Construction Management B.S.

Construction Management Major

The B.S. Construction Management major requires a minimum of 120 total hours to graduate. This total includes UNIFI/General Education requirements and the following specified major requirements, plus electives to complete the minimum of 120 hours.

Math and Science:		
CHEM 1020	Chemical Technology	4
MATH 1130	Trigonometry ^	2
PHYSICS 1511	General Physics I ^	4
STAT 1772	Introduction to Statistical Methods ^	3
Required Core:		
CONSTR 1000	Fundamentals of Construction Management Materials & Methods	3
CONSTR 1015	Introduction to Sustainability	3
CONSTR 1025	Construction Management Essentials & Professionalism	3
CONSTR 1050	Construction Safety	3
CONSTR 1100	Construction Documents	3
CONSTR 1600	Computer Aided Design & Drafting	3
CONSTR 2000	Land, Route, and Construction Surveying	3
CONSTR 2050	Construction Law	3
CONSTR 2200	Construction Project Administration	3
CONSTR 2300	Building Services	3
CONSTR 2400	Construction Materials	3
CONSTR 2800	Construction Management Engineering Mechanics	3
CONSTR 3000	Heavy Construction Operations & Equipment	3
CONSTR 3050	Construction Estimating	3
CONSTR 3150	Construction Project Planning, Scheduling and Control	3
CONSTR 3300	Pre Construction Management	3
CONSTR 4200	Structural Components of Construction	3
CONSTR 4350	Construction Management Financial Concepts	3
CONSTR 4500	Construction Management Capstone Project @	3
Business:		
ECON 1031	Introduction to Business Economics	3
ACCT 2120	Principles of Financial Accounting	3
Ethics and English:		
PHIL 1560	Science, Technology, and Ethics (STE)	3
ENGLISH 1005	College Writing and Research	3
ENGLISH 3772/5772	Technical Writing for Engineering Technologists	3
Total Hours		**85**

^ Has prerequisite of satisfactory score on ALEKS exam or subsequent remediation.

@This course meets the Bachelor of Science degree undergraduate research course requirement.

Four-Year Plan

Construction Management, B.S.

This is a sample plan of study with a suggested sequencing of classes for the major. University electives may be applied to earn additional academic majors, minors, or certificates. Students should regularly meet with their academic advisor to plan their specific semester schedule to include UNIFI/General Education program and/or university elective hours required.

Course	Title	Hour
Freshman		
Fall		
ENGLISH 1005	College Writing and Research	3
PHYSICS 1511	General Physics I	4
CONSTR 1000	Fundamentals of Construction Management Materials & Methods	3
CONSTR 1025	Construction Management Essentials & Professionalism	3
CONSTR 1050	Construction Safety	3
	Hours	**16**
Spring		
UNIFI/General Education or University Electives		3
MATH 1130	Trigonometry	2
PHIL 1560	Science, Technology, and Ethics (STE)	3
CONSTR 1100	Construction Documents	3
ECON 1031	Introduction to Business Economics	3
	Hours	**14**
Sophomore		
Fall		
CHEM 1020	Chemical Technology	4
CONSTR 1600	Computer Aided Design & Drafting	3
CONSTR 2000	Land, Route, and Construction Surveying	3
CONSTR 2200	Construction Project Administration	3
CONSTR 2400	Construction Materials	3
	Hours	**16**
Spring		
UNIFI/General Education or University Electives		6

STAT 1772	Introduction to Statistical Methods	3
CONSTR 2050	Construction Law	3
CONSTR 2800	Construction Management Engineering Mechanics	3
	Hours	**15**
Junior		
Fall		
UNIFI/General Education or University Electives		3
CONSTR 2300	Building Services	3
CONSTR 3000	Heavy Construction Operations & Equipment	3
CONSTR 3050	Construction Estimating	3
ACCT 2120	Principles of Financial Accounting	3
	Hours	**15**
Spring		
CONSTR 1015	Introduction to Sustainability	3
CONSTR 3150	Construction Project Planning, Scheduling and Control	3
CONSTR 3300	Pre Construction Management	3
ENGLISH 3772/5772	Technical Writing for Engineering Technologists	3
UNIFI/General Education or University Electives		2
	Hours	**14**
Senior		
Fall		
UNIFI/General Education or University Electives		12
CONSTR 4200	Structural Components of Construction	3
	Hours	**15**
Spring		
CONSTR 4350	Construction Management Financial Concepts	3
CONSTR 4500	Construction Management Capstone Project	3
UNIFI/General Education or University Electives		9
	Hours	**15**
	Total Hours	**120**

Learning Outcomes

Construction Management, B.S.

Program Educational Objectives (PEOs):

- Provide valuable input to complete construction activities of increasing complexity through the estimation and control of costs, coordination of materials and subcontractor scheduling, and supervising the safe completion of quality installations.
- Continue to learn via company mentors, professional organization engagement, continuing education, employer-based training programs or other developmental opportunities to take on increasing responsibilities in a safety conscious industry.
- Foster a sense of professionalism and self-assurance that enables graduates to become informed and participating citizens, emphasizing ethics, civic duty, and social responsibility.
- Maximize resources efficiency and with a sense of urgency through the judicious procurement and management of labor, materials and equipment to satisfy a company's need for profitability.

Student Learning Outcomes (SLOs):

- an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- an ability to function effectively as a member as well as a leader on technical teams.

Related Programs

- General Business Concepts Minor
- Real Estate Minor