

**AY2024-25 AND LATER COHORTS CURRICULUM FOR COMPUTER SCIENCE  
WITH CN YANG SCHOLARS PROGRAMME  
SECOND MAJOR IN SUSTAINABILITY (CSSN)  
(FIRST YEAR ADMISSION)**

Last Updated : 15-Jul-24

**SUMMARY OF ACADEMIC UNIT REQUIREMENT**

Year of Study	School Core	CNYS-PCore	MPE	CC	FC	BDE	Total AU
1	6	27	0	5	3	6	47
2	21	10	0	8	0	3	42
3	16	0	12	0	5	12	45
4	8	0	12	0	0	6	26
<b>Total</b>	<b>51</b>	<b>37</b>	<b>24</b>	<b>13</b>	<b>8</b>	<b>27</b>	<b>160</b>

**YEAR 1 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1001	Cell	CNY-Core	3	CNYS-PCourses
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	FC	3	
CC0005	Healthy Living & Mental Wellbeing in an Aging Society	CC	3	
			<b>22</b>	

Course type change fr

**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	CNYS-PCourse
SC1005	Logic Design	C	3	
SC1007	Data Structures and Algorithms	C	3	
CC0002	Navigating the Digital World	CC	2	
	Second Major Compulsory Course 2	BDE	3	
	Second Major Compulsory Course 3	BDE	3	
			<b>21</b>	

**YEAR 1 SPECIAL SEMESTER**

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY2003	Research Attachment 3	CNY-Core	4	CNYS-PCourse
	Overseas Learning Trip			
			<b>4</b>	

**YEAR 2 SEMESTER 1**

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0001	Writing Across the Disciplines	CNY-Core	3	CNYS-PCourse
SC1006	Computer Organisation & Architecture	C	3	
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	
	Second Major Compulsory Course 4	BDE	3	
			<b>21</b>	

New course

**YEAR 2 SEMESTER 2**

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYS-PCourse
CY2001	Research Attachment 1	CNY-Core	4	CNYS-PCourse 2-semester long, course registered only in Sem 2 (similar to URECA)
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	
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	
			<b>21</b>	

**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	
SC2079	Multidisciplinary Design Project	C	4	
	SN Elective 1	BDE	3	<a href="#">Please see attached list of</a>

New course

	SN Elective 2	BDE	3	<a href="#">electives to choose from</a>
			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	
	SN Elective 3	BDE	3	<a href="#">Please see attached list of electives to choose from</a>
			18	

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

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
SC4211	CNYSO Overseas Final Year Project	C	8	CNYSO 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	<a href="#">Please see attached list of electives to choose from</a>
	Second Major Interdisciplinary Project	BDE	3	
			18	

Total AU for Graduation: **160**

<sup>A</sup> 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](https://www.ntu.edu.sg/ase/admissions/undergraduate-programmes/second-major-in-sustainability#Content_C002_Col00)