

AY2025-26 CURRICULUM FOR BACHELOR OF SCIENCE (HONS) BIOLOGICAL SCIENCES with SECOND MAJOR IN FUTURE FOODS (BSFF)

Academic Unit (AU) requirements for candidates admitted to the First Year of the programme		
Type		No of AU
Major Requirements	Core	39
	Major PE	33
Interdisciplinary Collaborative Core	Common Core	14
	Professional Series	16
	Care, Serve, Learn	3
Broadening and Deepening Electives	BDE	27
Total		132

LEGEND:

Core = Core | MPE = Major Prescribed Elective | CC = ICC (Common Core) | PS = Professional Series | Care, Serve, Learn = CSL | BDE = Broadening and Deepening Electives

Year	Sem	Type	Course Code	Course Title	AU
Year 1	Sem 1	Core	BS1012	Foundations of Chemistry I	3
		Core	BS1016	Physiology	3
		Core	BS1008	Biostatistics	3
		ICC (Common Core)	CC0001	Inquiry & Communication in an Interdisciplinary World	2
		ICC (Common Core)	CC0003	Ethics and Civics in a Multi-Cultural World	2
		ICC (Common Core)	CC0015	Health & Wellbeing	2
		Total			15
Year 1	Sem 2	Core	BS1013	Foundations of Chemistry II	3
		Core	BS1005	Biochemistry I	3
		Core	BS1006	Principles of Genetics	3
		Core	BS1007	Molecular and Cell Biology I	3
		Core	BS1009	Introduction to Computational Thinking	3
		Core	BS1100	Molecular and Cell Biology Techniques Level 1	3
		ICC (Common Core)	ML0004	Career Design & Workplace Readiness in the V.U.C.A World	2
		Total			20
Year 2	Sem 1	Core	BS2002	Microbiology	3
		Core	BS2003	Biochemistry II	3
		Core	BS2028	Biophysical methods applied to biological sciences	3
		ICC (Professional Series)	BS0004	Introduction to Data Science	3
		ICC (Common Core)	CC0007	Science & Technology for Humanity	3
		BDE	CM5101	Food Chemistry & Nutrition	3
		BDE	NTU Elective	Second Major Elective 1	3
		Total			21
Year 2	Sem 2	Core	BS2004	Molecular & Cell Biology II	3
		ICC (Common Core)	CC0006	Sustainability: Society, Economy and Environment	3
		ICC (Professional Series)	HW0218	Communication Across the Sciences	2
		MPE	BSxxxx	MPE 1	3
		BDE	CH5220	Food Standard – Food Safety and Risk Assessment	3
		BDE	NTU Elective	Second Major Elective 2	3
		ICC (Care, Serve, Learn)	TBC	Care, Serve, Learn (CSL)	3
		Total			20
Year 3	Sem 1	Type	Course Code	Course Title	AU
		ICC (Professional Series)	BS4227	Professional Internship	10
		Total			10
Year 3	Sem 2	Type	Course Code	Course Title	AU
		MPE	BSxxxx	MPE 2	3
		MPE	BSxxxx	MPE 3	3
		BDE	CH5211	Data Analytics in Food Systems	3
		BDE	CH5222	Future Foods – Introduction to Advanced Meat Alternatives	3
		BDE	NTU Elective	Second Major Elective 3	3
		ICC (Professional Series)	MLxxxx	Profession Preparation Course	1
		Total			16
Year 4	Sem 1	Type	Course Code	Course Title	AU
		MPE	BS4021	Bi-Semestral FYP	12 (6)
		MPE	BS4010*	Synthetic Biology (MPE 4 / Second Major Elective 4)	3
		MPE	BS4015*	Plant Biotechnology (MPE 5 / Second Major Elective 5)	3
		BDE	CH5210	Food Process Technologies and New Production Systems	3
		Total			15
Year 4	Sem 2	Type	Course Code	Course Title	AU
		MPE	BS4021	Bi-Semestral FYP	12 (6)
		MPE	BSxxxx	MPE 6	3
		MPE	BSxxxx	MPE 7	3
		BDE	NTU Elective	Free BDE or Second Major Elective	3
		Total			15
		Total AU			132

*Counted towards 2nd Major in FF requirement (total 6AU)