

CN Yang Scholars Programme (CBE)

AY2020 - 2021 Intake onwards

Programme	Year of Study	Number of Academic Units (AUs)								
		Major Requirements		General Education Requirement (GER)					U E	Total
		Core	Major PE	GER Core	GER Prescribed Electives			Any Category (BM, LA, STS)		
					BM	LA	STS			
Chemical & Biomolecular Engineering (PA [®])	1	48		4						52
	2	36		10						46
	3	27		3						30
	4	8	3						3	14
	Total	119	3	17	0			3	142	

Course Type	AU Required
Core Courses	119
Major Prescribed Electives (Major PE)	3
<i>General Education Requirement Core (GER-Core)</i> - GC0001 Sustainability: Seeing through the haze (1AU) - CY0002 Ethics (3AUs) - CY0001 Writing & Reasoning (3AUs) - CB0494 Introduction to Data Science and Artificial Intelligence (3AUs) - ML0003 Kickstart your Career Success (1AU) - CY0006 Enterprise, Innovation and Leadership (3AUs) - EG0001 (3AUs)	17
General Education Requirement Elective (GER-Elective)	0
Unrestricted Electives (UE)	3
Total	142

B.Eng. (Chemical & Biomolecular Engineering)

Suggested Study Plan for AY2020-2021 intake (CNYang)

with Professional Internship**Year 1 Semester 1**

Course		Type	AU
CB1102	Introduction to Chemical and Biomedical Engineering	C	1
CB2106	Introduction to Multidisciplinary Engineering	C	2
CB1131	Engineering Fundamentals 1 Introduction to Biomolecular Engineering	C	3
CY1101	Principles of Modern Chemistry	C	3
CY1001	Introductory Biology	C	3
CY1601	Mathematics 1	C	4
CY1500	Introductory Research Methodology	C	3
CY1308	Physics	C	3
GC0001	Sustainability: Seeing Thru The Haze	GC	1
HW0001	Introduction to Academic Communication*		
			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

Course		Type	AU
CH2107	Introduction to Computational Thinking	C	3
CH2103	Fluid Systems	C	4
CH2010	Engineering Statistics	C	3
CH1108	Thermodynamics	C	3
CY0002	Ethics	GC	3
CY2001	Research Attachment 1	C	4
ML0003	Kickstart your Career Success	GC	1
			21

Year 3 Semester 1

Course		Type	AU
CH2140	Unit Operations B	C	3
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
CY0006	Enterprise, Innovation and Leadership	GC	3
			17

Year 4 Semester 1

Course		Type	AU
CH4801	Final Year Design Project	C	4
	Free elective 1	UE	3
			7

Year 1 Semester 2

Course		Type	AU
CH1104	Materials & Energy Balance	C	3
CB2102	Organic Chemistry For Engineers	C	3
EG0001	Engineers & Society	GC	3
CY1007	Climate Change	C	3
CY1307	Relativity and Quantum Physics	C	3
CY1400	CN Yang Scholars Programme Research Experience	C	3
CY1602	Mathematics II	C	4
	Engineering Fundamentals 2 +	C	3
			29

Year 1 Special Term

CY2003	Research Attachment 3 (Making and Tinkering)		4
-	Overseas Learning Trip	-	-

Year 2 Semester 2

Course		Type	AU
CH2104	Heat & Mass Transfer in Chemical and Biological Systems	C	4
CH3102	Chemical Reaction Engineering	C	4
CH3103	Chemical Thermodynamics	C	3
CH3141	Unit Operations A	C	3
CH3104	Biochemical Engineering	C	3
CY0001	Writing Across The Disciplines	GC	3
CH2802	Chemical & Biomolecular Engineering Laboratory 2B	C	2
CB0494	Introduction to Data Science and Artificial Intelligence	GC	3
			25

Year 3 Semester 2

Course		Type	AU
CH4211	CNYSP Overseas Final Year Project	C	8

Year 3 Special Term

CH3885	Professional Attachment	C	5
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Year 4 Semester 2

Course		Type	AU
CH4801	Final Year Design Project	C	4
	CBE PE 1	P	3
			7
Total (AU)			142

+ students can choose from list of EF courses