

AY2025-26 CURRICULUM - APPLIED PHYSICS WITH SECOND MAJOR IN MEDICAL PHYSICS
WITH CN YANG SCHOLARS PROGRAMME_Internship
(FIRST YEAR ADMISSION)

Last Updated : 28-Nov-24

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	School Core	CNYSP-Core	MPE	CC	FC	BDE	Total AU
1	7	30 [3]	0	5	3	3	48 [3]
2	21	10	3	8	0	0	42
3	9	0	0	0	0	31	40
4	12	0	0	0	10	0	22
Total	49	40 [3]	3	13	13	34	152 [3]

[] AU of courses that could be used to fulfil Core/Major PE 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 Course Mutually exclusive with BS1001 Required course for second major
CY1101	Molecule	CNY-Core	4	CNYSP Courses
CY1308	Physics	CNY-Core	3	
CY1500	Introduction to Research	CNY-Core	2	
CY1601	Mathematics I	CNY-Core	4	
PH1198	Physics Lab IA	C	2	
PS0001	Introduction to Computational Thinking	C	3	
CC0002	Navigating the Digital World	CC	2	
			23	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1007	Climate Change	CNY-Core	3	CNYSP Courses
CY1602	Mathematics II	CNY-Core	4	
CY1307	Quantum	CNY-Core	3	
PH1199	Physics Lab IB	C	2	
CC0005	Healthy Living and Wellbeing	CC	3	
PS0002	Introduction to Data Science and Artificial Intelligence	FC	3	PS0001
BS1007	Molecular & Cell Biology 1	BDE	3	Required course for second major
			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
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
PHXXXX	Physics Prescribed Elective 1	MPE	3	
SP0061	Science & Technology for Humanity	CC	3	
			22	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYSP Course
CY2001	Research Attachment 1	CNY-Core	4	CNYSP Course 2-semester long, course registered only in Sem 2 (similar to URECA)
PH2101	Quantum Mechanics 1	C	3	CY1601 & CY1602 & CY1307
PH2199	Physics Lab IIB	C	2	PH1199
PH2301	Physical Optics	C	3	PH1105
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	
CC0006	Sustainability: Human, Social, Economics & Environment	CC	3	
			20	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/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	Elective list
BSXXXX	Second Major Elective 2	BDE	3	
			19	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/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	Elective list
BSXXXX	Second Major Elective 4	BDE	3	
	Broadening and Deepening Elective 1	BDE	3	
			21	

YEAR 3 SPECIAL SEMESTER & YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
PH4111	Overseas Final Year Project	C	12	CNYSP Course
			12	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
PH4420	Professional Internship	FC	10	
			10	

Total AU for Graduation : **152**