CURRICULUM FOR BACHELOR OF SCIENCE (MATHEMATICAL AND COMPUTER SCIENCES)
CN YANG SCHOLARS PROGRAMME
(FIRST YEAR ADMISSION)
AY2026 Intake Onwards

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	Core	CNYSP-Core	MPE	CC	Professional Series	Care, Serve & Learn	BDE	Total AU
1	23	27	0	2	0	0	0	52
2	22	6	0	8	3	3	4	46
3	0	0	16	0	11	0	0	27
4	12	0	14	0	0	0	0	26
Total	57	33	30	10	14	3	4	151

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
CY1001	Cell	CNYSP-Core	3	
CY1101	Molecule	CNYSP-Core	4	
CY1308	Physics	CNYSP-Core	3	
CY1601	Mathematics I	CNYSP-Core	4	
MH1300	Foundations of Mathematics	C	4	
SC1003	Introduction to Computational Thinking & Programming	C	3	
SC1005	Digital Logic	C	3	
			24	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
CY1007	Climate Change	CNYSP-Core	3	
CY1500	Introduction to Research	CNYSP-Core	2	
CY1602	Mathematics II	CNYSP-Core	4	
MH1201	Linear Algebra II	C	4	
MH1301	Discrete Mathematics	C	3	
SC1006	Computer Organisation and Architecture	C	3	
SC1007	Data Structures & Algorithms	C	3	
CC0015	Health & Wellbeing	CC	2	
			24	

YEAR 1 SPECIAL TERM				
Course Code	Course Title	Type	AU	Remarks
CY2003	Research Attachment 3 (Making and Tinkering)	CNYSP-Core	4	
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
CY0001	Writing Across The Disciplines	CNYSP-Core	3	
MH2500	Probability and Introduction to Statistics	C	4	
PS5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
SC2001	Algorithms Design and Analysis	C	3	
SC2002	Object Oriented Design & Programming	C	3	
SC2005	Operating Systems	C	3	

Course Code	Course Title	Type	AU	Remarks
	Tech-For-Good	CSL	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	
			21	

YEAR 2 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Remarks**
CY0002	Ethics	CNYSP-Core	3	
SC2006	Software Engineering	C	3	
SC2207	Introduction to Databases	C	3	
SC2008	Computer Networks	C	3	
PS5915	Undergraduate Research	BDE	4	**2-semester long, course registered only in Sem 2**
PS0002	Introduction to Data Science and Artificial Intelligence	PS	3	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
SP0061	Science & Technology for Humanity	CC	3	
			25	

YEAR 3 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Remarks**
MHXXXX	MATH Prescribed Elective 1	MPE	4	
MHXXXX	MATH Prescribed Elective 2	MPE	3	
SCXXXX	CS Prescribed Elective 1	MPE	3	
SCXXXX	CS Prescribed Elective 2	MPE	3	
SCXXXX	CS Prescribed Elective 3	MPE	3	
MLXXXX	Profession Preparation	PS	1	
			17	

YEAR 3 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Remarks**
SC3079	Professional Internship	PS	10	
			10	

YEAR 3 SPECIAL SEMESTER & YEAR 4 SEMESTER 1				
Course Code	**Course Title**	**Type**	**AU**	**Remarks**
MH4111	Overseas Final Year Project	C	12	
			12	

YEAR 4 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Remarks**
MH4XXX	MATH Prescribed Elective 3	MPE	4	
MH4XXX	MATH Prescribed Elective 4	MPE	4	
SCXXXX	CS Prescribed Elective 4	MPE	3	
SCXXXX	CS Prescribed Elective 5	MPE	3	
			14	
		Total AUs required for Graduation:	**151**	