

**CURRICULUM FOR BACHELOR OF ENGINEERING (ELECTRICAL & ELECTRONIC)
WITH CN YANG SCHOLARS PROGRAMME
SECOND MAJOR IN SUSTAINABILITY (EESN)
(FIRST YEAR ADMISSION)
AY2026 Intake Onwards**

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	Major Requirements			Interdisciplinary Collaborative Core			BDE	Total AU
	Core	CNYS-Core	MPE	CC	Professional Series (PS)	Care, Serve, Learn		
1	6 [2]	27 [3]	0	5	0	0	3	41 [5]
2	18 [3]	6	0	5	3	3	4	39 [3]
3	14	0	12 [3]	0	6	0	10	42 [3]
4	8	0	9	0	0	0	6	23
Total	46 [5]	33 [3]	21 [3]	10	9	3	23	145 [11]

[] AU of courses that could be used to fulfil Core/MPE requirement and second major requirement concurrently.

YEAR 1 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1001	The Systems Architecture of Life	CNY-Core	3	CNYS-SP Courses
CY1101	Molecule	CNY-Core	4	
CY1308	Physics	CNY-Core	3	
CY1601	Mathematics I	CNY-Core	4	
IE2104	Digital Electronics	C	3	
NH0007	Critical Perspectives on Technology and Society	CC	3	
			20	

YEAR 1 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY1007^	Climate Change	CNY-Core	3	Double-counted as Planet Core
CY1500	Introduction to Research	CNY-Core	2	CNYS-SP Course
CY1602	Mathematics II	CNY-Core	4	
EE1071	EEE Laboratory 1	C	1	
EG1001^	Engineers in Society	C	2	Double-counted as Practice Core
CC0015	Health & Wellbeing	CC	2	
	Second Major Compulsory Course 3	BDE	3	Please see attached list of courses to choose from
			17	

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

YEAR 2 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0001	Language & Logic	CNY-Core	3	CNYS-SP Course
EE5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
IE1005	From Computational Thinking to Program	C	3	
EE2101	Circuit Analysis	C	3	
IE2106	Engineering Mathematics I	C	3	CY1602
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career Design & Workplace Readiness in the V.U.C.A. World	CC	2	
NH0001	Tech-for-Good Service Learning	CSL	3	
			20	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYS-SP Course

EE5915	Undergraduate Research	BDE	4	2-semester long, course registered only in Sem 2
EE2005^	Electrical Devices & Machines	C	3	EE2101 Double-counted as SN Elective
EE2102	Analog Electronics	C	3	EE2101
IE2110	Signals and Systems	C	3	CY1601/CY1602
IE0005	Introduction to Data Science and Artificial Intelligence	PS	3	
			19	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE2073	Intro to EEE Design & Project	C	2	
EE2103	Semiconductor Fundamentals	C	3	
IE2108	Data Structures & Algorithms	C	3	
EE3XXX^*	Third Year Technical Elective 1	MPE	3	Choose: EE3015 to double-count as SN Elective
	Third Year Technical Elective 2	MPE	3	
	Profession Preparation	PS	1	
	Second Major Compulsory Course 4	BDE	3	Please see attached list of courses to choose from
			18	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE3101	Engineering Electromagnetics	C	3	IE2107 (co-req)
EE3180	Design & Innovation Project	C	3	
EE4XXX^*	Final Year Technical Elective	MPE	3	Choose: EE4530/EE4532/EE4533/EE4534 to double count as SN Elective
	Final Year Design/Technical Elective	MPE	3	
	SN Elective 3	BDE	3	Please see attached list of electives to choose from
	SN Elective 4	BDE	4	
			19	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
EE3910	Professional Attachment	PS	5	Y3 standing, completed ≥4 semesters
			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	MPE	3	
	Final Year Technical Elective	MPE	3	
	Final Year Design/Technical Elective	MPE	3	
	Second Major Compulsory Course 5	BDE	3	Please see attached list of courses to choose from
ES5100	Second Major Interdisciplinary Project	BDE	3	
			15	
Total AU for Graduation:			145	

^ These courses are double-counted towards both EEE as well as the Second Major in Sustainability

*Students to choose which PE to double count as SN elective. Max number of AUs that can be double counted is 12AUs.

Compulsory Courses and Electives for Second Major in Sustainability

https://www.ntu.edu.sg/ase/admissions/undergraduate-programmes/second-major-in-sustainability#Content_C002_Col00