ENVIRONMENTAL ENGINEERING PROGRAM – University of Connecticut
(Catalog of 2015-2016)

NORMAL SEMESTER BY SEMESTER COURSE SEQUENCE (128 credits)

FIRST YEAR - First Semester	Cr.	Second Semester	Cr.
CHEM 1127Q General Chemistry	4	CHEM 1128Q 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	ENVE 1000 Environmental Sustainability (CA2)	3
(1) ENGL 1010 Seminar in Academic Writing or ENGL 1011 Sem. in Writing thru Literature	4	(1)(2) CA 1 (_____)	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	PHIL 1104 Philosophy & Ethics (CA1)	3
ENVE 2310 Environmental Eng'g Fundamentals	3	CHEG 2111 Chemical Eng'g Thermodynamics	3
(3) Professional Elective	3	ENVE 3200 Environmental Engineering Lab	3
TOTAL	17	TOTAL	16

THIRD YEAR - First Semester		Second Semester	
CE 2251 Probability and Statistics in CEE	3	ENVE 3230 Air Pollution Control	3
ENVE 3120 Fluid Mechanics	4	ENVE 3270 Environmental Microbiology	3
ENVE 3220 Water Quality Engineering	3	(3) Professional Elective	3
ENVE 4210 Environ. Engineering Chemistry	3	(3) Professional Elective	3
CE 2211 Engineering Economics	1	(2) GenEd: CA 4(I) (_____)	3
(2) GenEd: CA 2 (_____)	3		
TOTAL	17	TOTAL	15

FOURTH YEAR – First Semester		Second Semester	
ENVE 4910W Environmental Eng'g Design I	2	ENVE 4920W Environmental Eng'g Design II	2
ENVE 4320 Ecological Principles & Eng'g	3	ENVE 4310 Environmental Modeling	3
(3) Professional Elective	3	(3) Professional Elective	3
(3) Professional Elective	3	(3) Professional Elective	3
(2) GenEd: CA 4 (_____)	3	Free Elective	3
Free elective	2		
TOTAL	16	TOTAL	14

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 may be taken at any time and CA assignments to particular semesters are indicative only.

(3) There are 7 total PROFESIONAL ELECTIVE courses to select so as to meet the following requirements:

Natural Resource Requirement (1 Course):
- NRE 3155- Water Quality Management (Fall semester even years) OR
- NRE 3205-Stream Ecology (Summer semester) OR
- NRE 3105-Wetlands Biology & Conservation (Fall odd yrs)

Earth Science Requirement (1 Course):
- NRE 4135-Intro. to Groundwater Hydrology (Fall semester) OR
- ENVE 3530- Engr. & Env. Geology (Spring semester, odd years)

Hydrologic Science Requirement (1 Course)
- ENVE 4810-Engineering Hydrology (Fall semester) OR
- ENVE 4820-Hydraulic Engineering (Spring semester)

Professional Electives (4 Courses): At least one course from four different focus areas (see pg. 2 for list of approved courses). ENVE 4886 Thesis I (1 cr) plus ENVE 4986 Thesis II (2 cr) may fulfill one professional elective. Honors students must fulfill one professional elective using ENVE 4886 + 4986. ENVE 4886 + 4986 is recommended as a professional elective for students planning to pursue graduate studies. Courses used to fulfill Natural Resource, Earth Science or Hydrologic Science requirements cannot also count as Professional Electives.

ENVIRONMENTAL ENGINEERING PROGRAM – University of Connecticut
(Catalog of 2015-2016)

ENVE Professional Requirements

Area 1: Data Collection and Analysis NRE 3535 Remote Sensing of the Environment CE 2500 Introduction to GIS ME 3263 Introduction to Sensors and Data Analysis CE 2410 Geomatics & Spatial Measurement CE 4410 Computer Aided Site Design	**Area 6. Water Resources** ENVE 4810. Engineering Hydrology ENVE 4820. Hydraulic Engineering NRE 3125 Watershed Hydrology NRE 4135. Introduction to Groundwater Hydrology NRE 4165. Soil and Water Management and Engineering
Area 2. Renewable Energy ME 3270 Fuel Cells ME 3285 Sustainable Energy Sources and Systems * Courses offered as Special Topics in Renewable Energy also qualify as PR under this area	**Area 7. Geoenvironmental Processes** CE 3510. Soil Mechanics CE 4530. Geoenvironmental Engineering ENVE 3530. Engineering and Environmental Geology NRE 4165. Soil and Water Management and Engineering.
Area 3. Systems Analysis CHEG 3151. Process Kinetics CHEG 4147. Introduction to Process Dynamics and Control. CE 4210. Operations Research in Civil and Environmental Engineering	**Area 8. Atmospheric Processes** GEOG 3400. Climate and Weather NRE 3145. Meteorology NRE 3146 Climatology ME 3239. Combustion for Energy Conversion
Area 4. Environmental Chemistry CHEM 2241 or CHEM 2443. Organic Chemistry CHEM 4370. Environmental Chemistry - Atmosphere SPSS 3410. Soil Chemistry Components SPSS 4420. Soil Chemistry Processes MARN 4030W. Chemical Oceanography NRE 3155. Water Quality Management	**Area 9. Management and Policy** AH 3275. HAZWOPER ARE 3434. Environment and Resource Policy ARE 4462. Economics of Natural Resource Use EEB 3205. Current Issues in Environmental Science GEOG 3320W. Environmental Evaluation and Assessment GEOG 3340. Environmental Planning and Management LAND 3230W. Environmental Planning and Landscape Design MEM 2221. Principles of Engineering Management NRE 3245. Environmental Law
Area 5. Environmental Biology MCB 2610. Fundamentals of Microbiology NRE 3105. Wetlands Biology and Conservation NRE 3205. Stream Ecology	