

**AY2024-25 CURRICULUM FOR BACHELOR OF ENGINEERING (ELECTRICAL & ELECTRONIC)
WITH CN YANG SCHOLARS PROGRAMME
(FIRST YEAR ADMISSION)**

Last Updated : 23-May-24

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	Core	CNYS- Core	MPE	CC	FC	BDE	Total AU
1	9	27	0	5	0	3	44
2	15	10	0	8	0	0	33
3	14	0	9	0	8	6	37
4	8	0	12	0	0	3	23
Total	46	37	21	13	8	12	137

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1001	Cell	CNY-Core	3	CNYS- Courses
CY1101	Molecule	CNY-Core	4	
CY1308	Physics	CNY-Core	3	
CY1500	Introduction to Research	CNY-Core	2	
CY1601	Mathematics I	CNY-Core	4	
EG1001	Engineers in Society	C	2	
CC0002	Navigating the Digital World	CC	2	
			20	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1007	Climate Change	CNY-Core	3	CNYS- Courses
CY1602	Mathematics II	CNY-Core	4	
IE1005	From Computational Thinking to Program	C	3	
EE1071	EEE Laboratory 1	C	1	
IE2104	Digital Electronics	C	3	
CC0005	Healthy Living & Mental Wellbeing in an Aging Society	CC	3	
CY1307	Quantum	BDE	3	Pre-requisite for EE2103
			20	

YEAR 1 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY2003	Research Attachment 3	CNY-Core	4	CNYS- 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- Course
EE2101	Circuit Analysis	C	3	
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	
			11	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYS- Course
CY2001	Research Attachment 1	CNY-Core	4	CNYS- Course 2-semester long, course registered only in Sem 2 (similar to URECA)
EE2102	Analog Electronics	C	3	EE2101
EE2005	Electrical Devices & Machines	C	3	EE2101
IE2106	Engineering Mathematics I	C	3	
IE2110	Signals and Systems	C	3	

SP0061	Science & Technology for Humanity	CC	3	
			22	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE2103	Semiconductor Fundamentals	C	3	
IE2108	Data Structures & Algorithms in Python	C	3	
EE2073	Intro to EEE Design & Project	C	2	
IE0005	Introduction to Data Science and Artificial Intelligence	FC	3	
EE3XXX	Prescribed Elective 1	MPE	3	
	Broadening and Deepening Elective 1	BDE	3	
			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	EE2073^
EE3XXX	Prescribed Elective 2	MPE	3	
EE4XXX	Technical Elective 1	MPE	3	
	Broadening and Deepening Elective 2	BDE	3	
			15	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE3276	Professional Attachment	FC	5	
			5	

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

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE4XXX	Design Elective 1	MPE	3	
EE4XXX	Design Elective 2	MPE	3	
EE4XXX	Technical Elective 2	MPE	3	
EE4XXX	Technical Elective 3	MPE	3	
	Broadening and Deepening Elective 3	BDE	3	
			15	

Total AU for Graduation: **137**