

To: The Faculty of the College of Engineering
From: The Division of Construction Engineering & Management
Date: February 28, 2019
RE: Revised Plan of Study in the Construction Engineering & Management curriculum (B.S. CNE);
reduction of credit hours

The faculty of the Division of Construction Engineering & Management has approved a change in the plan of study for the B. S. CNE curriculum. The revised plan of study reduces the total number of credit hours required from 130 to 126. This is accomplished by consolidating some material from other courses into existing courses. It also increases the number of technical electives available to students.

Summary of Changes:

1. Add CEM 45500 – Temporary Structures as a required course
2. Remove CEM 30200 – Practical Applications for Construction Engineering, material is incorporated into other CEM required courses.
3. Remove MA 26600 – Ordinary Differential Equations and MA 26500 – Linear Algebra and replace with MA 26200 – Combination of 26500 & 26600
4. Revise CEM 42500 – Construction Practice Project (3 cr), break into a two semester sequence at 2 cr each and rename to Construction Engineering Capstone I & II.
5. Relocate MGMT 20000 & 30400 from Core Engineering to General Education requirements

Reasons:

The CEM faculty have recognized the need to provide opportunities for students to complete take more and relevant technical electives. In addition, a course in temporary structures, required for every practical construction project for construction safety if nothing else, should be required in the curriculum and not a technical elective course. The present capstone course, delivered in one semester, contained too much material for students to successfully absorb in the time available; division into a two-semester sequence (currently with a temporary solution) solves the problem.

The revised plan of study will become effective fall 2019 for all entering freshmen. Sophomore students enrolling in Construction Engineering will have the option to follow the new POS while students currently enrolled in Construction Engineering will utilize a temporary solution which addresses the current POS while incorporating the best features of the revised POS.



Makarand Hastak, Professor and Head
Division of Construction Engineering & Mgmt.

Present	Total Credit Hours	130	Proposed	Total Credit Hours	126
<i>Courses</i>		<i>Credit Hours</i>	<i>Courses</i>		<i>Credit Hours</i>
Mathematics and Basic Sciences			Mathematics and Basic Sciences		
Calculus: MA16500, 16600, 26100, 26500, 26600		18	Calculus: MA16500, 16600, 26100, 26200		16
Chemistry: CMH 11500		4	Chemistry: CHM 11500		4
Physics: PHYS 17200, 24100		7	PHYS 17200, 24100		7
Statistics: STAT 51100		3	Statistics: STAT 51100		3
Science Electives:		3	Science Electives:		3
Engineering Tools and Skills			Engineering Tools and Skills		
ENGR 13100, 13200, CGT 16400		6	ENGR 13100, 13200, CGT 16400		6
Professional Development			Professional Development		
CEM 19100*, 29100*, 39100*, 32400, 42500, 48500		9	CEM 19100*, 29100*, 39100*, 32400, 42500†, 48500		10
General Education			General Education		
Students must satisfy the requirements of the College of Engineering's General Education Program. Selections must be chosen from approved lists in accordance with counsel from an advisor and include courses in oral and written communication and management (CEM 28000 & 38000). The remaining credit hours needed to attain the minimum of 24 should be chosen carefully.		24	Students must satisfy the requirements of the College of Engineering's General Education Program. Selections must be chosen from approved lists in accordance with counsel from an advisor and include courses in oral and written communication and management (MGMT 20000 & 30400 and CEM 28000 & 38000). The remaining credit hours needed to attain the minimum of 24 should be chosen carefully.		24
Core Engineering Courses			Core Engineering Courses		
CE 20300, 23100, 27000, 29700, 29800, 34000/34300, 37100, 38300, 47300; ME 20000; CEM 20100, 30100, 32100, 30200; and two technical elective courses in CEM; MGMT 20000 & 30400.		56	CE 20300, 23100, 27000, 29700, 29800, 34000/34300, 37100, 38300, 47300; ME 20000, CEM 20100, 30100, 32100, 45500; and three technical elective courses in CEM		53

* 19100, 29100, 39100 are zero credit hour internships required by the program.

† 42500 is the CNE Capstone course, repeatable across two semesters