

CURRICULUM FOR BACHELOR OF ENGINEERING (AEROSPACE ENGINEERING)

CN YANG SCHOLARS PROGRAMME

(FIRST YEAR ADMISSION)

AY2025 Intake Onwards

Year of Study	SUMMARY OF ACADEMIC UNIT REQUIREMENT						Total AU
	Core (C)	CNYSP-Core (CNYSP-C)	Major Prescribed Electives (MPE)	Common Core (CC)	Professional Series (PS)	Care, Serve, Learn (CSL)	
1	12	27	0	2	0	0	0
2	20	6	0	8	0	3	4
3	27	0	0	0	9	0	2
4	17	0	0	0	0	0	0
Total	76	33	0	10	9	3	137

YEAR 1 SEMESTER 1

Course Code	Course Title	Type	AU	Remarks
CY1001	Cell	CNYSP-C	3	
CY1101	Molecule	CNYSP-C	4	
CY1308	Physics	CNYSP-C	3	
CY1500	Introduction to Research	CNYSP-C	2	
CY1601	Mathematics I	CNYSP-C	4	
EG1001	Engineers in Society	C	2	
CC0015	Health & Wellbeing	CC	2	
			20	

YEAR 1 SEMESTER 2

Course Code	Course Title	Type	AU	Remarks
CY1007	Climate Change	CNYSP-C	3	
CY1602	Mathematics II	CNYSP-C	4	
MA1001	Dynamics	C	3	
MA1008	Introduction to Computational Thinking	C	3	
MA1700	Aerospace Discovery Course	C	1	
MA2001	Mechanics of Materials	C	3	
			17	

YEAR 1 SPECIAL TERM

Course Code	Course Title	Type	AU	Remarks
CY2003	Research Attachment 3 (Making and Tinkering)	CNYSP-C	4	
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1

Course Code	Course Title	Type	AU	Remarks
CY0001	Writing Across The Disciplines	CNYSP-C	3	
MA5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
MA2003	Intro to Thermo-fluids	C	3	
MA2006	Engineering Mathematics	C	3	
MA2072	Laboratory Experiments (AE)	C	1	
MA2701	Flight Performance	C	2	
SP0061	Science & Technology for Humanity	CC	3	
	Tech-For-Good (T4G)	CSL	3	
			18	

YEAR 2 SEMESTER 2

Course Code	Course Title	Type	AU	Remarks
CY0002	Ethics	CNYSP-C	3	
MA5915	Undergraduate Research	BDE	4	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
MA2007	Thermodynamics	C	3	MA2003
MA2700	Aerospace Materials & Manufacturing Process	C	3	
MA2079	Engineering Innovation and Design	C	2	Semester 2 with 1 week in Special Term
MA3705	Aerospace Control Theory	C	3	Having Read MA2006
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A World	CC	2	AY27 cohort to read in Year 1 Semester 2
			23	

YEAR 3 SEMESTER 1

Course Code	Course Title	Type	AU	Remarks
MA3072	Engineering Experiments (AE)	C	1	
MA3700	Aircraft Structures I	C	3	MA2001
MA3701	Aerodynamics	C	3	MA2003
MA3702	Aircraft Propulsion	C	3	MA2007
MA3703	Flight Dynamics	C	2	MA2701 & MA3705

MA3704	Aircraft Electrical Devices	C	3	
MA4705	Aircraft Navigation and Flight Computers	C	3	MH1811
MLXXX	Profession Preparation	PS	1	
			19	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
MA2005	Engineering Graphics	C	3	
MA3003	Heat Transfer	C	3	MA2007
MA3006	Fluid Mechanics	C	3	MA2003
MA0218	Introduction to Data Science and Artificial Intelligence	PS	3	MA1008
XXXXXX	Broadening and Deepening Elective 1	BDE	2	
			14	

YEAR 3 SPECIAL TERM				
Course Code	Course Title	Type	AU	Remarks
MA3910	Professional Attachment	PS	5	
			5	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Remarks
MA4701	Aircraft Design	C	3	MA3701, MA3702 & MA3703
MA4702	Aircraft Structures II	C	3	MA2001 & MA3700
MA4704	Aeroelasticity	C	3	MA3700 & MA3701
			9	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Remarks
MA4211	CNYSP Overseas Final Year Project	C	8	Year 4 Standing
			8	
Total AUs for Graduation:			137	