

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

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

	Course Code	Course Title	Type	AU
<b>Year 1 Semester 1</b>	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
	CE1003	Introduction to Computational Thinking	Core	3
	GC0001	Sustainability: Seeing Through the Haze	GER-Core	1
	Total AUs			<b>20</b>

	Course Code	Course Title	Type	AU
<b>Year 1 Semester 2</b>	CY1007	Living with Climate Change	Core	3
	CY1307	Relativity and Quantum Physics	Core	3
	CY1400	CNYSPP Undergraduate Research Experience	Core	3
	CY1602	Mathematics II	Core	4
	CE1005	Digital Logic	Core	3
	CE1015	Introduction to Data Science and Artificial Intelligence	GER-Core	3
	ML0003	New Career Course	GER-Core	1
	Total AUs			<b>20</b>

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

	Course Code	Course Title	Type	AU
<b>Year 2 Semester 1</b>	CY2001	Research Attachment 1	Core	4
	CY0001	Writing and Reasoning	GER-Core	3
	CE1006	Computer Organisation & Architecture	Core	3
	CE1007	Data Structures	Core	3
	CE2002	Object Oriented Design and Programming	Core	3
	CE2004	Circuits and Signal Analysis	Core	3
	MH1812	Discrete Mathematics	Core	3
	Total AUs			<b>22</b>

	Course Code	Course Title	Type	AU
Year 2 Semester 2	CY0002	Ethics	GER-Core	3
	CE2001	Algorithms	Core	3
	CE2003	Digital Systems Design	Core	3
	CE2005	Operating Systems	Core	3
	CE2006	Software Engineering	Core	3
				Total AUs

	Course Code	Course Title	Type	AU
Year 3 Semester 1	CE2007	Microprocessor-based Systems Design	Core	3
	CE3001	Advanced Computer Architecture	Core	3
	CE3002	Sensors, Interfacing and Control	Core	3
	CE3004	Multidisciplinary Design Project	Core	4
	CE3006	Digital Communications	Core	3
	CY0006	Enterprise, Innovation and Leadership	GER-Core	3
			Total AUs	<b>19</b>

	Course Code	Course Title	Type	AU
Year 3 Semester 2	CE3003	Microcontroller Programming	Core	3
	CE3005	Computer Networks	Core	3
	CE3007	Digital Signal Processing	Core	3
	xxxxxx	Unrestricted Elective	UE	3
	CE0001	Engineers and Society	GER-Core	3
	CZ2xxx or CZ3xxx	Technical Elective 1	Major PE	3
			Total AUs	<b>18</b>

	Course Code	Course Title	Type	AU
Year 3 Special Term	CE3126	Professional Attachment	Core	5
				Total AUs

	Course Code	Course Title	Type	AU
Year 4 Semester 1	CE4211	CNYSF Overseas Final Year Project	Core	8
				Total AUs

	Course Code	Course Title	Type	AU
Year 4 Semester 2	CE4xxx	Major PE 1	Major PE	3
	CE4xxx	Major PE 2	Major PE	3
	CE4xxx	Major PE 3	Major PE	3
	xxxxxx	Unrestricted Elective	UE	2
			Total AUs	<b>11</b>
			<b>GRAND TOTAL</b>	<b>142</b>