

Double Degree in Engineering and Economics

B.Eng (Hons) in Chemical & Biomolecular Engineering and BSocSci (Hons) in Economics

AY2020 - 2021 Intake onwards

Programme	Year of Study	Number of Academic Units (AUs)								Total
		Major Requirements		General Education Requirement (GER)					UE	
		Core	Major PE	GER Core	BM	LA	STS	Any Category (BM, LA, STS)		
Double Degree in Chemical & Biomolecular Engineering and Economics (PI)	1	39/40 [^]		8						47/48 [^]
	2	43		1						44
	3	28		2						30
	4	8	18	3						29
	5		30							30
	Total		118/119[^]	48	14	0			0	180/181[^]

Individual Degree Requirements

Chemical & Biomolecular Engineering (PI)	1	27/28 [^]		8						
	2	34		1						
	3	24		2						
	4	8	9	3						
	5									
	Total		93/94[^]	9	14	0			24	140/141[^]
Economics	1	12		8						
	2	9		1						
	3	4		2						
	4	8	9	3						
	5		30							
	Total		33	39	14	0			39	125

Category	Academic Units (AUs)	Total Aus
University Requirement		
General Education Requirement Core (GER-Core)		
HW0188 Effective Communication	2	14
HW0288 Engineering Communication	2	
ET0001 Enterprise and Innovation	1	
GC0001 Sustainability: Seeing through the haze	1	
HY0001 Ethics and Moral Reasoning	1	
ML0003 Kickstart your career	1	
CB0494 Introduction to Data Science and Artificial Intelligence	3	
EG0001 Engineers and Society	3	
General Education Requirement Elective (GER-Elective)		
GER- Elective in Liberal Arts (LA)		0
GER-Elective in Business Management (BM)		
GER-Elective in Science, Technology & Society (STS)		
Major Requirement		
CBE Cores		93/94 [^]
Major Prescribed Electives (Major PE) for CBE		9
Major Prescribed Electives (Major PE) for Econs		39
Unrestricted Electives		25
Total		180/181[^]

[^]For students without 'A' level physics

B.Eng. (Chemical & Biomolecular Engineering) and BSocSci (Economics)							
Suggested Study Plan for AY2020-2021 intake (Double Degree in Engineering and Economics)							
with Professional Internship							
Year 1 Semester 1				Year 1 Semester 2			
Course		Type	AU	Course	Type	AU	
CB1102	Introduction to Chemical and Biomedical Engineering	C	1	CB1117	Engineering Mathematics	C	4
CB2106	Introduction to Multidisciplinary Engineering	C	2	CH1104	Materials & Energy Balance	C	3
CB1131	Engineering Fundamentals 1 Introduction to Biomolecular Engineering	C	3	CB2102	Organic Chemistry For Engineers	C	3
CH1801	Chemical & Biomolecular Engineering Laboratory 1A	C	1	CH1802	Chemical & Biomolecular Engineering Laboratory 2	C	1
MH1810	Math 1	C	3	HW0188	Effective Communication	GC	2
GC0001	Sustainability: Seeing Thru The Haze	GC	1	HE1005	Introduction to Probability & Statistical Inference	UE	3
HW0001	Introduction to Academic Communication*			HE2001	Intermediate Microeconomics	UE	3
HE1001	Microeconomic principles	UE	3		Engineering Fundamentals 2 +	C	3
HE1002	Macroeconomic principles	UE	3	EG0001	Engineers & Society	GC	3
HY0001	Ethics & Moral Reasoning	GC	1				
ET0001	Entrepreneurship & Innovation	GC	1				
PH1011	Physics	C	3				
	<i>or</i>						
PH1012	Physics A (^ For students without 'A' Level Physics)		4				
			22				25
			23				
*For students who have not passed or been exempted from the Qualifying English Test (QET) at the time of admission.							
Year 2 Semester 1				Year 2 Semester 2			
Course		Type	AU	Course	Type	AU	
CH2107	Introduction to Computational Thinking	C	3	CH2104	Heat & Mass Transfer in Chemical and Biological Systems	C	4
CH2103	Fluid Systems	C	4	CH3102	Chemical Reaction Engineering	C	4
CH2010	Engineering Statistics	C	3	CH3103	Chemical Thermodynamics	C	3
CH1108	Thermodynamics	C	3	CH3141	Unit Operations A	C	3
CH2801	Chemical & Biomolecular Engineering Laboratory 2A	C	2	CH3104	Biochemical Engineering	C	3
HE2005	Principles of Econometrics	UE	3	CH2802	Chemical & Biomolecular Engineering Laboratory 2B	C	2
ML0003	Kickstart your Career Success	GC	1	HE3021	Intermediate Econometrics	UE	3
				HE2002	Intermediate Macroeconomics	UE	3
			19				25
Year 3 Semester 1				Year 3 Semester 2			
Course		Type	AU	Course	Type	AU	
CH2140	Unit Operations B	C	3	CH3880	Professional Internship	C	10
CH3111	Process Control and Dynamics	C	3				
CH2109	Decision Tools for Business & Engineering	C	3				
CH4101	Chemical, Biological & Plant Safety	C	2				
CH3802	Chemical & Biomolecular Engineering Laboratory 5	C	3				
HW0288	Engineering Communication	GC	2				
HE4010	Singapore Economy in a Globalized World	UE	4				
			20				10
Year 4 Semester 1				Year 4 Semester 2			
Course		Type	AU	Course	Type	AU	
CH4801	Final Year Design Project	C	4	CH4801	Final Year Design Project	C	4
	CBE PE 1	P	3		CBE PE 3	P	3
	CBE PE 2	P	3	CB0494	Introduction to Data Science and Artificial Intelligence	GC	3
	Econ elective 1	UE	3		Econ elective 2	UE	3
					Econ elective 3	UE	3
			13				16
Year 5 Semester 1				Year 5 Semester 2			
Course		Type	AU	Course	Type	AU	
	Econ elective 4	UE	3		Econ elective 9	UE	3
	Econ elective 5	UE	3		Econ elective 10	UE	4
	Econ elective 6	UE	3		Econ elective 11	UE	4
	Econ elective 7	UE	3		Econ elective 12	UE	4
	Econ elective 8	UE	3				
			15				15
					Total (AU)		180
							181[^]

+ students can choose from list of EF courses