

CERTIFICATE IN SUSTAINABLE CONSTRUCTION

Overview

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 Sustainable Construction 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 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

Certificate requires a total of 12 credits of core courses and related electives.

Admission Requirements

To be eligible for admission, a student must hold a bachelor's degree from a regionally accredited institution in engineering, architecture, environmental / physical sciences, environmental science and policy, business, management, economics, or construction management. Other admission requirements will be consistent with those of UM Graduate School; GRE / GMAT are not required.

Curriculum Requirements

| Code | Title | Credit Hours |
|---|---|--------------|
| Core Courses | | |
| CAE 660 or ARC 659 | Sustainable Construction Sustainability and LEED Exam Prep | 3 |
| CAE 765 | Construction Accounting and Finance | 3 |
| CMA 636 | Legal Issues in Building Construction | 3 |
| Electives (Sustainable Construction Focus) | | 3 |
| ARC 679 | An Introduction to Resilient Building and Community Design | |
| CAE 665 | Facilities Operation and Management | |
| CAE 744 | Risk Management and Resilience | |
| CAE 691 | Special Topics in Construction Management | |
| CMA 681 | Special Topics in Construction | |
| RED 699 | Capstone: Real Estate Development and Urbanism Charrette | |
| MGT 646 | Sustainable Supply Chains ¹ | |
| MGT 667 | Leadership for Sustainable Organizations ¹ | |
| MKT 653 | Sustainable Marketing of Goods and Services ¹ | |
| Total Credit Hours | | 12 |

¹ Students who want to apply this certificate towards the MS in Construction Management must take one of these courses to fulfill the elective requirement.

Mission

- To prepare students for professional leadership and lifelong learning in architecture, urbanism, and related fields.
- To preserve and develop knowledge for the profession through research and practice.
- To share knowledge locally and internationally through community service.
- To promote building and community design goals of environmental responsibility, social equity, and economic sustainability.

Learning Outcome

- Students will develop technical professional proficiency.
- Students will develop interdisciplinary system design and construction principles.