FACULTY OF SCIENCE, APPLIED SCIENCE, & ENGINEERING

Degree Checklist – **BSE Environmental Engineering** (*Start Fall 2023 or late)*

GENERAL INFORMATION TOTAL CREDIT HOURS- **min 160 with minimum grade of C in all courses**

Last Name: First Name: Student #:

REQUIRED COURSES(138ch)			
Grade	**Course Number and Title**	**Grade**	**Course Number and Title**
	APSC 1011 Mechanics I (4 ch)		ENVE 2011 Introduction to Environmental Engineering (4 ch)
	APSC 1015 Mechanics I Laboratory (1 ch)		ENVE 3121 Water Resources Engineering (4 ch)
	APSC 1021 Mechanics II (4 ch)		ENVE 3123 Water Treatment Principles & Design (4 ch)
	APSC 1025 Mechanics II Laboratory (1 ch)		ENVE 3133 Hydraulics & Hydrology (3 ch)
	BIOL 1302 Introduction to Environmental Biology (3 ch)		ENVE 3231 Contaminants and Pollutants Transport in the Environment (4 ch)
	BIOL 2345 Fundamentals of Microbilogy (3 ch)		ENVE 3322 Wastewater Treatment Principles and Design (4 ch)
	CE 2703 Introduction to Fluid Mechanics (4 ch)		ENVE 3513 Soil Mechanics (4 ch)
	CE 2913 Numerical Problem Solving (4 ch)		ENVE 3665 Introduction to Environmental Law (3 ch)
	CHE 2003 Fundamentals I - Mass Balances (3 ch)		ENVE 4040 Environmental Engineering Design Project (7 ch)
	CHE 2004 Fundamentals II - Mass and Energy Balances (3 ch)		ENVE 4231 Contaminants Hydrogeology (4 ch)
	CHE 2012 Engineering Thermodynamics (3 ch)		ENVE 4322 Waste Management (4 ch)
	CHE 2501 General Materials Science (3 ch)		ENVE 4432 Air Pollution and Emission Control (4 ch)
	CHE 2506 Materials Science Laboratory (1 ch)		GEOL 1044 The Earth: Its Origin and Evolution (5 ch)
	CHEM 1872 General Physical and Organic Chemistry (3 ch)		GEOL 1074 Earth Processes, Resources and the Environment (5 ch)
	CHEM 1877 General Physical and Organic Chemistry Lab (2 ch)		GEOL 3442 Environmental Geology (3 ch)
	CHEM 2421 Organic Chemistry I (3 ch)		MATH 1003 Introduction to Calculus I (3 ch)
	CMPE 1003 Programming & Problem Solving for Engs (4 ch)		MATH 1013 Introduction to Calculus II (3 ch)
	ENGG 1001 Engineering Practice Series (0 ch)		MATH 1503 Introduction to Linear Algebra (3 ch)
	ENGG 1003 Engineering Techinical Communication (4 ch)		MATH 2513 Multivariable Calculus for Engineers (4 ch)
	ENGG 1015 Introduction to Engineering Design and Problem Solving (2 ch)		MATH 3503 Differential Equations for Engineers (3 ch)
	ENGG 4013 Law and Ethics for Engineers (3 ch)		STAT 2593 Probability and Statistics for Engineers (3 ch)
	ENGG 4032 Engineering Economics (3 ch)		

BASIC SCIENCE ELECTIVE (3 ch) - Select from Physics (PHYS), Chemistry (CHEM), or the life or earth sciences (GEOL)		
Grade	**Course**	

COMPLEMENTARY STUDIES ELECTIVE COURSES (6 ch)		
Grade	**Course**	
		min. 3ch Tech & Society
		min. 3ch from Humanities & Social Sciences (HSS)
		or min. 3ch from Arts (including HSS), Business, or Program Coordinator approval

REQUIRED ENGINEERING TECHNICAL ELECTIVES (12 ch)		**Select 16 ch from the following courses (Prerequisites May Apply):**
Grade	**Course**	BIOL 2585 Introductory Ecology (4 ch)
		BIOL 3165 Marine Ecology (4 ch) - Prerequisite: BIOL 2585
		BIOL 4115 Landscape Ecology (4 ch)
		BIOL 4855 Biometrics (4 ch) - Prerequisite: STAT 2263 or equivalent (i.e.: STAT 2593)
		BIOL 4861 Advanced Environmental Biology (4 ch) - Prerequisite BIOL 1302
		BIOL 4875 Environmental Techniques (4 ch)
		CHEM 3245 Environmental Chemistry (4 ch) - Prerequisite: CHEM 2421 or equivalent
		DA 4803 Independent Studies in Data Analysis I (4 ch)
		DA 4813 Independent Studies in Data Analysis II (4 ch)

Updated: September 2023