

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

Course Type	AU
Core Courses	119
Major Prescribed Electives	6
GER-Core	17
GER-PE	0
Unrestricted Electives	0
<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
	TBA	Engineering Fundamentals 2	Core	3
	MA1008	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
<b>Year 1 Semester 2</b>	CY1007	Climate Change	Core	3
	CY1307	Relativity and Quantum Physics	Core	3
	CY1400	CNYSU Undergraduate Research Experience	Core	3
	CY1602	Mathematics II	Core	4
	MA1001	Dynamics	Core	3
	MA1700	Aerospace Discovery Course	Core	1
	MA2003	Intro to Thermo-fluids	Core	3
	EG0001	Engineers and Society	GER-Core	3
	ML0003	Kickstart Your Career Success	GER-Core	1
			Total AUs	<b>24</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

	Course Code	Course Title	Type	AU
<b>Year 2 Semester 1</b>	CY2001	Research Attachment 1	Core	4
	CY0002	Ethics	GER-Core	3
	MA2005	Engineering Graphics	Core	3
	MA2007	Thermodynamics	Core	3
	MA2701	Flight Performance	Core	2
	MA3704	Aircraft Electrical Devices	Core	3
	MA2072	Laboratory Experiments (AE)	Core	1
			Total AUs	<b>19</b>

	Course Code	Course Title	Type	AU
<b>Year 2 Semester 2</b>	CY0001	Writing Across the Disciplines	GER-Core	3
	MA2001	Mechanics of Materials	Core	3
	MA2006	Engineering Mathematics	Core	3
	MA2700	Aerospace Materials & Manufacturing Process	Core	3
	MA2079	Engineering Innovation & Design	Core	2
	MA0218	Introduction to Data Science and Artificial Intelligence	GER-Core	3
				Total AUs

	Course Code	Course Title	Type	AU
<b>Year 3 Semester 1</b>	CY0006	Enterprise, Innovation and Leadership *	GER-Core	3
	MA3700	Aircraft Structures I	Core	3
	MA3701	Aerodynamics	Core	3
	MA3702	Aircraft Propulsion	Core	3
	MA3703	Flight Dynamics	Core	2
	MA3072	Experimental Labs (AE)	Core	1
				Total AUs

\*Offered in both Semester 1 & 2

	Course Code	Course Title	Type	AU
<b>Year 3 Semester 2</b>	MA3003	Heat Transfer	Core	3
	MA3006	Fluid Mechanics	Core	3
	MA3705	Control Theory	Core	3
	MAxxxx	Major PE #1	Major PE	3
	MAxxxx	Major PE #2	Major PE	3
				Total AUs

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

	Course Code	Course Title	Type	AU
<b>Year 4 Semester 1</b>	MA4701	Aircraft Design	Core	3
	MA4702	Aircraft Structures II	Core	3
	MA4704	Aeroelasticity	Core	3
	MA4705	Aircraft Navigation and Flight Computers	Core	3
				Total AUs

	Course Code	Course Title	Type	AU
<b>Year 4 Semester 2</b>	MA4211	CNYSP Overseas Final Year Project	Core	8
			Total AUs	<b>8</b>
			<b>GRAND TOTAL</b>	<b>142</b>