

**Curriculum for CN Yang Scholars Programme
Mechanical Engineering
(For AY2020-21 intake)**

Course Type	AU
Core Courses	112
Major Prescribed Electives	12
GER-Core	17
GER-PE	0
Unrestricted Electives	1
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
	MA1008	Introduction to Computational Thinking	Core	3
	TBA	Engineering Fundamentals 2	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
	MA1001	Dynamics	Core	3
	MA2003	Intro to Thermo-fluids	Core	3
	EG0001	Engineers and Society	GER-Core	3
	ML0003	Kickstart Your Career Success	GER-Core	1
				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
	MA2001	Mechanics of Materials	Core	3
	MA2002	Theory of Mechanism	Core	3
	MA2006	Engineering Mathematics	Core	3
	MA2007	Thermodynamics	Core	3
	MA2071	Laboratory Experiments (ME)	Core	1
				Total AUs

	Course Code	Course Title	Type	AU
Year 2 Semester 2	CY0001	Writing Across the Disciplines	GER-Core	3
	MA2004	Manufacturing Processes	Core	3
	MA2005	Engineering Graphics	Core	3
	MA2009	Electrical Circuits & Electronics Device	Core	3
	MA2079	Engineering Innovation and Design	Core	2
	MA0218	Introduction to Data Science and Artificial Intelligence	GER-Core	3
				Total AUs

	Course Code	Course Title	Type	AU
Year 3 Semester 1	MA3001	Machine Element Design	Core	3
	MA3003	Heat Transfer	Core	3
	MA3005	Control Theory	Core	3
	MA3071	Experimental Labs (ME)	Core	1
	CY0006	Enterprise, Innovation and Leadership	GER-Core	3
				Total AUs

	Course Code	Course Title	Type	AU
Year 3 Semester 2	MA3002	Solid Mechanics & Vibrations	Core	3
	MA3004	Mathematical Methods in Engineering	Core	3
	MA3006	Fluid Mechanics	Core	3
	MAxxxx	Major PE #1	Major PE	3
	MAxxxx	Major PE #2	Major PE	3
				Total AUs

	Course Code	Course Title	Type	AU
Year 3 Special Term	MA3075	Professional Attachment	Core	5
				Total AUs

	Course Code	Course Title	Type	AU
Year 4 Semester 1	MA4211	CNYSP Overseas Final Year Project	Core	8
				Total AUs

	Course Code	Course Title	Type	AU
Year 4 Semester 2	MAxxxx	Major PE #3	Major PE	3
	MAxxxx	Major PE #4	Major PE	3
	MA4001	Engineering Design	Core	4
	MA4002	Fluid Dynamics	Core	3
	xxxxxx	Unrestricted Elective	UE	1
				Total AUs
			GRAND TOTAL	142