

ENVIRONMENTAL ENGINEERING PROGRAM – University of Connecticut
(Catalog of 2017-2018)

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
			ENVE 1000 Environmental Sustainability (CA2)		3
F/S courses: CSE 1010 Intro to Computing for Engineers (3), ENGL 1010 Seminar in Academic Writing or ENGL 1011 Sem. in Writing thru Literature (4), General Education course (3)					
TOTAL		16/17	TOTAL		17/16

SECOND YEAR - First Semester		Cr.	Second Semester		Cr.
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
ENVE 2310 Environmental Engineering Fundamentals		3	ENVE 3200 Environmental Engineering Lab		3
F/S courses: CE 2110 Applied Mechanics I (3), PHIL 1104 Philosophy and Ethics (3), ME 2233 Thermodynamic Principles (F/S) or CHEG 2211 Chemical Engineering Thermodynamics (S only) (3), CE 2251 Probability and Statistic in CEE (3)					
TOTAL		17	TOTAL		16

THIRD YEAR - First Semester		Cr.	Second Semester		Cr.
ENVE 3270 Environmental Microbiology		3	ENVE 3220 Water Quality Engineering		3
ENVE 4210 Environmental Engineering Chemistry		3	ENVE 3230 Introduction to Air Pollution		3
Earth Science Requirement: NRE 4135 Introduction to Groundwater Hydrology (F) or ENVE 3530 Engineering and Environmental Geology (S) or ENVE 4530 Geoenvironmental Engineering (S) (3)					
NRE Requirement: NRE 3155 - Water Quality Management (Fall semester even years) OR NRE 3205 -Stream Ecology (Fall semester odd years) OR NRE 3105 -Wetlands Biology & Conservation (Fall odd years) (3)					
F/S courses: CE 2211 Engineering Economics (1), ENVE 3120 Fluid Mechanics (4), General Education and Professional Electives (up to 9 credits total)					
TOTAL		16	TOTAL		16

FOURTH YEAR – First Semester		Cr.	Second Semester		Cr.
ENVE 4910W Environmental Eng'g Design I		2	ENVE 4920W Environmental Eng'g Design II		2
ENVE 4320 Ecological Principles & Eng'g Hydrology Requirement: ENVE 4810 Engineering Hydrology (F) or ENVE 4820 Hydraulic Engineering (S) (3)		3	ENVE 4310 Environmental Modeling		3
F/S courses: General Education and Professional Electives, Free Electives (16 credits total)					
TOTAL		14/16	TOTAL		16/14

NOTES:

(1) In addition to the General Education courses PHIL 1104 (CA1) and ENVE 1000, students must take additional 9 or 12 credits of General Education courses. These must fulfill the following requirements: one CA1 course, 1 CA2 course, 2 CA4 courses, with one CA4 being designated as International (I). One double-dipping (CA1/CA4 or CA2/CA4) is allowed and the three credits may be substituted with a free elective. Lists of approved GenEds in each area can be found at <http://geoc.uconn.edu>.

(2) There are 4 total PROFESSIONAL ELECTIVE courses to select so as to meet the following requirements: 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 double-count as Professional Electives.

ENVIRONMENTAL ENGINEERING PROGRAM – University of Connecticut
(Catalog of 2017-2018)

ENVE Professional Electives

<p>Area 1: Data Collection and Analysis NRE 3535 Remote Sensing of the Environment GEOG 2500 Introduction to GIS ME 3263 Introduction to Sensors and Data Analysis CE 2410 Geomatics & Spatial Measurement CE 4410 Computer Aided Site Design</p>	<p>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</p>
<p>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</p>	<p>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.</p>
<p>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</p>	<p>Area 8. Atmospheric Processes GEOG 3400. Climate and Weather NRE 3145. Meteorology NRE 3146 Climatology ME 3239. Combustion for Energy Conversion</p>
<p>Area 4. Environmental Chemistry CHEM 2241 or CHEM 2443. Organic Chemistry CHEM 4370. Environmental Chemistry - Atmosphere SOIL 3410. Soil Chemistry Components SOIL 4420. Soil Chemistry Processes MARN 4030W. Chemical Oceanography NRE 3155. Water Quality Management</p>	<p>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</p>
<p>Area 5. Environmental Biology MCB 2610. Fundamentals of Microbiology NRE 3105. Wetlands Biology and Conservation NRE 3205. Stream Ecology</p>	