

Degree and Study Plan

College	Engineering
Department	Energy and Sustainable Engineering
Program	Environmental Engineering
Degree Level	Bachelor of Engineering
Total Credit Hours	137
Cohort	2018 and above

Summary of Credits	
University Requirements (UR)	12
College Requirements (CR)	42
Program Requirements (PR)	74
Program Electives (PE)	9
Total	137

For more information contact: Dr. Mohamed Abd El-Hameed, HoD

HoD:



Dean:



Date: 30/09/2024

Year One	Semester 1 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ISLM101	Islamic Civilization	3		UR
	ENGL101	English Communication Skills 1	3		UR
	ENGR111	Computer Applications	3		CR
	MATH101	Calculus I	3		CR
	PHYS101	Physics I	3		CR
	Total Credits		15		
	Semester 2 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CHEM101	Chemistry	3		CR
	ENGL102	English Communication Skills 2	3	ENGL101	UR
	MATH102	Calculus 2	3	MATH101	CR
	PHYS102	Physics 2	3	PHYS101	CR
	ENGR110	Engineering Laboratories	3		PR
	Total Credits		15		

Year Two	Semester 3 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN310	Surveying	3	MATH101	PR
	ENEN301	Environmental Chemistry	3	CHEM101	PR
	ENGR201	Engineering Drawing	3		CR
	ENGR202	Technical Writing and Presentation	3	ENGL102	CR
	MATH215	Linear Algebra	3	MATH101	CR
	ENGR220	Statics	3	MATH101	PR
	Total Credits		18		
	Semester 4 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN232	Engineering Geology	2	CHEM101	PR
	ENEN201	Renewable Energy	3	MATH102	PR
	CVEN361	Environmental Engineering	3	CHEM101	PR
	CVEN350	Thermofluids Engineering	3	PHYS102	PR
	ENGR321	Dynamics	3	ENGR220	PR
	Total Credits		14		

Year Three	Semester 5 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN332	Civil Engineering Materials	3	ENGR110	PR
	ENEN422	Environmental Measurements	3	ENEN301	PR
	MATH204	Probability and Statistics	3	MATH102	CR
	CVEN451	Hydraulics Engineering	3	CVEN350	PR
	MNGT 313	Entrepreneurship	3	60CH	UR
	Total Credits		15		
	Semester 6 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	MATH305	Numerical Methods	3	MATH102	CR
	ENEN431	Water & Wastewater Treatment	3	CVEN361	PR
	ENEN302	Environmental Microbiology	3	CHEM101	PR
	ENEN360	Environmental Law	3	ENEN301	PR
	MATH203	Differential Equations	3	MATH102	CR
	Total Credits		15		

Year Four	Semester 7 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENEN582	Desalination Engineering	3	CVEN332	PR
	MATH406	Calculus III	3	MATH102	CR
	CVEN471	Engineering Project Management	3	ENGR201	PR
	ENGR404	Engineering Economics	3	MATH204	CR
	ENEN572	Environmental Impact Assessment	3	CVEN361	PR
	Total Credits		15		
	Semester 8 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN491	Capstone Design Project I	3	90CH	PR
	CVEN554	Hydrogeology & Groundwater Contamination	3	CVEN451	PR
	ENEN441	Air Pollution	3	CVEN361	PR
		Environmental Engineering Elective	3		PE
	ENEN461	Solid Waste Management	3	CVEN361	PR
	Total Credits		15		
	Summer				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENGR322	Summer Internship	0		CR

Year Five	Semester 9 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN592	Capstone Design Project II	3	CVEN491	PR
	CVEN553	Water Resources Engineering	3	CVEN451	PR
	CVEN552	Engineering Hydrology	3	CVEN451	PR
		Environmental Engineering Elective	3		PE
		Environmental Engineering Elective	3		PE
	Total Credits		15		

List of Program Elective Courses:

A student must register in 3 courses with total of 9 credits hours following the program study plan:			
Course Code	Course Title	Credits	Pre-Request/ Co-Request*
CNMN405	Building Information Modelling	3	ENGR201
ENEN531	Advanced Wastewater Treatment	3	ENEN431
ENEN561	Industrial and Hazardous Waste	3	CVEN361
ENEN571	Environmental Pollution	3	CVEN361
ENEN581	Climate Change	3	CVEN361
ENEN583	Waste and Energy	3	CVEN461
ENEN584	Sustainable Engineering	3	CVEN361
COEN280	Construction Methodology	3	
COEN282	Construction Equipment	3	
COEN585	GIS Application in Civil Engineering	3	
COEN586	Sustainable Construction	3	CVEN361
CVEN260	Geotechnical Engineering	3	
CVEN564	Coastal Engineering	3	CVEN451