

**CURRICULUM FOR BACHELOR OF ENGINEERING (ELECTRICAL & ELECTRONIC)
WITH CN YANG SCHOLARS PROGRAMME
(FIRST YEAR ADMISSION)
AY2025 Intake Onwards**

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	Major Requirements			Interdisciplinary Collaborative Core			BDE	Total AU
	School Core	CNYS-PS-Core	MPE	CC	Professional Series PS)	Care, Serve, Learn		
1	9	27	0	2	3	0	0	41
2	15	10	0	8	0	3	3	39
3	17	0	9	0	6	0	5	37
4	8	0	12	0	0	0	0	20
Total	49	37	21	10	9	3	8	137

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1001	Cell	CNY-Core	3	CNYS-PS Courses
CY1101	Molecule	CNY-Core	4	
CY1308	Physics	CNY-Core	3	
CY1500	Introduction to Research	CNY-Core	2	
CY1601	Mathematics I	CNY-Core	4	
IE1005	From Computational Thinking to Program	C	3	
			19	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1007	Climate Change	CNY-Core	3	CNYS-PS Courses
CY1602	Mathematics II	CNY-Core	4	
EE1071	EEE Laboratory 1	C	1	
EG1001	Engineers in Society	C	2	
IE2104	Digital Electronics	C	3	
CC0015	Health & Wellbeing	CC	2	
IE0005	Introduction to Data Science and Artificial Intelligence	PS	3	
			18	

YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY2003	Research Attachment 3	CNY-Core	4	CNYS-PS Course
	Overseas Learning Trip			
			4	

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0001	Writing Across the Disciplines	CNY-Core	3	CNYS-PS Course
EE2101	Circuit Analysis	C	3	
EE2103	Semiconductor Fundamental	C	3	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A. World	CC	2	
	Tech-For-Good (T4G)	CSL	3	
			17	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYS-PS Course
CY2001	Research Attachment 1	CNY-Core	4	CNYS-PS Course 2-semester long, course registered only in Sem 2 (similar to URECA)
EE2005	Electrical Devices & Machines	C	3	EE2101
EE2102	Analog Electronics	C	3	EE2101
IE2106	Engineering Mathematics I	C	3	
SP0061	Science & Technology for Humanity	CC	3	
	Broadening and Deepening Elective 1	BDE	3	

			22	
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YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE2073	Intro to EEE Design & Project	C	2	
IE2107	Engineering Mathematics II	C	3	
IE2108	Data Structures & Algorithms in Python	C	3	
IE2110	Signals and Systems	C	3	
	Third-Year Technical Elective 1	MPE	3	
	Profession Preparation	PS	1	
	Broadening and Deepening Elective 2	BDE	2	
			17	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE3101	Engineering Electromagnetics	C	3	
EE3180	Design & Innovation Project	C	3	
	Third-Year Technical Elective 2	MPE	3	
	Final Year Technical Elective 1	MPE	3	
	Broadening and Deepening Elective 3	BDE	3	
			15	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE3910	Professional Attachment	PS	5	
			5	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE4081	CNYSO Overseas Final Year Project	C	8	CNYSO Course
			8	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
	Final Year Design Elective 1	MPE	3	
	Final Year Technical Elective 2	MPE	3	
	Final Year Design/Technical Elective 2/3	MPE	3	
	Final Year Design/Technical Elective 3/4	MPE	3	
			12	
Total AU for Graduation:			137	