

B.Eng (Hons) in Chemical and Biomolecular Engineering with 2nd Major in Business (International Trading)

with Professional Internship

AY2026 - 2027 Intake onwards CBBM(ITG)

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)		
Chemical & Biomolecular Engineering with Second Major in Business - ITP	1	24		7		3	6	40
	2	28		7	3		11	49
	3	17			11		6	34
	4	8	6		2		8	24
	Total	77	6	14	16	3	31	147
78*148*								

Category		AU	Total AU
Interdisciplinary Collaborative Core (ICC)	Common Core (CC)		
	Inquiry and Communication in the Interdisciplinary World	2	14
	CC0001		
	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	
	CH3920 Professional Internship	10	
	Care, Service, Learn (CSL)		
	Service Learning	3	3
Major Requirement	CBE Core		
	EG1001 Engineers In Society	2	22
	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	
	CB1131 Introduction to Biomolecular Engineering	3	

	CH1104	Materials & Energy Balance	3	
Major Requirement	CH1801	Chemical & Biomolecular Engineering Laboratory 1A	1	55
	CH1802	Chemical & Biomolecular Engineering Laboratory 2	1	
	CH2010	Engineering Statistics	3	
	CH2103	Fluid Systems	3	
	CH2107	Introduction to Computational Thinking	3	
	CH2108	Thermodynamics	3	
	CH2112	Chemical Reaction Engineering	3	
	CH2114	Heat & Mass Transfer in Chemical and Biological Systems	3	
	CH2123	Chemical Thermodynamics	3	
	CH2151	Unit Operations: Fluid-Solid Separation	3	
	CH2801	Chemical & Biomolecular Engineering Laboratory 2A	2	
	CH2802	Chemical & Biomolecular Engineering Laboratory 2B	2	
	CH3104	Biochemical Engineering	3	
	CH3109	Decision Tools for Business & Engineering	3	
	CH3111	Process Control and Dynamics	3	
	CH3121	Chemical, Biological & Plant Safety	2	
	CH3140	Unit Operations: Fluid-Fluid Separation	3	
	CH3802	Chemical & Biomolecular Engineering Laboratory 5	3	
	CH4801	Final Year Design Project	8	
	CBE Major Prescribed Electives (MPE)			
2nd Major in Business - International Trading (BDEs)	Business (ITP) Courses			31
	AB1201	Financial Management	3	
	AB1501	Marketing	3	
	AD1102	Financial Accounting	3	
	AD2102	Management Accounting	3	
	BE1402	Business Operations & Process	3	
	BF2226	Trade Incoterms & Ship Chartering	3	
	BF2227	Commodity Markets	3	
	BF2302	International Tax & Trading Law	2	
	BF3212	Trade, Structured & Supply Chain Finance	2	
	BF3213	Enterprise Risk Management in Commodity Markets	2	
	BF3214	Commodities Trading	2	
	BF3226	Strategic Management in Commodity Market	2	
Total			147	
			148*	

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

B.Eng. (Chemical & Biomolecular Engineering) with 2nd Major in Business (International Trading)

Suggested Study Plan for AY2026-2027 intake CBBM(ITG)

*with Professional Internship***Year 1 Semester 1**

Course	Type	AU
CB1102 Introduction to Chemistry, Chemical Engineering and Biomedical Engineering	C	1
CB1131 Introduction to Biomolecular Engineering	C	3
CH1801 Chemical & Biomolecular Engineering Laboratory 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
AB1201 Financial Management	BDE	3
		16
		17

Year 2 Semester 1

Course	Type	AU
CH2103 Fluid Systems	C	3
CH2107 Introduction to Computational Thinking	C	3
CH2108 Thermodynamics	C	3
CH2010 Engineering Statistics	C	3
CH2801 Chemical & Biomolecular Engineering Laboratory 2A	C	2
CC0003 Ethics & Civics in a Multi-Cultural World	CC	2
AD1102 Financial Accounting	BDE	3
BF2227 Commodity Markets	BDE	3
		22

Year 3 Semester 1

Course	Type	AU
CH3104 Biochemical Engineering	C	3
CH3109 Decision Tools for Business & Engineering	C	3
CH3111 Process Control and Dynamics	C	3
CH3121 Chemical, Biological & Plant Safety	C	2
CH3140 Unit Operations: Fluid-Fluid Separation	C	3
CH3802 Chemical & Biomolecular Engineering Laboratory 5	C	3
MLXXXX Professional Preparation	PS	1
AD2102 Management Accounting	BDE	3
BF2226 Trade Incoterms and Ship Chartering	BDE	3
		24

Year 4 Semester 1

Course	Type	AU
CH4801 Final Year Design Project	C	4
CBE PE 1	MPE	3
HW0288 Engineering Communication	PS	2
BF2302 International Tax and Trading Law	BDE	2
BF3226 Strategic Management in Commodity Market	BDE	2
		13

Year 1 Semester 2

Course	Type	AU
CB1103 Organic Chemistry For Engineers	C	3
CB1117 Engineering Mathematics	C	4
CH1104 Materials & Energy Balance	C	3
CH1802 Chemical & Biomolecular Engineering Laboratory 2	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
AB1501 Marketing	BDE	3
		24

Year 2 Semester 2

Course	Type	AU
CH2112 Chemical Reaction Engineering	C	3
CH2114 Heat & Mass Transfer in Chemical and Biological Systems	C	3
CH2123 Chemical Thermodynamics	C	3
CH2151 Unit Operations: Fluid-Solid Separation	C	3
CH2802 Chemical & Biomolecular Engineering Laboratory 2B	C	2
CC0006 Sustainability: Society, Economy & Environment	CC	3
CC0015 Health & Wellbeing	CC	2
CB0494 Introduction to Data Science and Artificial Intelligence	PS	3
BE1402 Business Operations and Processes	BDE	3
BF3214 Commodities Trading	BDE	2
		27

Year 3 Semester 2

Course	Type	AU
CH3920 Professional Internship	PS	10
		10

Year 4 Semester 2

Course	Type	AU
CH4801 Final Year Design Project	C	4
CBE PE 2	MPE	3
BF3212 Trade, Structured and Supply Chain Finance	BDE	2
BF3213 Enterprise Risk Management	BDE	2
		11

Total (AU)**147****148***

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