

**CURRICULUM FOR BACHELOR OF SCIENCE (APPLIED PHYSICS)  
WITH SECOND MAJOR IN MEDICAL PHYSICS  
CN YANG SCHOLARS PROGRAMME  
(FIRST YEAR ADMISSION)  
AY2025 Intake Onwards**

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	Core	CNYSP-Core	MPE	CC	Professional Series	Care, Serve & Learn	BDE	Total AU
1	10	27 [3]	0	2	3	0	3	45 [3]
2	21	6	3	8	0	3	4	45
3	9	0	0	0	1	0	31	41
4	12	0	0	0	10	0	0	22
<b>Total</b>	<b>52</b>	<b>33 [3]</b>	<b>3</b>	<b>10</b>	<b>14</b>	<b>3</b>	<b>38</b>	<b>153 [3]</b>

[ ] 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		CNYSP-Core	3	Mutually exclusive with BS1001 Required course for second major
CY1101	Molecule		CNYSP-Core	4	
CY1308	Physics		CNYSP-Core	3	
CY1500	Introduction to Research		CNYSP-Core	2	
CY1601	Mathematics I		CNYSP-Core	4	
PH1198	Physics Lab IA		C	2	
PS0001	Introduction to Computational Thinking		C	3	
CC0015	Health & Wellbeing		CC	2	
				<b>23</b>	

YEAR 1 SEMESTER 2					
Course Code	Course Title		Type	AU	Remarks
CY1007	Climate Change		CNYSP-Core	3	
CY1602	Mathematics II		CNYSP-Core	4	
PH1107	Relativity and Quantum Physics		C	3	
PH1199	Physics Lab IB		C	2	
PS0002	Introduction to Data Science and Artificial Intelligence		PS	3	
BS1007	Molecular & Cell Biology 1		BDE	3	Required course for second major
				<b>18</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	
PH5915	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	CY1601 & CY1602 & CY1308
PH2103	Thermal Physics		C	4	CY1602 & CY1308
PH2198	Physics Lab IIA		C	2	PH1198
	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	
				<b>24</b>	

YEAR 2 SEMESTER 2					
Course Code	Course Title		Type	AU	Remarks
CY0002	Ethics		CNYSP-Core	3	

PH5915	Undergraduate Research	BDE	4	2-semester long, course registered only in Sem 2
PH2101	Quantum Mechanics 1	C	3	CY1601 & CY1602 & PH1107
PH2199	Physics Lab IIB	C	2	PH1199
PH2301	Physical Optics	C	3	PH1105
PHXXXX	Physics Prescribed Elective 1	MPE	3	
SP0061	Science & Technology for Humanity	CC	3	
			<b>21</b>	

#### YEAR 3 SEMESTER 1

Course Code	Course Title	Type	AU	Remarks
PH3101	Quantum Mechanics II	C	4	MH2801 & PH2101
PH3103	Technological Applications of Quantum Mechanics	C	3	PH2101
BG2119	Anatomy & Physiology	BDE	3	Required course for second major
PH3301	Introduction to Advanced Biomedical Imaging	BDE	3	Required course for second major
PHXXXX	Second Major Elective 1	BDE	3	<a href="#">Elective list</a>
BSXXXX	Second Major Elective 2	BDE	3	
MLXXXX	Profession Preparation	PS	1	
			<b>20</b>	

#### YEAR 3 SEMESTER 2

Course Code	Course Title	Type	AU	Remarks
PH3199	Physics Lab IIIa	C	2	PH2198 and PH2199
PH3302	Magnetic Resonance Imaging	BDE	3	Required course for second major
PH3303	Biomechanics and Exercise Physiology	BDE	3	BG2119 Required course for second major
PH4605	Medical Physics for Radiotherapy	BDE	4	PH3101 Required course for second major
PHXXXX	Second Major Elective 3	BDE	3	<a href="#">Elective List</a>
BSXXXX	Second Major Elective 4	BDE	3	
	Broadening and Deepening Elective 1	BDE	3	
			<b>21</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
PH4420	Professional Internship	PS	10	
			<b>10</b>	
Total AUs required for Graduation:				<b>153</b>