CURRICULUM FOR COMPUTER SCIENCE
WITH CN YANG SCHOLARS PROGRAMME
SECOND MAJOR IN SUSTAINABILITY (CSSN)
(FIRST YEAR ADMISSION)
AY2025 Intake Onwards

	SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	**Major Requirements**			**Interdisciplinary Collaborative Core**				
	School Core	**CNYSP-Core**	**MPE**	**CC**	**Professional Series**	**Care, Serve, Learn**	**BDE**	**Total AU**
1	6	27 [3]	0	4	3	0	6	**46 [3]**
2	21	6	0	6	0	3	7	**43**
3	16	0	12	0	6	0	12	**46**
4	8	0	12	0	0	0	6	**26**
Total	**51**	**33 [3]**	**24**	**10**	**9**	**3**	**31**	**161 [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**	**Pre-Requisite/Remarks**
CY1001	Cell	CNY-Core	3	CNYSP Courses
CY1101	Molecule	CNY-Core	4	
CY1308	Physics	CNY-Core	3	
CY1500	Introduction to Research	CNY-Core	2	
CY1601	Mathematics I	CNY-Core	4	
SC1003	Introduction to Computational Thinking and Programming	PS	3	
CC0015	Healthy Living & Mental Wellbeing in an Aging Society	CC	2	
			21	

YEAR 1 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY1007^	Climate Change	CNY-Core	3	**Double-counted as Planet Core**
CY1602	Mathematics II	CNY-Core	4	CNYSP Course
SC1005	Logic Design	C	3	
SC1007	Data Structures and Algorithms	C	3	SC1003
	Second Major Compulsory Course 2	BDE	3	Please see attached list of core courses to choose from
	Second Major Compulsory Course 3	BDE	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	
			21	

YEAR 1 SPECIAL SEMESTER				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY2003	Research Attachment 3	CNY-Core	4	CNYSP Course
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY0001	Writing Across the Disciplines	CNY-Core	3	CNYSP Course
SC5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
SC1006	Computer Organisation & Architecture	C	3	SC1005
SC1008	C and C++ Programming	C	3	SC1003
SC2000	Probability and Statistics for Computing	C	3	
MH1812	Discrete Mathematics	C	3	
SP0061	Science & Technology for Humanity	CC	3	
	Tech-For-Good (T4G)	CSL	3	Replaces Care, Serve, Learn
			21	

YEAR 2 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY0002	Ethics	CNY-Core	3	CNYSP Course
SC5915	Undergraduate Research	BDE	4	2-semester long, course registered only in Sem 2
SC2001	Algorithm Design and Analysis	C	3	
SC2002	Object Oriented Design & Programming	C	3	
SC2005	Operating Systems	C	3	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
	Second Major Compulsory Course 4	BDE	3	Please see attached list of core
			22	

YEAR 3 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC2006	Software Engineering	C	3	
SC2203	Automata. Computability and Complexity	C	3	SC2001
SC2207	Introduction to Databases	C	3	
SC2008	Computer Networks	C	3	

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
SC2079	Multidisciplinary Design Project	C	4	
	SN Elective 1	BDE	3	Please see attached list of electives to choose from
	SN Elective 2	BDE	3	
			22	

YEAR 3 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
SC3XXX/SC4XXX	Major Prescribe Elective (Choose within SC3xxx/SC4xxx)	MPE	3	Year 3 Standing
	Second Major Compulsory Course 5	BDE	3	Please see attached list of core courses to choose from
	SN Elective 3	BDE	3	Please see attached list of
MLXXXX	Profession Preparation	PS	1	
			19	

YEAR 3 SPECIAL SEMESTER				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC3910	Professional Attachment	PS	5	
			5	

YEAR 4 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC4211	CNYSP Overseas Final Year Project	C	8	CNYSP Course
			8	

YEAR 4 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
SC4XXX	Major Prescribe Elective (Choose within SC4xxx)	MPE	3	Year 3 Standing
	SN Elective 4	BDE	3	Please see attached list of
	Second Major Interdisciplinary Project	BDE	3	
			18	
	Total AU for Graduation:		161	

^ These courses are double-counted towards both CSC 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