

B.Eng (Hons) in Bioengineering with 2nd Major in Entrepreneurship

with Professional Internship

AY2026 - 2027 Intake (BEET)

Programme	Year of Study	Number of Academic Units (AU)						
		Major Requirement		Interdisciplinary Collaborative Core			Broadening and Deepening Electives (BDE)	Total
		Core (C)	Major PE (MPE)	Common Core (CC)	Professional Series (PS)	Care, Serve, Learn (CSL)		
Bioengineering with Second Major in Entrepreneurship (BEET)	1	21		7		3	6	37
	2	27		7	3		6	43
	3	13			13 [5]		3	29 [5]
	4	11	12				10	33
	Total	72	12	14	16 [5]	3	25	142
		73*		143*				

Category			AU	Total AU
Interdisciplinary Collaborative Core (ICC)	Common Core (CC)			
	CC0001	Inquiry and Communication in the Interdisciplinary World	2	14
	CC0003	Ethics & Civics in a Multi-Cultural World	2	
	CC0006	Sustainability: Society, Economy & Environment	3	
	CC0007	Science & Technology for Humanity	3	
	CC0015	Health & Wellbeing	2	
	ML0004	Career Design & Workplace Readiness in a Dynamic World	2	
	Professional Series (PS)			
	CB0494	Introduction to Data Science and Artificial Intelligence	3	16
	HW0288	Engineering Communication	2	
	MLXXXX	Professional Preparation	1	
	BG3940	Overseas Entrepreneurship Programme (OEP)	10	
	OR			
BG3920	Professional Internship (PI)			
Care, Service, Learn (CSL)				
	Service Learning	3	3	
Major Requirement	BIE Core			
	EG1001	Engineers In Society	2	20
	MH1810	Math 1	3	
	PH1011*	Physics	3	
	CB1102	Introduction to Chemistry, Chemical Engineering and Biomedical Engineering	1	
	CB1103	Organic Chemistry For Engineers	3	
	CB1117	Engineering Mathematics	4	
	BG1141	Cellular & Molecular Biology for Bioengineers	3	
	BG1801	Bioengineering Lab 1A	1	

Major Requirement	BG1802	Bioengineering Lab 1B	1	52
	CB2002	Introduction to Chemical and Biological Safety	1	
	BG2103	Biosignal Processing	3	
	BG2104	Electronics for Biomedical Engineering	3	
	BG2110	Bioelectricity	3	
	BG2119	Anatomy and Physiology	3	
	BG2131	Biomaterials	3	
	BG2142	Biological Thermodynamics	3	
	BG2209	Mechanics for Bioengineers	3	
	BG2211	Introduction to Computational Thinking	3	
	BG2801	Bioengineering Lab 2A	1	
	BG2802	Bioengineering Lab 2B	1	
	BG3102	Control in Biosystems	3	
	BG3104	Biomedical Imaging	3	
	BG3105	Biomedical Instrumentation	3	
	BG3112	Cardiovascular Engineering	3	
	BG3801	Bioengineering Lab 3	1	
	BG4104	Machine Learning and Optimization for Bioengineers	3	
		BG4801 Final Year Project <u>OR</u> BG4123 Capstone Project	8	
	BIE Major Prescribed Electives (MPE)			
2nd Major in Entrepreneurship (BDEs)	Compulsory Courses			25
	ET5001	Foundations of Innovation & Entrepreneurship	3	
	ET5003	Leading and Managing New Entreprises	3	
	ET5132	New Venture Financing	3	
	ET5135	Business Venture Implementation	3	
	Compulsory Experiential Programme			
	BG3940	Overseas Entrepreneurship Programme (OEP) OR	NA	
	BG3920	Professional Internship (PI)		
	Elective Courses (at least 4 courses)		13	
Total			142	

143*

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

^Counted towards 2nd Major in Entrepreneurship requirement (total 10AU)

[] AU of courses that could be used to fulfil Core/MPE requirement and 2nd Major requirement concurrently

B.Eng. (Bioengineering) with 2nd Major in Entrepreneurship
Suggested Study Plan for AY2026-2027 intake (BEET)
with Professional Internship

Year 1 Semester 1			
Course		Type	AU
CB1102	Introduction to Chemistry, Chemical Engineering and Biomedical Engineering	C	1
BG1141	Cellular & Molecular Biology for Bioengineers	C	3
BG1801	Bioengineering Lab 1A	C	1
MH1810	Math 1	C	3
PH1011	Physics	C	3
	<i>or</i>		
PH1012	Physics A (* For students without 'A' Level Physics)	C	4
CC0001	Inquiry and Communication in the Interdisciplinary World	CC	2
ET5001	Foundations of Innovation & Entrepreneurship	BDE	3
			*
			16
			17
Year 2 Semester 1			
Course		Type	AU
BG2119	Anatomy and Physiology	C	3
BG2131	Biomaterials	C	3
BG2142	Biological Thermodynamics	C	3
BG2211	Introduction to Computational Thinking	C	3
BG2801	Bioengineering Lab 2A	C	1
CC0003	Ethics & Civics in a Multi-Cultural World	CC	2
ET5315	Business Venture Implementation	BDE	3
			18
Year 3 Semester 1			
Course		Type	AU
BG3102	Control in Biosystems	C	3
BG3104	Biomedical Imaging	C	3
BG3105	Biomedical Instrumentation	C	3
BG3112	Cardiovascular Engineering	C	3
BG3801	Bioengineering Lab 3	C	1
HW0288	Engineering Communication	PS	2
MLXXXX	Professional Preparation	PS	1
	Entrepreneurship Elective 1	BDE	3
			19
Year 4 Semester 1			
Course		Type	AU
BG4104	Final Year Project <u>OR</u> Capstone Project	C	4
	Machine Learning and Optimization for Bioengineers	C	3
	BIE PE 1	MPE	3
	BIE PE 2	MPE	3
	Entrepreneurship Elective 2	BDE	4
			17
Year 1 Semester 2			
Course		Type	AU
CB1103	Organic Chemistry For Engineers	C	3
CB1117	Engineering Mathematics	C	4
BG1802	Bioengineering Lab 1B	C	1
EG1001	Engineers in Society	C	2
CC0007	Science & Technology for Humanity	CC	3
ML0004	Career Design & Workplace Readiness in a Dynamic World	CC	2
	Service Learning	CSL	3
ET5003	Leading and Managing Growth Enterprises	BDE	3
			21
Year 2 Semester 2			
Course		Type	AU
BG2103	Biosignal Processing	C	3
BG2104	Electronics for Biomedical Engineering	C	3
BG2110	Bioelectricity	C	3
BG2209	Mechanics for Bioengineers	C	3
BG2802	Bioengineering Lab 2B	C	1
CB2002	Introduction to Chemical and Biological Safety	C	1
CC0006	Sustainability: Society, Economy & Environment	CC	3
CC0015	Health & Wellbeing	CC	2
CB0494	Introduction to Data Science and Artificial Intelligence	PS	3
ET5132	New Venture Financing	BDE	3
			25
Year 3 Semester 2			
Course		Type	AU
^BG3940	Overseas Entrepreneurship Programme	PS	
	OR		10
^BG3920	Professional Internship	PS	
			10
Year 4 Semester 2			
Course		Type	AU
	Final Year Project <u>OR</u> Capstone Project	C	4
	BIE PE 3	MPE	3
	BIE PE 4	MPE	3
	Entrepreneurship Elective 3	BDE	3
	Entrepreneurship Elective 4	BDE	3
			16
			142
			143*

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

[^]Counted towards 2nd Major in Entrepreneurship requirement (total 5AU)