

**CURRICULUM FOR BACHELOR OF SCIENCE (PHYSICS AND MATHEMATICAL 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	19	27	0	4	0	0	0	50
2	25	6	0	6	3	3	4	47
3	15	0	6	0	11	0	0	32
4	17	0	9	0	0	0	0	26
<b>Total</b>	<b>76</b>	<b>33</b>	<b>15</b>	<b>10</b>	<b>14</b>	<b>3</b>	<b>4</b>	<b>155</b>

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	
PH1198	Physics Laboratory Ia	C	2	
PS0001	Introduction to Computational Thinking	C	3	
			<b>23</b>	

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	
MH1403	Algorithms and Computing	C	3	
PH1107	Relativity and Quantum Physics	C	3	
CC0015	Health & Wellbeing	CC	2	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	
			<b>23</b>	

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

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
CY0001	Writing Across The Disciplines	CNYSP-Core	3	
PS5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
PH1105	Optics, Vibrations and Waves	C	3	
PH2102	Electromagnetism	C	4	
PH2103	Thermal Physics	C	4	
PH2198	Physics Lab IIa	C	2	

	Tech-For-Good	CSL	3	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
			<b>22</b>	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
CY0002	Ethics	CNYS-SP-Core	3	
MH2801	Complex Methods for the Sciences	C	3	
MH3110	Ordinary Differential Equations	C	4	
PH2101	Quantum Mechanics I	C	3	
PH2199	Physics Lab IIb	C	2	
PS5915	Undergraduate Research	BDE	4	2-semester long, course registered only in Sem 2
PS0002	Introduction to Data Science and Artificial Intelligence	PS	3	
SP0061	Science & Technology for Humanity	CC	3	
			<b>25</b>	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
MH2500	Probability and Introduction to Statistics	C	4	
MH3100	Real Analysis I	C	4	
PH3101	Quantum Mechanics II	C	4	
PH3103	Technological Applications of Quantum Mechanics	C	3	
PH4XXX	Physics PE	MPE	3	
MHXXXX	Mathematics PE	MPE	3	
MLXXXX	Profession Preparation	PS	1	
			<b>22</b>	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
PH4420	Professional Internship	PS	10	
			<b>10</b>	

YEAR 3 SPECIAL SEMESTER & YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
PH4111	Overseas Final Year Project	C	12	
			<b>12</b>	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
MH2220	Algebra I	C	3	
PH4511	Seminar in Mathematical Physics	C	2	
MHXXXX	Mathematics PE	MPE	3	
MHXXXX	Mathematics PE	MPE	3	
MH4XXX	Mathematics PE	MPE	3	
			<b>14</b>	
<b>Total AUs required for Graduation:</b>			<b>155</b>	