

100% ONLINE

MS IN CONSTRUCTION MANAGEMENT

OVERVIEW

MS in Construction Management applies management principles and innovative technologies to effectively lead, organize, and manage the construction projects of residential, commercial, and infrastructure facilities. Through the knowledge acquired in the program, building infrastructure facilities can be constructed in a controlled systematic manner to maximize construction efficiency and assure the highest quality.

With an advanced degree from Purdue University, you will be equipped with essential knowledge and educational experience to make significant contributions in the field of construction. The 100% online curriculum is designed to prepare qualified individuals for leadership positions in the construction industry. Emphasis on construction operations and company level management- the benefits of an MBA but with a focus on construction. This program is for individuals with a bachelor's degree in construction management, civil engineering, or a closely related field from an accredited university.



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PROGRAM HIGHLIGHTS

- Distinguish yourself in the construction industry with a graduate degree from an institution with global recognition and impact.
- Learn tools and techniques for successful leadership with highly relevant, timely instruction from construction industry leaders.
- Advance and network with an experienced and motivated peer group for mutual support, team exercises, and enhanced learning.
- Master principles of sustainability using emerging management techniques.
- Gain construction operational and company-level management knowledge – the benefits of a business degree but with a focus on construction principles



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PLAN OF STUDY

The MS in Construction Management Technology requires 33 credit hours. The program will consist of a two-year cycle, with start dates available at the beginning of each semester.

COURSES	CREDITS
<i>Risk Management in Construction</i>	3
<i>Managing Construction Quality and Production</i>	3
<i>Construction Operations and Strategic Management</i>	3
<i>Sustainable Site Development</i>	3
<i>Construction Management Training and Development</i>	3
<i>Construction Leadership and Marketing</i>	3
<i>Law for Construction Managers</i>	3
<i>Preconstruction Project Management</i>	3
<i>Construction Accounting and Financial Management</i>	3
<i>Real Estate Development Process</i>	3



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COURSES

Law for Construction Managers

A study of the legal system and its impact on the construction process. The focus is on the legal obligations, rights and remedies pertaining to the construction company. Topics include bidding, contracts, and construction changes. BCM graduate students may register for this course without written department or instructor approval. Non-BCM students must obtain written department approval prior to registration.

Sustainable Site Development

This course focuses on sustainable methods of site construction, provisioning and routing, processes, and evaluative measures and standards as they relate to construction and design. Coordination and communication between sub-contractors and managing conflicts are explored towards efficiency in both time and materials. Projects and exams are based around project precedents and case studies using established metrics and processes across the industry.

Construction Management Training and Development

This course focuses on identification, training and development of future company leaders. Mentorship as a required, managerial activity, effective delegation of responsibility, and empowerment of subordinates to take initiative. BCM graduate students may register for this course without written department or instructor approval. Non-BCM students must obtain written department approval prior to registration.

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Construction Leadership and Marketing

This course focuses on analysis of organizational leadership at the executive level. The goals of this course are to introduce and stimulate thought and discussion of leadership theories, characteristics and behaviors of successful leaders, contextual factors affecting leader effectiveness, dynamics of leader-follower relationships, communication, decision-making and contemporary challenges confronting organizational leaders as well as marketing theory, marketing vs. business development, the marketing process, and an introduction to a construction marketing dashboard.

Preconstruction Project Management

This course focuses on management and control of projects from authorization to start of construction. Project success factors, conceptual and parametric estimating, design planning and management constructability review techniques and value engineering methods. Real estate transactions. Land zoning, platting, development and pro forma calculations.

Construction Accounting and Financial Management

This course focuses on accounting techniques, financial methods, and financial management for construction firm management. Analysis techniques for contemporary construction company accounting and finance practice with an emphasis on cash flow analysis and cash management.

Real Estate Development Process

This course provides a comprehensive overview of the real estate development process beginning with market analysis, legal considerations, feasibility, acquisition, entitlement, development and financing through construction completion, leasing and asset management.

Construction Operations and Strategic Management

Principles of construction company business management for U.S. companies. Executive-level construction functions including strategic planning, organizational structure, and ownership structure including succession planning. BCM graduate students may register for this course without written department or instructor approval. Non-BCM students must obtain written department approval prior to registration.

Risk Management in Construction

This courses focuses on analysis of the depth and breadth of risk in construction. Defining key terms and concepts used in various risk management arenas - legal statutes, precedent and case studies relevant to construction risk management, insurance, and surety bonding. Subjects include: contracts, torts, insurance, surety, safety laws, quality, and risk management models. Analysis of case studies to utilize risk management tools and identify issues and possible approaches. Project risk control including management of foreseeable hazards as well as unforeseen conditions.

Managing Construction Quality and Production

This courses teaches advanced techniques for assessing the success of construction project management including schedule cost, safety and quality measurements. Impacts of pre planning, human factors, and communication systems on quality and productivity. Statistical methods for analysis of construction operations.

NOTE: All courses are subject to change and semester availability may vary.



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