CURRICULUM FOR BACHELOR OF ENGINEERING (ELECTRICAL & ELECTRONIC)
WITH CN YANG SCHOLARS PROGRAMME
SECOND MAJOR IN SUSTAINABILITY (EESN)
(FIRST YEAR ADMISSION)
AY2025 Intake Onwards

SUMMARY OF ACADEMIC UNIT REQUIREMENT								
Year of Study	**Major Requirements**			**Interdisciplinary Collaborative Core**			**BDE**	**Total AU**
	Core	**CNYSP-Core**	**MPE**	**CC**	**Professional Series (PS)**	**Care, Serve, Learn**		
1	9 [2]	27 [3]	0	2	0	0	3	**41 [5]**
2	15 [3]	6	0	8	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	Cell	CNY-Core	3	CNYSP 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	**Double-counted as Practice Core**
			18	

YEAR 1 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY1007^	Climate Change	CNY-Core	3	**Double-counted as Planet Core**
CY1602	Mathematics II	CNY-Core	4	CNYSP Course
EE1071	EEE Laboratory 1	C	1	
IE1005	From Computational Thinking to Programming	C	3	
IE2104	Digital Electronics	C	3	
CC0015	Health & Wellbeing	CC	2	
	Second Major Compulsory Course 3	BDE	3	Please see attached list of courses to choose from
			19	

YEAR 1 SPECIAL SEMESTER				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY2003	Research Attachment 3	CNY-Core	4	CNYSP 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	CNYSP Course
EE5915	Undergraduate Research	BDE	IP	Course will be registered in Semester 2. Grades will be recorded at the end of Semester 2
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	
IE0005	Introduction to Data Science and Artificial Intelligence	PS	3	
	Tech-For-Good (T4G)	CSL	3	
			20	

YEAR 2 SEMESTER 2				
Course Code	**Course Title**	**Type**	**AU**	**Pre-Requisite/Remarks**
CY0002	Ethics	CNY-Core	3	CNYSP 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**
SP0061	Science & Technology for Humanity	CC	3	

		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**
	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
				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:**
	Final Year Design/Technical Elective		MPE	3	
	SN Elective 3		BDE	3	Please see attached list of electives to
	SN Elective 4		BDE	4	choose from
				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	CNYSP Overseas Final Year Project		C	8	CNYSP 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
	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