

**AY2020-21 CURRICULUM FOR COMPUTER SCIENCE
WITH CN YANG SCHOLARS PROGRAMME**

Last Updated : 29-May-21

SUMMARY OF ACADEMIC UNIT REQUIREMENT						
Year of Study	Core	MPE	GER-Core	GER-PE	UE	Total AU
1	42	0	4	0	0	46
2	31	0	9	0	0	40
3	27	3	4	0	3	37
4	8	9	0	0	2	19
Total	108	12	17	0	5	142

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CY1001	Introductory Biology	C	3	CNYSP Courses
CY1101	Principles of Modern Chemistry	C	3	
CY1308	Physics	C	3	
CY1500	Introductory Research Methodology	C	3	
CY1601	Mathematics I	C	4	
CZ1103	Introduction to Computational Thinking and Programming	C	3	
GC0001	Sustainability : Seeing Through the Haze	GER-Core	1	
			20	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CY1007	Living with Climate Change	C	3	CNYSP Courses
CY1307	Relativity and Quantum Physics	C	3	
CY1400	CNYSP Undergraduate Research Experience	C	3	
CY1602	Mathematics II	C	4	
CZ1105	Digital Logic (Engineering Fundamentals 1)	C	3	
CZ1115	Introduction to Data Science and Artificial Intelligence	GER-Core	3	CZ1103
	Engineering Fundamentals 2	C	3	
			22	

YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite
CY2003	Research Attachment 3 (Making & Tinkering)	C	4	CNYSP Course
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite
CY2001	Research Attachment 1	C	4	CNYSP Courses
CY0001	Writing and Reasoning	GER-Core	3	
CZ1106	Computer Organisation & Architecture	C	3	CZ1105
CZ1107	Data Structures and Algorithms	C	3	CZ1103
CZ2100	Probability and Statistics for Computing	C	3	MH1810 (CY1601)
CZ2002	Object Oriented Design and Programming	C	3	CZ1103
MH1812	Discrete Mathematics	C	3	-
			22	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite
CY0002	Ethics	GER-Core	3	CNYSP Course
CZ2101	Algorithm Design and Analysis	C	3	CZ1107
CZ2005	Operating Systems	C	3	CZ1106, CZ1107
CZ2006	Software Engineering	C	3	CZ2002(co)
CZ2007	Introduction to Databases	C	3	CZ2101 (co)
EG0001	Engineers and Society	GER-Core	3	
			18	

YEAR 3 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite
CZ3004	Multidisciplinary Design Project	C	3	Year 3 standing
CZ3006	Net Centric Computing	C	3	CZ1104, CZ2100
CZ3005	Artificial Intelligence	C	3	CZ1115, CZ2101
CZ4062	Computer Security	C	4	CZ2005
CY0006	Enterprise, Innovation and Leadership	GER-Core	3	
ML0003	Kickstart Your Career Success	GER-Core	1	online course
			17	

YEAR 3 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite
CZ4031	Database System Principles	C	3	CZ2007
CZ3002	Advanced Software Engineering	C	3	CZ2006
CZ3001	Advanced Computer Architecture	C	3	CZ1106
XXXXXX	Unrestricted Elective 1	UE	3	
CZ4XXX	Major PE 1	MPE	3	
			15	

YEAR 3 SPECIAL SEMESTER

Course Code	Course Title	Type	AU	Pre-Requisite
CE3126	Professional Attachment	C	5	
			5	

YEAR 4 SEMESTER 1

Course Code	Course Title	Type	AU	Pre-Requisite
CZ4211	CNYSP Overseas Final Year Project	C	8	CNYSP Course
			8	

YEAR 4 SEMESTER 2

Course Code	Course Title	Type	AU	Pre-Requisite
CZ4XXX	Major PE 2	MPE	3	
CZ4XXX	Major PE 3	MPE	3	
CZ4XXX	Major PE 4	MPE	3	
XXXXXX	Unrestricted Elective 2	UE	2	
			11	

Total AU for Graduation : **142**