

**AY2026-27 CURRICULUM FOR BACHELOR OF ENGINEERING (ENVIRONMENTAL ENGINEERING)
WITH SECOND MAJOR IN FUTURE FOODS
(FIRST YEAR ADMISSION)**

Last Updated : 29-Jul-26

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	28	0	7	0	0	0	35
2	23	0	7	3	3	6	42
3	12	0	0	13	0	6	31
4	20	3	0	0	0	18	41
Total	83	3	14	16	3	30	149

* 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	C	3	
PH1011	Physics*	C	3	
FE1073	An Introduction to Engineering & Practices	C	1	
CV1012	Fluid Mechanics	C	3	
CV1711	Engineering Drawing and 3D Building Information Modelling	C	1	
EN1001	Environmental Chemistry	C	3	
CC0015	Health & Wellbeing	CC	2	
			16	

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	
CC0001	Inquiry and Communication in an Interdisciplinary World	CC	2	
CC0007	Science and Technology for Humanity	CC	3	
			19	

YEAR 2 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite
EN2003	Water Supply Engineering	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
CM5101	Food Chemistry & Nutrition	BDE-FF	3	Waive
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career Design and Workplace Readiness in a Dynamic World	CC	2	
			21	

YEAR 2 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite
EN2005	Environmental Health and Safety Management	C	3	
EN2712	Environmental Engineering Laboratory B	C	1	
EN3002	Wastewater Engineering	C	3	
EN3003	Environmental Transport Processes	C	3	
EN3004	Air Pollution Control Engineering	C	3	

CH5220	Food Standard - Food Safety and Risk Assessment	BDE-FF	3	
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2	
	Service Learning	CSL	3	
			21	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
EN3001	Solid & Hazardous Waste Management	C	3	Year 3 Standing
EN3006	Energy Resource Engineering	C	3	
EN3007	Sustainability Management & Reporting	C	3	
EN4001	Environmental Impact Analysis & Monitoring	C	3	
HW0288	Engineering Communication	PS	2	CC0001 & Year 3 Standing
MLxxxx	Profession Preparation	PS	1	
	FF Elective 1	BDE-FF	3	
	FF Elective 2	BDE-FF	3	
			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
EN4004	Membranes for Environmental Applications	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
CH5210	Food Process Technologies and New Food Production Systems	BDE-FF	3	
	FF Elective 3	BDE-FF	3	
	FF Elective 4	BDE-FF	3	
			20	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
EN4002	Environmental Systems Analysis	C	3	Year 3 Standing
EN4911	Final Year Project	C	4	Year 4 Standing
EN4915	Integrated Project Planning, Design, and Management	C	5	Year 4 Standing
CH5211	Data Analytics in Food Systems	BDE-FF	3	Refer to Syllabus
CH5222	Future Foods – Introduction to Advanced Meat Alternatives	BDE-FF	3	
	FF Elective 5	BDE-FF	3	
			21	

Total AU for Graduation : **149**