CENTRAL STATE UNIVERSITY

DEPARTMENT OF WATER RESOURCES MANAGEMENT

Environmental Engineering Program
(ENE)

Effective from 2019-2020

Degree/Major: B. S. in Environmental Engineering

Minimum total semester hours required for graduation: 129 Credit Hours

Name: _____ **Student ID:** _____

Advisor: _____ **Co-Advisor:** _____

Chair|ProgramCoordinator: _____ **Year Entered:** _____

REQUIRED IN OTHER DEPARTMENTS	Cr. Hrs	Semester & Year	Grade	MAJOR REQUIREMENTS	Cr. Hrs	Semester & Year	Grade
Core General Education – 11~12 hrs				**Other Major Courses – 14 hrs**			
ENG 1100 or ENG 1101	4 | 5			ENE 4596 Internship (Summer Term)	3		
ENG 1102 – Writing & Res./Essay	4			GEL 1101 Physical Geology	4		
HIS 1110| HIS 1121| HIS 1122| PSY 1200| SOC 1105	3			WRM 3308 Environmental Law	3		
Bridge: Humanities/Fine Arts(List B) & Social/Behavioral Sciences (List C) – 9 hrs				BIO 2650 Microbiology^^^	4		
Course B-1	3			**General Engineering - 21 hrs**			
If HIS 1110| HIS 1121| HIS 1122 then Course C-1 If PSY 1200| SOC 1105 then Course B-2	3			MFE 1210 Engineering Analysis I	3		
				INT 1210: Engineering Computer Graphics	3		
Course C-2 WRM 3370 Introduction to GIS*	3			MFE 2310 Statics	3		
				MFE 2420 Dynamics	3		
				MFE 3530 Strength of Materials	3		
Undergraduate Success Seminar – 2 hrs				MFE 3550 Thermodynamics and Heat Transfer	3		
USS 1000 Undergraduate Success Seminar	2			INT 3650 Surveying	3		
				Environmental Engineering - 34 hrs			
Chemistry – 8 hrs				ENE 2200 Intro. to Environmental Engineering	3		
CHM 1201 General Chemistry I	4			ENE 3305 Fluid Mechanics and Hydraulics	3		
CHM 1202 General Chemistry II	4			ENE 3309 Water Chemistry	3		
Physics – 10 hrs				ENE 3315 Air Quality Engineering	3		
PHY 2411 University Physics I	5			ENE 3320 Engineering Hydrology	3		
PHY 2412 University Physics II	5			ENE 3325 Groundwater Hydraulics	3		
Mathematics – 20 hrs				ENE 4405 Applied Hydraulics	3		
MTH 2001 Probability and Statistics I***	3			ENE 4415 Water Supply	3		
MTH 2502 Calculus I###	4			ENE 4425 Solid & Hazardous Waste Management	3		
MTH 2503 Calculus II	5			ENE 4430 Wastewater Treatment Systems	3		
MTH 3110 Differential Equations and Discrete Dynamical Systems	4			ENE 4496 Senior Capstone Design Project I	1		
MTH 3002 Calculus III	4			ENE 4498 Senior Capstone Design Project II	2		
				ENE 4440 Environmental Professionals Seminar	1		
				Applicable semester hours at graduation	/129		

PREREQUISITE	Description Not a major requirement, but a prerequisite for a major required course	Cr. Hrs	Semester & Year	Grade
MTH 1750 College Algebra	***Prerequisite for Probability and Statistics (MTH 2001)	3		
MTH 2500 Pre-Calculus | MTH 2501 Trigonometry	###Prerequisite for Calculus I (MTH 2502) 4 | 3			
BIO 1801 Fundamentals of Biology I	^^^Prerequisite for Microbiology (BIO 2560)	4		

*Counts also as ENE Elective 1

Students must earn a grade of "C" or better in their ENE courses

SPECIAL REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE:

1. A grade-point average in the major concentration of at least 2.0.
2. Except when required to meet accreditation or other professional standards, presentation of no more than 50 semester hours in any one discipline toward the 120-148 hours.
3. The sciences and the more technical subject matter areas must receive concentration and emphasis.

Advisor's Signature