inter-disciplinary approaches. Since 2016, the School has also offered a seminar in hospitality design. Together, these two courses have provided a foundation for further engagement and exploration of the field.

Plan of study

Required Core Courses (9 credits)

ARC 608-609 Architecture Design Studio (Hotel Studio Focus) ARC 684 Introduction to the Hotel Design and Development **Elective courses selected from the following (6 credits)** ARC 621 Urban Design History and Theory ARC 623 Urban Design Competition ARC 628 Introduction to Historic Preservation ARC 638 Interior Architecture Design ARC 640 Tropical Architecture

RED 601 Introduction to Real Estate Development and Urbanism

RED 650 Complex Real Estate Transactions

RED 630 Real Estate Market Analysis

Certificate in Urban Design

Coordinator: Prof. Elizabeth Plater-Zyberk

The vital role of designers in shaping the physical environment and its relationship to the natural world is at the core of the school's pedagogy. Urban Design and Real Estate Development, and the nexus between them, form a critical field of inquiry supported by the two distinct Master programs: the Master of Urban Design and the Master of Real Estate Development + Urbanism. Students in both programs share experiences in the classroom and in learning engagements with communities.

Plan of Study

At least one required studio course from the following (6 credits)

ARC 601 Urban Design Studio I (Form and Types/Form Based Codes) or ARC 602 Urban Design Studio II (General Urban to Urban Core) or ARC 603 Urban Design Studio III (Regional/Informal Urbanism) **At least one required seminar course selected from the following (3 credits)** ARC 648 Seminar in Community Development ARC 621 History-Theory II: Housing, Transportation & Infrastructure or ARC 622 History-Theory III: Urban Design Theory ARC 623 Urban Design Competition or RED 640 Charrette Training of RED 699 Capstone Project ARC 641 Seminar on Town Design ARC 642 Seminar on Housing ARC 643 Seminar on Retrofit of Suburbia ARC 643 Seminar on Retrofit of Suburbia ARC 644 GIS in Urban Design ARC 694 GIS in Urban Design ARC 694 History of Cities **Electives courses selected from the following (6 credits)** RED 601 Introduction to Real Estate Development and Urbanism RED 610 Financing Urban Real Estate Development RED 630 Market Analysis RED 660 Urban infill, Preservation & Mixed Use Development RED 650 Complex, Urban Real Estate Transactions Other courses by approval

Certificate in Real Estate Development and Urbanism

Coordinator: Prof. Charles Bohl

The Certificate in Real Estate Development and Urbanism is designed to provide students with skills and experience to compete in the evolving world of urban real estate development. The curriculum is enriched by the University's location in one of the nation's most dynamic real estate markets, and by the School of Architecture faculty's experience in livable community design. The certificate lays a foundation for training real estate industry professionals capable of tapping the power of the market to deliver development that offers a high quality of life for diverse populations to live, work, and pursue daily activities in walkable and sustainable neighborhoods and communities.

The Certificate will build on course offerings in the existing Master of Real Estate Development and Urbanism program, including real estate development, real estate finance, market analysis, real estate law, land use policies and codes, construction and project management, public private partnerships, sustainable development, and entrepreneurship. The existing curriculum incorporates case studies and materials on mixed-use development, urban infill, the redevelopment and repositioning of urban properties, historic preservation, and the integration of design, policy, management, and real estate development decision-making in shaping the built environment of communities.

There is a strong and increasing demand for graduates in architecture with both interdisciplinary skillsets and a foundational knowledge in real estate development, as well as knowledge of the interaction between real estate, architecture, construction, and urban design.

Plan of Study

Required Core Courses (9 credits)

RED 601 Introduction to Real Estate Development and Urbanism or

RED 660 Urban Infill, Preservation & Redevelopment

6 credits from the following

RED 610 or other approved Real Estate Finance course

RED 630 or approved Real Estate Market Analysis course or other approved Studio, ARC, RED, BUS or Law courses

Elective courses (6 credits)

Any approved architecture studio

RED 660 Urban Infill, Preservation, and Mixed Use Development

BSL 694 Real Estate Law

RED 640 National Charrette Training

RED 670 Construction and Project Management