DOUBLE MAJOR - CIVIL and ENVIRONMENTAL ENGINEERING
University of Connecticut
(Catalog of 2020-2021)
SEMESTER BY SEMESTER COURSE SEQUENCE (130 or 131 credits)

FIRST YEAR - Fall Semester	**Cr.**	**Spring 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)GenEd: CA 1 (_____)	3
(1)**ENGL 1010** Seminar in Academic Writing **or ENGL 1011** Sem. in Writing thru Literature	4	**ENVE 1000** Environmental Sustainability (CA 2)	3
TOTAL	**16**	**TOTAL**	**17**

SECOND YEAR - Fall Semester		**Spring Semester**	
PHYS 1501Q Physics for Engineers I	4	**MATH 2410Q** Elem. Differential Equations	3
MATH 2110Q Multivariable Calculus	4	(4)**ENVE 3270** Environmental Microbiology	3
CE 2110 Applied Mechanics I	3	(3)**CE 2251** Probability and Statistics in CEE	3
(3)**CE 2211** Engineering Economics	1	**CE 3110** Mechanics of Materials	3
(3)**CE 2411** Intro to Computer Aided Design	1	**CHEG 2211** or **ME 2233** Thermodynamics	3
(3) **ENVE 2310** Environ. Engr. Fundamentals	3	(2,3) **PHIL 1104** Philosophy & Ethics (CA 1)	3
TOTAL	**16**	**TOTAL**	**18**

THIRD YEAR - First Semester		**Second Semester**	
ENVE 3220 Water Quality Engineering (CE PR)	3	**ENVE 3200** Environmental Engr. Lab	3
ENVE 4210 Env Eng Chem	3	**(5) PHYS 1502Q** Physics for Engineers II	4
(5)**ENVE 3120** Fluid Mechanics	4	**CE 2710** Transportation Engineering	3
CE 3510 Soil Mechanics	3	**CE 3610** Basic Structural Analysis	3
CE 3220 Principles of Construction I	3	**ENVE 3530** Eng and Env Geology	3
TOTAL	**16**	**TOTAL**	**16**

FOURTH YEAR – First Semester		**Second Semester**	
CE 4900W or **ENVE 4910W** Projects I	2	**CE 4920W** or **ENVE 4920W** Projects II	2
(2)GenEd: CA 4 (_____)	3	(6)**ENVE 4530 or 4540** (CE PR)	3
ENVE 4810 Engineering Hydrology (CE PR)	3	(6) **CE Prof Req or ENVE Management and Policy Req**	3 or 4
ENVE 4320 Ecological Principles and Eng	3	**ENVE 4310** Environmental Modeling	3
(6)**CE Prof Req or ENVE Management and Policy Req.**	3	**ENVE 3230** Air Pollution Engineering	3
(2)GenEd: CA 2/4 double-dip	3		
TOTAL	**17**	**TOTAL**	**14** or **15**

(1) These courses may be taken either semester in the first year.
(2) GenEd CA = Content Area in General Education Requirements (For current lists of GenEd courses, visit http://geoc.uconn.edu). These courses may be taken at any time.
(3) These courses may be taken either semester in the second year.
(4) This course must be approved as Science Elective for the Civil Engineering Program.
(5) These courses may be taken either semester in the third year.
(6) See details on next page.

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CIVIL PROFICIENCY AREA REQUIREMENTS

All CE students must take one course in each of seven (7) technical areas as required courses. In addition, for the Professional Requirements, each student must take a second course from **four (4)** of these areas listed as "Proficiency Courses". In the case of Double majors, students must choose **one** of the following Proficiency courses to fulfill the requirements of courses in four areas (ENVE 3220, 4810 and 4530 or 4540 fulfill the other three areas). (F) and (S) indicates if the course is typically offered in the Fall or Spring semester. Some are offered in alternate years as indicated.

Technical Areas	**Required Courses**	**Proficiency Courses** (4 required @ 1 each from 4 Different Areas)
Construction Engineering & Management	CE 3220 Principles of Construction I (F)	CE 4210 Operations Research in CEE (F) or CE 4220 Principles of Construction II (S)
Structural	CE 3610 Basic Structural Analysis (S)	CE 3630 Steel Structure Design (S) or CE 3640 Reinforced Concrete Structure Design (F)
Surveying / Geodetic	CE 2411 Intro. to Computer Aided Design (F, S)	CE 2500 Intro. to Geographic Info. System (S) or CE 4410 Computer Aided Site Design (S)
Transportation	CE 2710 Transportation Engineering (S)	CE 4710 Case Studies in Transp. Engr. (F) or CE 4720 Street and Highway Design (S) or CE 4730 Transportation Planning (F – odd) or CE 4740 Traffic Engineering I (F – even)

ENVE MAJOR REQUIREMENTS

In addition to courses chosen for the CE Proficiency courses, ENVE students must take the following courses (9 credits of which will fulfill the remaining Professional Requirements for CE):
CHEG 2111/ME 2233, ENVE 3230, 4210, 4310, 3530, 4320 and the Management and Policy Requirement below

ENVE MANAGEMENT AND POLICY

Choose one of the following courses:

AH 3275. HAZWOPER (F)
ARE 3434. Environment and Resource Policy (S)
ARE 4462. Economics of Natural Resource Use (S)
EEB 3205. Current Issues in Environmental Science (F, odd years)
ENVE 3100. Climate Resilience and Adaptation (F)
GEOG 3320W. Environmental Evaluation and Assessment (S, online)
GEOG 3340. Environmental Planning and Management
LAND 3230W. Environmental Planning and Landscape Design
MEM 2221. Principles of Engineering Management
NRE 3245. Environmental Law (F)
OPIM 3801. Project Management