

Degree and Study Plan

College	Engineering
Department	Civil and Construction Engineering
Program	Water Engineering
Degree Level	Bachelor of Engineering
Total Credit Hours	123
Cohort	2022 and above

Summary of Credits	
University Requirements (UR)	12
College Requirements (CR)	24
Program Requirements (PR)	78
Program Electives (PE)	9
Total	123

For more information contact: Dr. Motasem Al-Azaiza

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
	CHEM111	Applied Chemistry	3		CR
	Total Credits		15		
	Semester 2 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	WATE121	Water Chemistry	3	CHEM111	PR
	ENGL102	English Communication Skills 2	3	ENGL101	UR
	MATH102	Calculus II	3	MATH101	CR
	PHYS111	Applied Physics	3		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
	CVEN332	Civil Engineering Materials	3	ENGR110	PR
	WATE211	Introduction to Water Quality	3	WATE121	PR
	WATE212	Water Microbiology	3	WATE121	PR
	WATE213	Water Treatment I	3	CHEM111	PR
	Total Credits		15		
	Semester 4 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN231	Engineering Geology	3	CHEM111	PR
	ENGR201	Engineering Drawing	3		CR
	WATE221	Water Treatment II	3	WATE213	PR
	MATH204	Probability and Statistics	3	MATH102	CR
	WATE222	Fluid Mechanics	3	MATH102	PR
	Total Credits		15		

Year Three	Semester 5 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENGR331	Applied Engineering Mathematics	3	MATH102	CR
	WATE311	Water Supply Technology	3	WATE222	PR
	WATE312	Computer Application in Water Resources	3	ENGR111	PR
	CVEN451	Hydraulics Engineering	3	CVEN332	PR
	MNGT 313	Entrepreneurship*	3	60CH	UR
	Total Credits		15		
	Semester 6 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENEN201	Renewable Energy	3	MATH102	PR
	WATE321	Irrigation & Drainage Technology	3	WATE311	PR
	ENEN461	Solid Waste Management	3	CVEN310	PR
	WATE322	Wastewater Treatment	3	WATE221	PR
	WATE323	Pump Station Design	3	WATE311	PR
	Total Credits		15		
	Summer				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	ENGR322	Summer Internship	0		CR

Year Four	Semester 7 (Fall)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN552	Engineering Hydrology	3	CVEN451	PR
	WATE411	Capstone Design Project I**	3		PR
		Water Engineering Technology Elective	3		PR
	CVEN553	Water Resources Engineering	3	CVEN451	PR
	ENEN582	Desalination Engineering	3	CVEN332	PR
	WATE414	Hydraulic Structures	3	CVEN451	PR
	Total Credits		18		
	Semester 8 (Spring)				
	Course Code	Course Title	Credits	Pre-Request/ Co-Request*	Category
	CVEN554	Hydrogeology & Groundwater Contamination	3	CVEN451	PR
		Water Engineering Technology Elective			PR
		Water Engineering Technology Elective			PR
	WATE423	Capstone Design Project II		WATE411	PR
	WATE413	Water Laws & Legislation		MNGT313	PR
	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*
ENEN531	Advanced Wastewater Treatment	3	WATE323
CVEN564	Coastal Engineering	3	
WATE422	Groundwater Remediation	3	CVEN554
WATE423	Advanced Technology in Desalination	3	
WATE424	Arid Zone Hydrology	3	CVEN554 & CVEN552
WATE425	Nanotechnology in Water Applications	3	
WATE426	Water-Borne Diseases	3	
WATE427	Special Topics in Water Engineering	3	
WATE428	Water Pollution Control	3	
WATE429	Design & Management of Irrigation Systems	3	WATE322
OJTR406	Industrial Internship I	0	90 Credit Hours
OJTR407	Industrial Internship II	0	OJTR406