AY2025-26 CURRICULUM FOR BACHELOR OF ENGINEERING (ENVIRONMENTAL ENGINEERING) WITH SECOND MAJOR IN FUTURE FOODS - TRACK 1 WUR BASED (FIRST YEAR ADMISSION)

Last Updated: 26-Jun-25

1

	SUMMARY OF ACADEMIC UNIT REQUIREMENT								
	Major Requirements Interdisciplinary Collaborative Core			e Core	Broadening				
Year of Study	Core	Major PE	Common Core	Professional Series	Care, Serve, Learn	& Deepening Electives	Total AU		
1	29	0	6	0	0	0	35		
2	20	0	8	5	3	6	42		
3	0	0	0	10	0	12	22		
4	31	3	0	1	0	12	47		
Total	80	3	14	16	3	30	146		

^{*} Students without 'A' Level/Senior High School Physics will take 'PH1012 Physics A' (4AU)

YEAR 1 SEMESTER 1					
Course Code	Course Title	Type	AU	Pre-Requisite	
MH1810	Mathematics 1	С	3		
PH1011	Physics*	С	3		
FE1073	An Introduction to Engineering & Practices	С	1		
CV1011	Mechanics of Materials	С	4		
CV1012	Fluid Mechanics	С	3		
CV1711	Engineering Drawing and 3D Building Information Modelling	С	1		
CC0001	Inquiry and Communication in the Interdisciplinary World	CC	2		
			17		

YEAR 1 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-Requisite	
MH1811	Mathematics 2	С	3	MH1810	
CV1014	Introduction To Computational Thinking	С	3		
CV2020	Water Resources Engineering	С	3	CV1012	
EN2002	Microbiological Principles of Environmental Engineering	С	3		
EG1001	Engineers In Society	С	2		
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2		
CC0015	Health & Wellbeing	CC	2		
			18		

YEAR 2 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-Requisite	
EN1001	Environmental Chemistry	С	3		
EN2004	Geo-Environment and Soil Mechanics	С	3		
EN2711	Environmental Engineering Laboratory A	С	1		
MH2814	Probability & Statistics	С	3	MH1810	
CV0003	Introduction to Data Science and Artificial Intelligence	PS	3	CV1014	
CM5101	Food Chemistry & Nutrition	BDE-FF	3	Waive	
CC0006	Sustainability: Society, Economy & Environment	CC	3		
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2		
			21		

YEAR 2 SEMESTER 2						
Course Code	Course Title	Туре	AU	Pre-Requisite		
EN2003	Water Supply Engineering	С	3	CV1012		
EN2005	Environmental Health and Safety Management	С	3			
EN2712	Environmental Engineering Laboratory B	С	1			
EN3003	Environmental Transport Processes	С	3			

ENG

CH5220	Food Standard - Food Safety and Risk Assessment	BDE-FF	3	
HW0288	Engineering Communication	PS	2	CC0001 & Year 3 Standing
CC0007	Science and Technology for Humanity	CC	3	
	Service Learning	CSL	3	
			21	

	YEAR 3 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-Requisite		
	Second Major Elective 1	BDE-FF	3			
	Second Major Elective 2	BDE-FF	3			
	Second Major Elective 3	BDE-FF	3			
	Second Major Elective 4	BDE-FF	3			
			12			

YEAR 3 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-Requisite	
EN3920	Professional Internship	PS	10	Year 3 standing &	
				completed at least 4	
				semesters of study	
			10		

YEAR 4 SEMESTER 1					
Course Code	Course Title	Туре	AU	Pre-Requisite	
EN3001	Solid & Hazardous Waste Management	С	3	Year 3 Standing	
EN3002	Wastewater Engineering	С	3	Year 3 Standing	
EN3004	Air Pollution Control Engineering	С	3	Year 3 Standing	
EN3006	Energy Resource Engineering	С	3		
CV4012	Project Planning & Management	С	2	Year 4 Standing	
EN4001	Environmental Impact Analysis & Monitoring	С	3		
EN4711	Seminars on Built Environment	С	1		
EN4911	Final Year Project	С	4	Year 4 Standing	
MLxxxx	Profession Preparation	PS	1		
CH5210	Food Process Technologies and New Food Production Systems	BDE-FF	3		
			26		

YEAR 4 SEMESTER 2					
Course Code	Course Title	Туре	AU	Pre-Requisite	
EN4003	Environmental Systems Analysis	С	2		
EN4911	Final Year Project	С	4	Year 4 Standing	
EN4912	Integrated Design Project	С	3	Year 4 Standing	
EN4XXX	Major Prescribed Elective	MPE	3	Refer to Syllabus	
CH5211	Data Analytics in Food Systems	BDE-FF	3		
CH5222	Future Foods – Introduction to Advanced Meat Alternatives	BDE-FF	3		
	Second Major Elective 5	BDE-FF	3		
			21		

Total AU for Graduation : 146

ENG 2