

EXECUTIVE M.S. IN CONSTRUCTION MANAGEMENT (HYBRID)

Overview

The Master of Science degree in Executive Construction Management Program is an interdisciplinary **30-credit** program designed for accomplished professionals in the design and construction industry who are ready to take their career to the next level.

The program's enrollment is limited to 10 students a year in the Fall term. Courses are focused on active learning based on practical information from current industry practices and real-world examples. Small classes taught by the leaders of major construction organizations. The Program facilitates insightful discussion between high-caliber students and industry leaders, providing the student an unparalleled education based on practical knowledge anchored by the years of experience of our industry leaders and guest faculty. The program will focus on current issues and events in construction Management and address the needs of the industry by developing candidates for middle and upper management positions.

Courses are offered predominantly in person in the late afternoons, evenings, and on weekends with some online options to meet the needs of working professionals. **Please note that international students on F-1 or J-1 visas are limited to taking a maximum of one (up to 3-credit hour) online course or one (up to 3-credit hour) hybrid course meeting less than 50% in person *per term* while enrolled full-time in this program.**

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		
CMA 701	Operating and Managing a Construction Organization	3
CMA 702	Professional Leadership Seminar	1
CAE 765	Construction Accounting and Finance	3
CMA 734 or CAE 766 or CMA 636	Prevention and Resolution of Contract Disputes Forensic Engineering Legal Issues in Building Construction	2-3
CMA 801	Executive Capstone Project	4
MGT 620	Managing Through People (or select one course from the Global Awareness/Management elective options)	2
One of the following options:		3-4
CMA 722 & CMA 692	Case Studies in Risk Management and Construction Forensics	
CAE 744	Risk Management and Resilience (or can count as a Technical Elective if not taken as a Core Course)	
ELECTIVES		11-12
Global Awareness/Management:		
ISE 670	Engineering Management	
MGT 617	Leading Across Cultures	
MGT 621	High Performance Leadership	
MGT 624	Negotiation Strategies	
MGT 646	Sustainable Supply Chains	
MKT 653	Sustainable Marketing of Goods and Services	
MGT 667	Leadership for Sustainable Organizations	
MGT 691	International Management	
Technical:		
ARC 679	An Introduction to Resilient Building and Community Design	
CAE 703	Seminars in Civil and Architectural Engineering	
CAE 762	Construction Project Management	
CAE 766	Forensic Engineering	
CAE 791	Advanced Topics in Construction Management	

CMA 601	Fundamentals of Construction Management	
CMA 630	Contract Documents	
CMA 640	Virtual Design and Construction (VDC/BIM)	
CMA 642	Emerging Technologies in Design and Construction	
CMA 680	Directed Studies	
CMA 681	Special Topics in Construction	
CMA 682	Special Topics in Construction	
CMA 690	Advanced Productivity and Lean Construction	
CMA 691	Quality Management and Performance	
CMA 692	Construction Forensics	
CMA 720	Advanced Planning and Scheduling	
CMA 726	Case Studies in Construction Management	
ISE 612	Quality Management Systems	
ISE 672	Management of Technological Innovation	
ISE 761	Advanced Economics of Systems	
RED 601	Introduction to Real Estate Development and Urbanism	
RED 610	Financing Urban Real Estate Development	
RED 630	Real Estate Economics and Market Analysis	
RED 650	Complex Urban Real Estate Transactions	
RED 699	Capstone: Real Estate Development and Urbanism Charrette	
Total Credit Hours		30

Students are required to engage in Practical Experience while enrolled in the program. International Students in F-1 status are required to obtain authorization for Curricular Practical Training (CPT) from the Department of International Student and Scholar Services (ISSS) prior to engaging in any practical experience/training/internship off-campus.

Suggested Plan of Study: 2-Year Path

Fall I		Credit Hours
CMA 701	Operating and Managing a Construction Organization	3
CMA 702	Professional Leadership Seminar	1
MGT 620	Managing Through People	2
Credit Hours		6
Spring I		
CMA 642	Emerging Technologies in Design and Construction (Elective)	2
CAE 765	Construction Accounting and Finance	3
CMA 724	Human Resource Management	1
Credit Hours		6
Summer I		
CMA 720	Advanced Planning and Scheduling (Elective)	2
CAE 791	Advanced Topics in Construction Management	2
Credit Hours		4
Fall II		
CMA 722	Case Studies in Risk Management	2
RED 601	Introduction to Real Estate Development and Urbanism (Elective)	3
ISE 612	Quality Management Systems (Elective)	3
Credit Hours		8
Spring II		
CMA 734	Prevention and Resolution of Contract Disputes	2
CMA 801	Executive Capstone Project	4
Credit Hours		6
Total Credit Hours		30

*Electives must be approved by the Program Director.

Suggested Plan of Study: 1.5 Year Path

Fall I		Credit Hours
CMA 701	Operating and Managing a Construction Organization	3
CMA 702	Professional Leadership Seminar	1
MGT 620	Managing Through People	2
RED 610	Financing Urban Real Estate Development	3
Credit Hours		9
Spring I		
CAE 765	Construction Accounting and Finance	3
CAE 766	Forensic Engineering	3
CMA 722	Case Studies in Risk Management	2
CMA 724	Human Resource Management	1
Credit Hours		9
Summer I		
CAE 791	Advanced Topics in Construction Management	3
RED 699	Capstone: Real Estate Development and Urbanism Charrette	3
Credit Hours		6
Fall II		
CMA 630	Contract Documents	2
CMA 801	Executive Capstone Project	4
Credit Hours		6
Total Credit Hours		30

*Electives must be approved by the Program Director.

Mission

The mission of Executive Master of Construction Management is to provide experienced construction professionals, a highly specialized practical curriculum embodied with real-world experience and taught by industry leaders to augment their practical knowledge of the industry and assist in advancing their careers into upper leadership positions at their organizations.

Goals

- To partner with the industry to develop the next generation of thought leaders ready to take on the challenges of the 21st-century workplace.
- To provide future construction professionals with the knowledge and quantitative skills required to understand, organize and control construction projects from conception to closeout;
- To expose participants to emerging technical skills and knowledge in architecture, engineering, construction, and cutting-edge technology in support of planning, analyzing, and solving construction problems;
- To encourage our students, as future industry leaders, through the school's culture and resources to address the critical social, economic, and environmental challenges facing the construction industry; and
- To encourage participants to make meaningful contributions to the shaping of the built environment.

Learning Outcomes

- Students will apply various management techniques and methods to efficiently and effectively plan and control construction projects.
- Students will utilize and integrate emerging technologies and innovations in Construction Management practices.
- Students will understand the value of and apply sustainable building practices to optimize the use of available resources.
- Students will apply skills to manage creative teams and project processes effectively and efficiently.
- Students will possess an understanding of the contributions made by design professionals to the construction processes, and can communicate and interact with design professionals within the multidisciplinary construction team.