

**AY2022-23 CURRICULUM FOR MATHEMATICAL SCIENCES
WITH CN YANG SCHOLARS PROGRAMME_Internship
(FIRST YEAR ADMISSION)**

Last Updated : 7-Feb-23

SUMMARY OF ACADEMIC UNIT REQUIREMENT

Year of Study	School Core	CNYS Core	MPE	CC	FC	BDE	Total AU
1	9	27	0	5	0	0	41
2	16	10	0	8	3	3	40
3	0	0	19	0	0	12	31
4	12	0	0	0	10	0	22
Total	37	37	19	13	13	15	134

YEAR 1 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1001	Cell	CNY-Core	3	CNYS Courses
CY1101	Molecule	CNY-Core	4	
CY1308	Physics	CNY-Core	3	
CY1500	Introduction to Research	CNY-Core	2	
CY1601	Mathematics I	CNY-Core	4	
PS0001	Introduction to Computational Thinking	C	3	
CC0002	Navigating the Digital World	CC	2	
			21	

YEAR 1 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1007	Climate Change	CNY-Core	3	CNYS Courses
CY1602	Mathematics II	CNY-Core	4	
MH1301	Discrete Mathematics	C	3	
MH1403	Algorithms and Computing	C	3	
CC0005	Healthy Living & Mental Wellbeing in an Aging Society	CC	3	
			16	

YEAR 1 SPECIAL SEMESTER

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

YEAR 2 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYS Course
CY2001	Research Attachment 1	CNY-Core	2	CNYS Course 'IP' grade
CY1307	Quantum	BDE	3	Students can choose to opt out and replace with any other BDE course (3 AU)
MH1300	Foundations of Mathematics	C	4	
MH2500	Probability and Introduction to Statistics	C	4	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	
			21	

YEAR 2 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0001	Writing Across the Disciplines	CNY-Core	3	CNYS Courses
CY2001	Research Attachment 1	CNY-Core	2	
MH3100	Real Analysis I	C	4	
MH3110	Ordinary Differential Equations	C	4	
PS0002	Introduction to Data Science and Artificial Intelligence	FC	3	
CC0007	Science & Technology for Humanity	CC	3	
			19	

YEAR 3 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
XXXXXX	School Major PE	MPE	4	
XXXXXX	School Major PE	MPE	4	
XXXXXX	School Major PE	MPE	3	
XXXXXX	Broadening and Deepening Electives 1	BDE	3	
XXXXXX	Broadening and Deepening Electives 2	BDE	3	
			17	

YEAR 3 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
XXXXXX	School Major PE	MPE	4	
XXXXXX	School Major PE	MPE	4	
XXXXXX	Broadening and Deepening Electives 3	BDE	3	
XXXXXX	Broadening and Deepening Electives 4	BDE	3	
			14	

YEAR 3 SPECIAL SEMESTER & YEAR 4 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
MH4111	Overseas Final Year Project	C	12	CNYS Course
			12	

YEAR 4 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
MH4912	Professional Internship	FC	10	
			10	

Total AU for Graduation : **134**