

**Curriculum for CN Yang Scholars Programme
Computer Science
(For AY2018-19 intake)**

Course Type	AU
Core Courses	108
Major Prescribed Electives	12
GER-Core	17
GER-PE	0
Unrestricted Electives	5
Total	142

	Course Code	Course Title	Type	AU
Year 1 Semester 1	CY1001	Introductory Biology	Core	3
	CY1101	Principles of Modern Chemistry	Core	3
	CY1308	Physics	Core	3
	CY1500	Introductory Research Methodology	Core	3
	CY1601	Mathematics I	Core	4
	CZ1003	Introduction to Computational Thinking	Core	3
	GC0001	Introduction to Sustainability: Multidisciplinary Approaches and Solutions	GER-Core	1
				Total AUs

	Course Code	Course Title	Type	AU
Year 1 Semester 2	CY1007	Climate Change	Core	3
	CY1307	Relativity and Quantum Physics	Core	3
	CY1400	CNYSP Undergraduate Research Experience	Core	3
	CY1602	Mathematics II	Core	4
	CZ1005	Digital Logic	Core	3
	CZ1015	Introduction to Data Science and Artificial Intelligence	GER-Core	3
				Total AUs

	Course Code	Course Title	Type	AU
Year 1 Special Term	CY2003	Research Attachment 3 (Making & Tinkering)	Core	4
	Overseas Learning Trip			
				Total AUs

	Course Code	Course Title	Type	AU
Year 2 Semester 1	CY2001	Research Attachment 1	Core	4
	CY0002	Ethics	GER-Core	3
	CZ1006	Computer Organisation & Architecture	Core	3
	CZ1007	Data Structures	Core	3
	CZ2003	Computer Graphics and Visualisation	Core	3
	CZ2004	Human Computer Interaction	Core	3
	MH1812	Discrete Mathematics	Core	3
			Total AUs	22

	Course Code	Course Title	Type	AU
Year 2 Semester 2	CY0001	Writing and Reasoning	GER-Core	3
	CZ2001	Algorithms	Core	3
	CZ2002	Object Oriented Design and Programming	Core	3
	CZ2005	Operating Systems	Core	3

	CZ2006	Software Engineering	Core	3
	ML0003	Kickstart your Career Success	GER-Core	1
			Total AUs	16

Year 3 Semester 1	Course Code	Course Title	Type	AU
	CZ2007	Introduction to Databases	Core	3
	CZ3001	Advanced Computer Architecture	Core	3
	CZ3002	Advanced Software Engineering	Core	3
	CZ3004	Multidisciplinary Design Project	Core	4
	CZ3006	Net Centric Computing	Core	3
	CY0006	Enterprise, Innovation and Leadership	GER-Core	3
			Total AUs	19

Year 3 Semester 2	Course Code	Course Title	Type	AU
	CZ20xx or CZ30xx	Technical Elective 1	Major PE	3
	CZ3003	Software Systems Analysis and Design	Core	3
	CZ3005	Artificial Intelligence	Core	3
	CZ3007	Compiler Techniques	Core	3
	xxxxxx	Unrestricted Elective	UE	3
	CZ0001	Engineers and Society	GER-Core	3
			Total AUs	18

Year 3 Special Term	Course Code	Course Title	Type	AU
	CZ3126	Professional Attachment	Core	5
			Total AUs	5

Year 4 Semester 1	Course Code	Course Title	Type	AU
	CZ4211	CNYSF Overseas Final Year Project	Core	8
			Total AUs	8

Year 4 Semester 2	Course Code	Course Title	Type	AU
	CZ4xxx	Technical Elective 2 (Major PE 1)	Major PE	3
	CZ4xxx	Technical Elective 3 (Major PE 2)	Major PE	3
	CZ4xxx	Technical Elective 4 (Major PE 3)	Major PE	3
	xxxxxx	Unrestricted Elective	UE	2
			Total AUs	11
			GRAND TOTAL	142