

**CURRICULUM FOR BACHELOR OF SCIENCE (CHEMISTRY AND BIOLOGICAL CHEMISTRY)
WITH SECOND MAJOR IN SUSTAINABILITY
CN YANG SCHOLARS PROGRAMME
(FIRST YEAR ADMISSION)- AY2025 ONWARDS**

SUMMARY OF ACADEMIC UNIT REQUIREMENT

Year of Study	Core	CNYS- Core	MPE	CC	Professional Series	Care, Serve & Learn	BDE	Total AU
1	7	27 [3]	0	2	0	0	6	42 [3]
2	16	6	0	8	3	3	13	49
3	18	0	12	0	1	0	12	43
4	12	0	0	0	10	0	0	22
Total	53	33 [3]	12	10	14	3	31	156 [3]

[] AU of courses that could be used to fulfil Core requirement and second major requirement concurrently

YEAR 1 SEMESTER 1

Course Code	Course Title	Type	AU	Remarks
CY1001	Cell	CNYS- Core	3	
CY1101	Molecule	CNYS- Core	4	
CY1308	Physics	CNYS- Core	3	
CY1500	Introduction to Research	CNYS- Core	2	
CY1601	Mathematics I	CNYS- Core	4	
CB1102	Introduction to Chemistry, Chemical and Biomedical Engineering	C	1	New Core wef AY25
CC0015	Health & Wellbeing	CC	2	
			19	

YEAR 1 SEMESTER 2

Course Code	Course Title	Type	AU	Remarks
CY1007^	Climate Change	CNYS- Core	3	Replaces Planet Core
CY1602	Mathematics II	CNYS- Core	4	
CM2031	Organic & Bioorganic Chemistry	C	3	CY1101
CM2041	Physical & Biophysical Chemistry 1	C	3	CY1101
	Second Major Compulsory Course 2	BDE	3	
	SN Elective 1	BDE	3	List of electives to choose from
			19	

YEAR 1 SPECIAL TERM

Course Code	Course Title	Type	AU	Remarks
CY2003	Research Attachment 3 (Making and Tinkering)	CNYS- Core	4	
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1

Course Code	Course Title	Type	AU	Remarks
CY0001	Writing Across The Disciplines	CNYS- Core	3	
CB5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
CM2011	Analytical & Bioanalytical Chemistry	C	3	CY1101
CM2021	Inorganic & Bioinorganic Chemistry	C	3	CY1101
CM2061	Chemistry & Biological Chemistry Lab 1	C	3	CY1101
PS0001	Introduction to Computational Thinking	C	3	
XXXXXX	Tech-For-Good	CSL	3	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	
	Second Major Compulsory Course 3	BDE	3	
			26	

YEAR 2 SEMESTER 2

Course Code	Course Title	Type	AU	Remarks
CY0002	Ethics	CNYS- Core	3	
CB5915	Undergraduate Research	BDE	4	2-semester long, course registered only in Sem 2
CM2062	Chemistry & Biological Chemistry Lab 2	C	3	CY1101

CB2002	Introduction to Chemical and Biological Safety	C	1	New Core wef AY25
PS0002	Introduction to Data Science and Artificial Intelligence	PS	3	PS0001
SP0061	Science & Technology for Humanity	CC	3	
	Second Major Compulsory Course 4	BDE	3	
	Second Major Compulsory Course 5	BDE	3	
			23	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
CM3xxx	Chem-Core	C	3	CM3011, CM3021, CM3031, CM3041 are offered in both semesters
CM3xxx	Chem-Core	C	3	
CM3062	Chemistry & Biological Chemistry Lab 4	C	3	CM2062
CM4XXX	School Major PE	MPE	3	
CM4XXX	School Major PE	MPE	3	
	SN Elective 2	BDE	3	List of electives to choose from
	SN Elective 3	BDE	3	
MLXXXX	Profession Preparation	PS	1	
			22	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
CM3xxx	Chem-Core	C	3	CM3011, CM3021, CM3031, CM3041 are offered in both semesters
CM3xxx	Chem-Core	C	3	
CM3061	Chemistry & Biological Chemistry Lab 4	C	3	CM2061
CM4XXX	School Major PE	MPE	3	
CM4XXX	School Major PE	MPE	3	
	SN Elective 4	BDE	3	List of electives to choose from
	Second Major Interdisciplinary Project	BDE	3	
			21	

YEAR 3 SPECIAL SEMESTER & YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
CM4111	Overseas Final Year Project	C	12	
			12	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
CM4081	Professional Internship	PS	10	
			10	
Total AUs required for Graduation:			156	

^ These courses are double-counted towards both CHEM as well as the Second Major in Sustainability.

Compulsory Courses and Electives for Second Major in Sustainability
https://www.ntu.edu.sg/ase/admissions/undergraduate-programmes/second-major-in-sustainability#Content_C002_Col00