

BACHELOR PROGRAM
ENVIRONMENTAL ENGINEERING
2023-2024

STUDY PLAN FOR BACHELOR OF ENVIRONMENTAL ENGINEERING

UNIVERSITY OF NIZWA														
BACHELOR IN ENVIRONMENTAL ENGINEERING														
C – Credit Hours, L – Lecture contact hours, P – Practical contact hours														
Y E A R 1			SUMMER	CODE	COURSE			C	L	P				
				MATH116	Pre Calculus			4	3	2				
				ENGL150	English Language I			3	3	0				
							7	6	2					
	FALL		CODE	COURSE	C	L	P	SPRING	CODE	COURSE	C	L	P	
			ENGN101	Introduction to Engineering	2	2	0		MATH212	Calculus-II	3	2	2	
			MATH211	Calculus I	4	3	2		ENGN103	Engineering Drawing	2	1	2	
			ENGL152	English Language II	3	3	0		CHEM107/L	Fundamentals of chemistry	4	3	2	
			COMP101/L	Computer Skills	3	2	2		HIST150	Islamic Civilization	3	3	0	
			PHYS101/L	Physics-I	4	3	2		CIVL211	Statics	3	3	0	
			16	13	6				15	12	6			
Y E A R 2			SUMMER	CODE	COURSE			C	L	P				
				STAT105	Statistics for Engineering			3	2	2				
				ENGL155	Communication Skills			3	3	0				
							6	5	2					
	FALL		CODE	COURSE	C	L	P	SPRING	CODE	COURSE	C	L	P	
			MATH312	Differential Equations for Engineers	3	2	2		ARAB100	Arabic Language-I	3	3	0	
			CIVL215	Civil Engineering Drawing	2	0	4		CIVL213	Fluid Engineering Mechanics	3	2	2	
			CIVL212	Civil Engineering Materials	3	2	2		CIVL241	Environmental Engineering	3	3	0	
			CIVL216	Dynamics	2	2	0		CIVL214	Geomatic Engineering	3	2	2	
			CIVL221	Solid Mechanics	3	3	0		CIVL321	Structural Analysis-I	3	2	2	
			MGT100	Entrepreneurship creativity and innovation	3	2	2							
						16	11		10				15	12
	Y E A R 3			SUMMER	CODE	COURSE			C	L	P			
					ARAB101	Arabic Language-II			3	3	0			
COMP151L					Introduction to Algorithm & Programming			4	3	2				
					7	6	2							
FALL			CODE	COURSE	C	L	P	SPRING	CODE	COURSE	C	L	P	
			CIVL332	Geotechnical Engineering I	4	3	2		CIVL431	Geotechnical Engineering II	3	3	0	
			CIVL342	Hydrology & Hydraulics	3	3	0		CIVL441	Water and Wastewater Engineering	3	2	2	
			ENVE412	Fundamental of Air Pollution Engineering	3	3	0			College Elective	3	3	0	
			ENVE411	Energy and Environment	3	3	0		ENVE413	Environmental, Law & Regulations	3	3	0	
			CIVL323	Structural Design-I	3	3	0		BIOL101	Biology I	4	3	2	
						16	15		2				16	14
Y E A R 4				SUMMER	CODE	COURSE			C	L	P			
	ENGN333				Industrial training			2	0	4				
					2	0	4							
	FALL		CODE	COURSE	C	L	P	SPRING	CODE	COURSE	C	L	P	
			ENVE422	Wastewater Treatment Process Design	3	3	0		ENVE431	Design Project	2	0	4	
			ENVEXXX	Technical elective-I	3	3	0		ENVEXXX	Technical elective-II	3	3	0	
			ENVE501	Graduation Project	6	0	12		ENVEXXX	Technical elective-III	3	3	0	
			CIVL463	Project Management	2	2	0		ENVEXXX	Technical elective-IV	3	3	0	
			ENVE421	Water Treatment Principles & Design	3	3	0		ENVEXXX	Technical elective-V	3	3	0	
									ENVE423	Water & Wastewater Lab	1	0	2	
						17	11		12				15	12
	Total No. of Credit										148			

