

CIVIL ENGINEERING PROGRAM – University of Connecticut, Storrs, CT
(Catalog of 2011-2012)

NORMAL SEMESTER BY SEMESTER COURSE SEQUENCE (128 credits)

FIRST YEAR - First Semester		Cr.	Second Semester		Cr.
CHEM 1127Q or 1147Q General Chemistry		4	CHEM 1128Q or 1148Q General Chemistry		4
MATH 1131Q Calculus I		4	MATH 1132Q Calculus II		4
ENGR 1000 Orientation to Engineering		1	ENGR 1166 Foundations of Engineering		3
CSE 1010 Intro to Computing for Engineers		3	(1)(2) CA 1 (_____)		3
(1) ENGL 1010 Seminar in Academic Writing or ENGL 1011 Sem. in Writing thru Literature		4	(1)(2) CA 2 (_____)		3
TOTAL		16	TOTAL		17

SECOND YEAR - First Semester			Second Semester		
PHYS 1501Q Physics for Engineers I		4	PHYS 1502Q Physics for Engineers II		4
MATH 2110Q Multivariable Calculus		4	MATH 2410Q Elem. Differential Equations		3
CE 2110 Applied Mechanics I		3	CE 2120 Applied Mechanics II		3
CE 2410 Geomatics & Spatial Meas.		4	CE 2710 Transportation Engineering		3
PHIL 1104 Philosophy & Ethics (CA 1)		3	(2) CA 2 (_____)		3
TOTAL		18	TOTAL		16

THIRD YEAR - First Semester			Second Semester		
(3) CE 2010 C&EE Professional Issues Seminar		0	(3) CE 2010 C&EE Professional Issues Seminar		0
CE 2210 Decision Analysis in CEE		3	CE 3520 Civil Engineering Materials		3
			or CE 3300 Environmental Engineering Lab		
CE 2310 Environmental Engineering Fundamentals		3	CE 3610 Basic Structural Analysis		3
CE 3110 Mechanics of Materials		3	or CE 3320 Water Quality Engineering		
			(4) CE 3630 Steel Structure Design		4
CE 3120 Fluid Mechanics		3	or (5) Prof. Req. (_____)		(3)
CE 3510 Soil Mechanics I		4	(2) GenEd: CA 4 (_____)		3
			(2) GenEd: CA 4 (_____)		3
TOTAL		16	TOTAL		16(6)

FOURTH YEAR – First Semester			Second Semester		
(5) Prof. Req. (_____)		3	ME 2233 Thermodynamic Principles		3
Or (4) CE 3640 Rein. Concrete Struc. Design		(4)	Or CHEG 2111 Chem. Engrg. Thermodynamics		
(5) Prof. Req. (_____)		3	CE 4910W Civil Engineering Projects		3
(5) Prof. Req. (_____)		3	(5) Prof. Req. (_____)		3
(5) Prof. Req. (_____)		3	(5) Prof. Req. (_____)		3
Elective (_____)		2(6)	Elective (_____)		3(6)
TOTAL		14(6)	TOTAL		15(6)

NOTES:

- (1) These courses may be taken either semester in the first year.
- (2) CA = Content Area in General Education (GenEd) Requirements (For current lists of GenEd courses, visit <http://geoc.uconn.edu>). These courses must include one W course and may be taken at any time.
- (3) You must complete two semesters of CE 2010 with satisfactory grade **before taking** CE 4910W.
- (4) All students must take either CE 3630 or CE 3640.
- (5) Professional Requirements must be chosen to include at least one course from four of the following technical areas: Construction Management (CE 4210), Environmental/Sanitary (CE 3320 if also taken CE 3610, or CE 4310), Geotechnical (CE 4510 or CE 4541), Hydraulic/Water Resources (CE 4820 or CE 4810), Structural (CE 3630 or CE 3640), Surveying/Geodetic (CE 4410), and Transportation (CE 4710). The remaining course may be any 2000-level or higher course in engineering, mathematics or science not already used to satisfy another requirement or MGMT 5335.
- (6) The credit totals for the last three semesters depend on how many structural design courses are chosen and when they are taken. If the second structural design class is selected as a professional requirement, the number of free elective credits is reduced by one.

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PROFESSIONAL REQUIREMENTS

The professional requirements are satisfied by eighteen (18) credits of 3000-level or higher courses in engineering, science or mathematics, including at most one course at the 2000-level and MGMT 5335. Following are specific restrictions on these courses:

Proficiency in 4 CE Areas (12 Credits): All CE students must take one course in each of the seven (7) technical areas listed in the table below as required courses. In addition, for the Professional Requirements, Each student must take a second course from four of these areas listed as “Proficiency Courses”. (F) and (S) indicates if the course is typically offered in the First or Second semester.

Technical Areas	Required Courses	Proficiency Courses (4 required @ 1 each from 4 Areas)
Construction Management	CE 2210 Decision Analysis in CEE (F)	CE 4210 Operations Research in CEE (S)
Environmental	CE 2310 Environmental Engineering Fundamentals (F)	CE 3320* Water Quality Engineering (S) or CE 4310 Environmental Modeling (S)
Geotechnical	CE 3510 Soil Mechanics I (F)	CE 4510 Foundation Design (S) or CE 4541 Soil Mechanics II (F)
Hydraulic / Water Resources	CE 3120 Fluid Mechanics (F)	CE 4810 Engineering Hydrology (F) or CE 4820 Hydraulic Engineering (S)
Structural	CE 3630 Steel Structure Design (S) or CE 3640 Reinforced Concrete Structure Design (F)	**CE 3630 Steel Structure Design (S) or CE 3640 Reinforced Concrete Structure Design (F)
Surveying / Geodetic	CE 2410 Geomatics and Spatial Measurement (F)	CE 4410 Computer Aided Site Design (S)
Transportation	CE 2710 Transportation Engineering (S)	CE 4710 Case Studies in Transportation Engineering (F) or CE 4720 Highway Engineering – Design (S) or CE 4580 Pavement Design (F)

*CE 3320 is permitted for Professional Requirements only if CE 3610 was also taken.

**To meet proficiency in the Structural area, the second of the two courses must be taken.

Restrictions on the Remaining Six (6) Credits of Courses:

- CE 3520 Civil Engineering Materials (S) or CE 3300 Environmental Engineering Laboratory (S) may be used only if the other was taken for the laboratory requirement
- CE 3610 Basic Structural Analysis (S) or CE 3320 Water Quality Engineering (S) may be used only if the other was taken to meet CE requirements

Additional CE Courses that can be used for Professional Requirements:

- CE 3530 Engineering and Environmental Geology (S)
- CE 4610 Advanced Structural Analysis (F)