

The following is the recommended curriculum for CBE students:

Year 1 Semester 1	Course Type	Course Code	Course Title	AU
	Core	CB1102	Introduction to Chemical and Biomedical Engineering	1
	Core	CB2106	Introduction to Multidisciplinary Engineering	2
	Core	CB1131	<u>Engineering Fundamentals 1</u> Introduction to Biomolecular Engineering	3
	Core	CH1801	Chemical & Biomolecular Engineering Laboratory 1A	1
	Core	MH1810	Math 1	3
	Core	PH1011 or PH1012	Physics or Physics A [^]	3 or 4 [^]
	GER-Core	ET0001	Entrepreneurship & Innovation	1
	GER-Core	HY0001	Ethics & Moral Reasoning	1
	GER-Core	GC0001	Sustainability: Seeing Thru The Haze	1
	GER-Elective		GER Elective 1	3
		HW0001	*Introduction to Academic Communication	
				Total AUs

**For students who have not passed/exempted from the Qualifying English Test (QET) at the time of admission.*

[^]For students without 'A' Level Physics

Year 1 Semester 2	Course Type	Course Code	Course Title	AU
	Core	CB1117	Engineering Mathematics	4
	Core	CB2102	Organic Chemistry for Engineers	3
	Core	CH1104	Materials & Energy Balance	3
	Core	CH1802	Chemical & Biomolecular Engineering Laboratory 2	1
	Core		Engineering Fundamentals 2 ⁺	3
	GER-Core	HW0188	Effective Communication	2
	GER-Core	EG0001	Engineers & Society	3
	GER-Elective		GER Elective 2	3
				Total AUs

⁺ students can choose from list of Engineering Fundamental courses

Year 2 Semester 1	Course Type	Course Code	Course Title	AU
	Core	CH1108	Thermodynamics	3
	Core	CH2103	Fluid Systems	4
	Core	CH2107	Introduction to Computational Thinking	3
	Core	CH2010	Engineering Statistics	3
	Core	CH2801	Chemical & Biomolecular Engineering Laboratory 2A	2
	GER-Core	ML0003	Kickstart your Career Success	1
	GER-UE		Unrestricted elective 1	3
			Total AUs	19

Year 2 Semester 2	Course Type	Course Code	Course Title	AU
	Core	CH2104	Heat & Mass Transfer in Chemical and Biological Systems	4
	Core	CH3102	Chemical Reaction Engineering	4
	Core	CH3103	Chemical Thermodynamics	3
	Core	CH3104	Biochemical Engineering	3
	Core	CH3141	Unit Operations A	3
	Core	CH2802	Chemical & Biomolecular Engineering Laboratory 2B	2
	GER-Core	CB0494	Introduction to Data Science and Artificial Intelligence	3
			Total AUs	22

Year 3 Semester 1	Course Type	Course Code	Course Title	AU
	Core	CH2109	Decision Tools for Business & Engineering	3
	Core	CH2140	Unit Operations B	3
	Core	CH3111	Process Control and Dynamics	3
	Core	CH4101	Chemical, Biological & Plant Safety	2
	Core	CH3802	Chemical & Biomolecular Engineering Laboratory 5	3
	GER-Core	HW0288	Engineering Communication	2
	GER-Elective		GER elective 3	3
			Total AUs	19

Year 3 Semester 2	Course Type	Course Code	Course Title	AU
	Core	CH3880	Professional Internship [#]	10
			Total AUs	10

#Professional Internship (PI) is offered in year 3 sem 2 or year 4 sem 1

Year 4 Semester 1	Course Type	Course Code	Course Title	AU
	Core	CH4801	Final Year Design Project	4
	Major PE		CBE Elective 1	3
	Major PE		CBE Elective 2	3
	GER-UE		Unrestricted Elective 2	3
	GER-UE		Unrestricted Elective 3	3
	Total AUs			16

Year 4 Semester 2	Course Type	Course Code	Course Title	AU
	Core	CH4801	Final Year Design Project	4
	Major PE		CBE Elective 3	3
	GER-UE		Unrestricted Elective 4	3
	GER-UE		Unrestricted Elective 5	3
Total AUs			13	