AY2024-25 CURRICULUM FOR BACHELOR OF ENGINEERING (ENVIRONMENTAL ENGINEERING) WITH SECOND MAJOR IN SUSTAINABILITY - PROFESSIONAL ATTACHMENT (FIRST YEAR ADMISSION)

					Last Updated :	11-Nov-24
		SUMMARY O	F ACADEMIC UNIT	REQUIREMENT		
Year of Study	Core	MPE	CC	FC	BDE	Total AU
1	26	0	9	0	0	35
2	23	0	8	3	6	40
3	12	3	0	7	16	38
4	19	0	0	0	11	30
Total	80	3	17	10	33	143

* Students without 'A' Level Physics will take 'PH1012 Physics A' (4AU).

^ The Course will be double counted towards Primary Programme and Second Major in Sustainability

	YEAR 1 SEMESTER 1				
Course Code	Course Title	Туре	AU	Pre-Requisite	
MH1810	Mathematics 1	C	3		
PH1011	Physics*	C	3		
FE1073	An Introduction to Engineering & Practices	C	1		
CV1011	Mechanics of Materials	C	4		
CV1012	Fluid Mechanics	C	3		
CC0001	Inquiry and Communication in the Interdisciplinary World	CC	2		
CC0002	Navigating the Digital World	CC	2		
			18		

YEAR 1 SEMESTER 2				
Course Code	Course Title	Туре	AU	Pre-Requisite
MH1811	Mathematics 2	C	3	MH1810
CV1014	Introduction To Computational Thinking	C	3	
CV1711	Engineering Drawing and 3D Building Information Modelling	C	1	
CV2020	Water Resources Engineering	С	3	CV1012
EG1001	Engineers In Society	C	2	
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2	
CC0005	Healthy Living & Wellbeing	CC	3	
			17	

	YEAR 2 SEMESTER 1				
Course Code	Course Title	Туре	AU	Pre-Requisite	
EN1001 ^	Environmental Chemistry	C	3		
EN2004	Geo-Environment and Soil Mechanics	C	3		
EN2711	Environmental Engineering Laboratory A	C	1		
MH2814	Probability & Statistics	C	3	MH1810	
CV0003	Introduction to Data Science and Artificial Intelligence	FC	3	CV1014	
CC0006	Sustainability: Society, Economy & Environment	CC	3		
ML0004	Career and Entrepreneurial Development for the Future World	CC	2		
			18		

	YEAR 2 SEMESTER 2			
Course Code	Course Title	Туре	AU	Pre-Requisite
EN2002	Microbiological Principles of Environmental Engineering	C	3	
EN2003	Water Supply Engineering	C	3	CV1012
EN2005	Environmental Health and Safety Management	C	3	
EN2712	Environmental Engineering Laboratory B	С	1	
EN3003	Environmental Transport Processes	С	3	

CC0007	Science & Technology for Humanity	CC	3	
	Sustainability-Core	BDE	3	Refer to Syllabus
	Sustainability-Core	BDE	3	Refer to Syllabus
			22	

	YEAR 3 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	
HW0288	Engineering Communication	FC	2	CC0001
	Sustainability-Core	BDE	3	Refer to Syllabus
			17	

	YEAR 3 SEMESTER 2			
Course Code	Course Title	Туре	AU	Pre-Requisite
EN4XXX	Major Prescribed Elective	MPE	3	Refer to Syllabus
	Sustainability-Core	BDE	3	Refer to Syllabus
	Sustainability-Elective	BDE	4	Refer to Syllabus
	Sustainability-Elective	BDE	3	Refer to Syllabus
	Broadening & Deepening Electives	BDE	3	
			16	

	YEAR 3 SPECIAL SEMESTER			
Course Code	Course Title	Туре	AU	Pre-Requisite
EN3910	Professional Attachment	FC	5	Year 3 standing &
				completed at least 4
				semesters of study
			5	

	YEAR 4 SEMESTER 1				
Course Code	Course Title	Туре	AU	Pre-Requisite	
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	
	Sustainability-Elective	BDE	3	Refer to Syllabus	
	Broadening & Deepening Electives	BDE	2		
			15		

	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	
	Sustainability-Interdisciplinary Project	BDE	3	Refer to Syllabus	
	Sustainability-Elective	BDE	3	Refer to Syllabus	
			15		
	Total AU for Graduation :		143		