

**AY2025-26 CURRICULUM FOR BACHELOR OF ENGINEERING (ENVIRONMENTAL ENGINEERING)
WITH SECOND MAJOR IN DATA ANALYTICS - PROFESSIONAL INTERNSHIP
(FIRST YEAR ADMISSION)**

Last Updated : 2-Jul-25

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	Major Requirements		Interdisciplinary Collaborative Core			Broadening & Deepening Electives	Total AU
	Core	Major PE	Common Core	Professional Series	Care, Serve, Learn		
1	29	0	6	0	0	0	35
2	20	0	8	3	3	6	40
3	12	0	0	13	0	6	31
4	19	3	0	0	0	12	34
Total	80	3	14	16	3	24	140

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

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

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	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	
CV1711	Engineering Drawing and 3D Building Information Modelling	C	1	
CC0001	Inquiry and Communication in an Interdisciplinary World	CC	2	
			17	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
MH1811	Mathematics 2	C	3	MH1810
CV1014 ^	Introduction To Computational Thinking	C	3	
CV2020	Water Resources Engineering	C	3	CV1012
EN2002	Microbiological Principles of Environmental Engineering	C	3	
EG1001	Engineers In Society	C	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	Type	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	PS	3	CV1014
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	
			18	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
EN2003	Water Supply Engineering	C	3	CV1012

EN2005	Environmental Health and Safety Management	C	3	
EN2712	Environmental Engineering Laboratory B	C	1	
EN3003	Environmental Transport Processes	C	3	
CC0007	Science and Technology for Humanity	CC	3	
	Service Learning	CSL	3	
CV2019	Matrix Algebra & Computational Methods	BDE-DA	3	
MH1403	Algorithms and Computing	BDE-DA	3	CV1014
			22	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
EN3001	Solid & Hazardous Waste Management	C	3	Year 3 Standing
EN3002	Wastewater Engineering	C	3	Year 3 Standing
EN3004	Air Pollution Control Engineering	C	3	Year 3 Standing
EN3006	Energy Resource Engineering	C	3	
HW0288	Engineering Communication	PS	2	CC0001
MLxxxx	Profession Preparation	PS	1	
SC4024	Data Visualization	BDE-DA	3	CV1014 & MH2814
EE4483	Artificial Intelligence & Data Mining	BDE-DA	3	CV2019 & CV0003
			21	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	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	Type	AU	Pre-Requisite
CV4012	Project Planning & Management	C	2	Year 4 Standing
EN4001	Environmental Impact Analysis & Monitoring	C	3	
EN4711	Seminars on Built Environment	C	1	
EN4911	Final Year Project	C	4	Year 4 Standing
EN4XXX	Major Prescribed Elective	MPE	3	Refer to Syllabus
SC2207	Introduction to Database	BDE-DA	3	MH1403
	Data Analytics Elective Course	BDE-DA	3	Refer to Syllabus
			19	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
EN4003	Environmental Systems Analysis	C	2	
EN4911	Final Year Project	C	4	Year 4 Standing
EN4912	Integrated Design Project	C	3	Year 4 Standing
	Data Analytics Elective Course	BDE-DA	3	
	Data Analytics Elective Course	BDE-DA	3	
			15	

Total AU for Graduation : **140**