

CONSTRUCTION MANAGEMENT (BS)

Contacts

Program Director: Gulbin Ozcan-Deniz, PhD, LEED AP BD+C

Email: Gulbin.Deniz@Jefferson.edu

215-951-2914

Campus: East Falls

Program Website (<https://www.jefferson.edu/academics/colleges-schools-institutes/architecture-and-the-built-environment/programs/construction-management.html>)

Program Description

- **Accreditation:** ABET-ANSAC
- **STEM** designated program

The Bachelor of Science in Construction Management is a STEM (Science, Technology, Engineering, and Math) program with the mission to provide students with a broad practice-oriented understanding of construction technology, business, architecture, and engineering, and with specific emphasis on the management of the construction process from project inception to closeout. The program is designed to equip students and graduates with the knowledge and the technical, administrative, and communication skills, necessary to succeed in the construction industry.

Construction managers play an integral role in the development, construction and maintenance of commercial, residential, institutional and industrial buildings, as well as civil and transportation infrastructure. Degree programs in construction management have become the preferred higher education option for students interested in leadership positions within this multifaceted and competitive field.

The curriculum combines traditional business management and construction-specific coursework with a comprehensive liberal arts and sciences program of studies to acquaint students with the full business model of construction management. Graduates of the Construction Management program will have the knowledge, as well as the technical, administrative and communication skills, necessary to succeed in all sectors of the construction industry.

The teaching faculty brings a wide variety of rich industry experience to the program. Many are current practitioners who bring their daily professional challenges to the classroom, enriching the student experience.

The proximity to Philadelphia's active urban economy presents opportunity for a wide variety of jobsite experiences and exposure to innovative, state-of-the-art practices.

Housed in the University's highly regarded College of Architecture and the Built Environment, the program allows students to learn collaboratively with students in the Architecture, Interior Design, Architectural Studies, Geodesign and Landscape Architecture programs.

Graduates will have the skills necessary to manage the construction process from project conception to closeout with respect to scope, schedule, budget, quality, risk and safety, and the environment. The Construction Management Core Curriculum stresses the following topics:

- Construction Project Management from pre-design through commissioning
- Project life-cycle and sustainability
- Health and safety, accident prevention, and regulatory compliance
- Materials, labor, and methods of construction
- Project Delivery methods
- Finance and accounting principles
- Cost management including plan reading, quantity takeoffs and estimating
- Planning and scheduling
- Law, contract document administration and dispute prevention and resolution
- Leadership and managing people
- Business and communication skills

The program produces graduates familiar with industry-specific management practices who have developed an ethical, global and sustainable problem-solving approach. Thus, our graduates will be prepared to meet the challenges of a variety of career options which include: construction project management, construction field management, construction project estimating, scheduling, project supply chain management, real estate management, specialty contract services management, capital projects management, installation management, facilities management, and construction material and equipment sales.

Upper-level courses offer students the opportunity to collaborate and innovate across these disciplines, incorporating the business management skills as well as the liberal arts core to explore innovative approaches to hands-on project management challenges.

Program Educational Objectives

- Collaborate across disciplines of construction project stakeholders and appreciate the benefit of that collaboration.
- Communicate effectively with a variety of audiences, such as owners, design professionals and code officials, using appropriate media
- Find and evaluate relevant cost, schedule, quality and safety data based on sound analysis.
- Create sound and innovative approaches to challenges faced by construction project teams
- Identify and evaluate the ethical choices faced by construction management professionals and formulate value-based responses.

Accreditation

The Bachelor of Science in Construction Management program is accredited by the Applied and Natural Science Accreditation Commission (ANSAC) of ABET. Details can be found at www.abet.org (<http://www.abet.org/>). The ABET-accredited Construction Management program prepares students for entry-level construction manager/project manager/project engineer jobs, for advanced study, and to apply for memberships and scholarships in professional Construction Management organizations.

Curriculum: 4 Years, 122-124 Credits

Course	Title	Credits
First Year		
FYS 100	Pathways Seminar	1
WRIT 101	Writing Sem I: Written Comm.	3
AMST 114		3
SCI 109	Sys Thinking & Sustainability	3
MATH 1XX	Quantitative Reasoning I	3
Select one of the following:		3
PHYC 201	Physics I	3
MATH 1XX	Quant Reasoning II	
Elective		
CMGT 101	Construction Graphics	3
CMGT 102	Intro the Constructn Industry	3
CMGT 104	Intro to Estimating and Schdl	3
ACCT 101	Financial Accounting	3
Credits		31
Second Year		
ETHC 1XX	Ethics	3
WRIT 201	Writing Seminar II:Multi Comm	3
Select one of the following:		3
GDIV 1XX	Global Diversity or Language	
CMGT 200	Const Proj Plann & Scheduling	3
CMGT 202	Const Cost Estimatr & Budgtn	3
Global Language		3
CMGT 204	Behavior of Materials	3
CMGT 206	Building Systems	3
CMGT 208	Materials & Mthds of Construc	3
ABA 201	Intro to Business Analytics	3
Credits		30
Third Year		
ADIV 2XX	American Diversity	3
CGIS 300	Contemporary Global Issues	3
Select one of the following:		3
GCIT 2XX	Global Citizenship or World Language	
ISEM-3XX	Integrative Seminar	3
Global Language		3
CMGT 300	Constructn Acct/Cost Control	3
CMGT 302	Construction Contract Admin.	3
CMGT 304	Construc Safety & Risk Magmt.	3
CMGT 306	Construction Site Operations	3
CMGT 310	Constructn Surveying	3
ECON 205 or ECON 206	Macroeconomics or Microeconomics	3
BLAW 301	Business Law	3
Credits		36
Fourth Year		
PHIL 499	Philosophies of the Good Life	3
CMGT 450	Construction Mgmt Seminar	3
CMGT 499	Construction Capstone Project	3
Construct Mgt. Ele. 1 (designated)		3
Construct Mgt. Ele. 2 (designated)		3
FIN 301	Financial Management	3
Business Electives		6
General Electives		3
Credits		27
Total Credits		124