

## B.Eng (Hons) in Bioengineering (ABP)

AY2025 - 2026 Intake onwards

with Professional Attachment (BIE ABP)

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	1	21		6			9	36
	2	27		8	3		3	41
	3	27	3		6		6	42
	4	3	3		2	3	6	17
	Total	78	6	14	11	3	24	136
		79*						137*

## BIE Accelerated Bachelor Programme (ABP)

Category		AU	Total AU
Interdisciplinary Collaborative Core (ICC)	<b>Common Core (CC)</b>		
	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 the V.U.C.A World	2	
	<b>Professional Series (PS)</b>		
	CB0494 Introduction to Data Science and Artificial Intelligence	3	11
	HW0288 Engineering Communication	2	
	MLXXXX Professional Preparation	1	
	BG3910 Professional Attachment	5	
	<b>Care, Service, Learn (CSL)</b>		
	Service Learning	3	3
Major Requirement	<b>BIE Core</b>		
	EG1001 Engineers In Society	2	12
	MH1810 Math 1	3	
	PH1011* Physics	3	
	CB1102 Introduction to Chemical and Biomedical Engineering	1	
	CB1103 Organic Chemistry For Engineers	3	

Major Requirement	CB1117	Engineering Mathematics	4	66
	BG1141	Cellular & Molecular Biology for Bioengineers	3	
	BG1801	Bioengineering Lab 1A	1	
	BG1802	Bioengineering Lab 1B	1	
	CB2002	Introduction to Chemical and Biological Safety	1	
	BG2103	Signal Processing in Biosystems	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	
	BG4122	Medical Device Design	6	
	BG4801	Final Year Project	8	
BIE Major Prescribed Electives (MPE)				6
Broadening and Deepening Electives (BDE)				24
<b>Total</b>				<b>136</b>

**137\***

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

**B.Eng (Hons) in Bioengineering (ABP)**  
**Suggested Study Plan for AY2025-2026 intake**  
with Professional Attachment (BIE ABP)

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