Degree Plan for B.Sc. in Environmental Engineering

Minimum No. of Credits for the Degree Plan = 148					
University requirements = 24 Credits					
Course Code	Course Name	Credit Hours	Contact Hours		Pre-requisites/Co-requisites
			Theory	Practical	
ARAB100	ARABIC LANGUAGE-I	3	3	0	
ARAB101	ARABIC LANGUAGE-II	3	3	0	ARAB100
COMP101/L	COMPUTER SKILL	3	2	2	Comp-A, Comp-B (Digital Literacy)
ENGL150	ENGLISH LANGUAGE-I	3	3	0	
ENGL152	ENGLISH LANGUAGE-II	3	3	0	ENGL150
ENGL155	COMMUNICATION SKILL	3	3	0	ENGL152
HIST150	ISLAMIC CIVILIZATION	3	3	0	
MNGT100/L	ENTREPRENEURSHIP CREATIVITY AND INNOVATION	3	2	2	
College requirements = 18 Credits					
COMP151/L	INTRODUCTION TO ALGORITHMS	4	3	2	COMP101/L
ENGN101	INTRODUCTION TO ENGINEERING	2	2	0	MATH116
ENGN103	ENGINEERING DRAWINGS	2	1	2	
ENGN333	INDUSTRIAL TRAINING	2	0	4	110 credits
MATH116	PRE-CALCULUS	4	3	2	
MATH211	CALCULUS-I	4	3	2	MATH116
College elective = 3 Credits (ENGN201)					
Department Requirement: Core Course= 88 Credits					
CHEM107/L	FUNDAMENTAL OF CHEMISTRY	4	3	2	
CIVL211	STATICS	3	3	0	PHYS101
CIVL213/L	FLUIDENGINEERING MECHANICS	3	2	2	MATH211; CIVL211
MATH312	DIFFERENTIAL EQUATIONS FOR ENGINEERS	3	3	0	MATH212
PHYS101/L	GENERAL PHYSICS-I	4	3	2	MATH116
CIVL214	GEOMATIC ENGINEERING	3	2	2	ENGN101
CIVL216	DYNAMICS	2	2	0	CIVL211
CIVL221	SOLID MECHANICS	3	3	0	CIVL211
CIVL241	ENVIRONMENTAL ENGINEERING	3	3	0	CHEM107
CIVL321	STRUCTURAL ANALYSIS I	3	2	2	CIVL221,CIVL216 MATH211
CIVL441	WATER AND WASTEWATER ENGINEERING	3	2	2	CIVL241
MATH212	CALCULUS II	3	2	2	MATH211

Course Code	Course Name	Credit Hours	Contact Hours		Pre-requisites/Co-requisites
			Theory	Practical	
CIVL212	CIVIL ENGINEERING MATERIALS	3	2	2	CHEM107,CIVL211
STAT105	STATISTICS FOR ENGINEERING	3	2	2	MATH211
CIVL215	CIVIL ENGINEERING DRAWING	2	0	4	ENGN103
BIOL101	GENERAL BIOLOGY I	4	3	2	
CIVL323	STRUCTURAL DESIGN I	3	0	0	CIVL321,CIVL212,CIVL215
CIVL332	GEOTECHNICAL ENGINEERING I	4	3	2	CIVL221
CIVL342	HYDROLOGY AND HYDRAULICS	3	3	0	CIVL213
ENVE411	ENERGY AND ENVIRONMENT	3	3	0	CIVL241
CIVL431	GEOTECHNICAL ENGINEERING II	3	3	0	CIVL332,MATH312
ENVE412	FUNDAMENTAL OF AIR POLLUTION ENGG	3	3	0	CIVL241
ENVE413	ENVIRONMENTAL LAW AND REGULATIONS	3	3	0	ENVE411
ENVE421	WATER TREATMENT PRINCIPLES AND DESIGN	3	3	0	CIVL441
ENVE422	WASTEWATER TREATMENT PROCESS DESIGN	3	3	0	CIVL441,BIOL101
ENVE423	WATER AND WASTEWATER LAB	1	0	2	CIVL441
CIVL463	PROJECT MANAGEMENT	2	2	0	ENVE413
ENVE431	DESIGN PROJECT	2	0	4	Final Year
ENVE501	GRADUATION PROJECT	6	0	12	120 credits
Department Technical Electives = 15 Credits					
ENVE514	GREEN ENGINEERING	3	3	0	CIVL241
ENVE515	DESIGN OF AIR POLLUTION CONTROL	3	3	0	ENVE412
ENVE521	SOLID AND HAZARDOUS WASTE ENGINEERING	3	3	0	CIVL441
ENVE523	INDUSTRIAL AND WASTEWATER TREATMENT	3	3	0	ENVE421 ENVE422
CIVL534	DAM DESIGN	3	3	0	CIVL431 CIVL342
CIVL543	ADVANCED WASTEWATER ENGINEERING	3	3	0	CIVL441
ENVE511	DESIGN OF ENVIRONMENTAL ENGINEERING SYSTEM	3	3	0	CIVL241
ENVE512	ENVIRONMENTAL RISK ASSESSMENT	3	3	0	ENVE413
ENVE513	ADVANCED AIR POLLUTION ENGINEERING	3	3	0	ENVE412
ENVE516	ENVIRONMENTAL INFORMATICS	3	3	0	CIVL241
ENVE517	ENVIRONMENTAL CHEMISTRY AND MICROBIOLOGY	3	3	0	CHEM107 BIOL101
ENVE518	NOISE POLLUTION AND VIBRATION CONTROL	3	3	0	CIVL241
ENVE519	ENVIRONMENTAL MANAGEMENT SYSTEM	3	3	0	CIVL241
ENVE522	WATER QUALITY MANAGEMENT AND CONTROL	3	3	0	CIVL441
ENVE524	HAZARDOUS WASTE SITE REMEDIATION	3	3	0	CIVL241
ENVE525	Water supply and Sewer drainage systems	3	3	0	CIVL441,CIVL342

