Construction Engineering and Management

PURDUE UNIVERSITY

College of Engineering

Code-BSCNE
130 Credits for Graduation
Students must have a graduation index of 2.0
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Construction Engineering Major Courses
Required CEM Courses (58 credits)

_____ (4)	CE 20300 Principles and Practices of Geomatics	(3) CE 29700 Basic Mechanics I (Statics)
_____ (3)	CEM 20100 Life Cycle Engineering and Management of Constructed Facilities	
_____ (2)	CGT 16400 Graphics for Civil Engr and Construction	(3) ME 20000 Thermodynamics I
_____ (4)	CE 27000 Introductory Structural Mechanics	
_____ (3)	CE 23100 Engineering Materials I	
_____ (1)	CEM 321 CEM Materials Lab	
_____ (3)	CE 29800 Basic Mechanics II (Dynamics)	
_____ (3)	CEM 30200 Practical Applications for Constr. Eng.	
_____ (3)	CEM 32400 Human Resource Mgmt in Constr.	
_____ (3)	CEM 30100 Project Control and Life Cycle Execution of Constructed Facilities	
_____ (3)	CE 34000 Hydraulics	(1) CE 34300 Elementary Hydraulics Lab
_____ (3)	CE 37100 Structural Analysis I	(4) CE 47300 Reinforced Concrete Design
_____ (3)	CE 38300 Geotechnical Engineering I	
_____ (3)	CEM 48500 Legal Aspects Construction Engineering	(0) CEM 19100 Construction Internship I
_____ (3)	CEM 42500 Construction Practice Project	(0) CEM 29100 Construction Internship I
_____ (3)	CE 52100 Construction Business Management	(0) CEM 39100 Construction Internship I

CEM technical Electives - (6 credits)

_____ (3)   Technical Elective I
_____ (3)   Technical Elective II

Other Departmental /Program Course Requirements (48-50 credits)

_____ (3)   COM 11400 Funadmentals of Speech Communication
_____ (3)   MGMT 20000 Introductory Accounting
_____ (4/5) MA 16500 / 16100 Analytic Geometry and Calculus I (satisfies FYE requirement)
_____ (4/5) MA 16600 / 16200 Analytic Geometry and Calculus II (satisfies FYE requirement)
_____ (4)   MA 26100 Multivariate Calculus
_____ (3)   MA 26500 Linear Algebra
_____ (3)   MA 26600 Ordinary Differential Equations Eng
_____ (4)   CHM 11500 General Chemistry (satisfies FYE requirement)
_____ (4)   PHYS 17200 Modern Mechanics (satisfies FYE requirement)
_____ (3)   PHYS 24100 Electricity and Optics
_____ (3)   ENGL 10800 First-Year Composition (satisfies FYE requirement)
_____ (2)   ENGR 13100 Transforming Ideas to Innovation I (satisfies FYE requirement)
_____ (2)   ENGR 13200 Transforming Ideas to Innovation II (satisfies FYE requirement)
_____ (3)   STAT 51100 Statistical Methods
_____ (3)   Science Selective (satisfies FYE requirement)

General Education Electives (18 credits)

_____ (3) General Education Elective I	_____ (3) General Education Elective IV
_____ (3) General Education Elective II	_____ (3) General Education Elective V
(3) General Education Elective III	(3) General Education Elective VI (CEM 28000 & CEM 38000)

University Foundational Core Requirements (http://www.purdue.edu/provost/initiatives/curriculum/course.html)

Human Cultures – Humanities (H)	Gen Ed I	Science, Technology & Society (STS)	Gen Ed III
Human Cultures – Behavioral/Social Science (BSS)	Gen Ed II	Written Communication (WC)	ENGL 10800
Information Literacy (IL)	ENGL 10800	Oral Communication (OC)	COM 11400
Science (S)	CHM 11500	Quantitative Reasoning (QR)	MA 16500

Revised 3/2014 (Effective Fall 2016)

Construction Engineering
https://engineering.purdue.edu/CEM/Academics

Suggested Arrangement of Courses

Credits	Fall 1ˢᵗ Year	Prerequisite	Credits	Spring 1ˢᵗ Year	Prerequisite
4	MA 16500		4	MA 16600	MA 16500
4	CHM 11500		4	PHYS 17200	MA 16500
3	ENGL 10800		3	Science Selective	
2	ENGR 13100		2	ENGR 13200	ENGR 13100
			3	COM 11400	
13			**16**		

Credits	Summer 1ˢᵗ Year				
0	CEM 19100 – Summer Internship I				

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2ⁿᵈ Year	Prerequisite
4	MA 26100	MA 16600	3	MA 26600	MA 26100
3	CEM 20100		3	CE 23100	CE 29700, CE 27000
3	CE 29700	MA 26100, PHYS 17200	4	CE 27000	CE 29700, CE 23100
4	CE 20300	CGT 16400	2	CEM 28000	CEM 19100
2	CGT 16400		3	MGMT 20000	
			3	PHYS 24100	PHYS 17200
16			**18**		

Credits	Summer 2ⁿᵈ Year				
0	CEM 29100 – Summer Internship II				
3	Gen Ed Elective I				

Credits	Fall 3ʳᵈ Year	Prerequisite	Credits	Spring 3ʳᵈ Year	Prerequisite
3	MA 26500	MA 16600	3	Technical Elective I	
3	CE 29800	CE 29700	3	CE 34000	CE 29800
1	CEM 38000	CEM 28000	1	CE 34300	CE 34000
3	CEM 30100	CEM 20100	3	CE 37100	CE 27000
3	STAT 51100	MA 16600	3	CE 38300	CE 34000
1	CEM 32100 CEM Materials Lab	CE 23100	3	CEM 30200	CEM 30100
14			**16**		

Credits	Summer 3ʳᵈ Year				
0	CEM 39100 – Summer Internship III				
3	Gen Ed Elective II				

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	Technical Elective II		3	CE 52100 or MGMT 30400	MGMT 20000/STAT 51100
4	CE 47300	CE 37100	3	ME 20000	MA 26100
3	CEM 42500	CEM 30200/CEM 29100	3	CEM 48500	
3	CEM 32400	CEM 29100/CEM 30100	3	General Education Elective IV	
3	General Education Elective III		3	General Education Elective V	
16			**15**		

130 semester credits required for Bachelor of Science in Construction Engineering degree.
Students must have a graduation index of 2.0.

The student is ultimately responsible for knowing and completing all degree requirements.
MyPurduePlan is a knowledge source for specific requirements and completion.