

**AY2024-25 CURRICULUM FOR BACHELOR OF ENGINEERING (INFORMATION ENGINEERING & MEDIA)
WITH CN YANG SCHOLARS PROGRAMME
SECOND MAJOR IN SUSTAINABILITY (IESN)
(FIRST YEAR ADMISSION)**

Last Updated : 31-Jan-24

SUMMARY OF ACADEMIC UNIT REQUIREMENT							
Year of Study	School Core	CNYSP-Core	MPE	CC	FC	BDE	Total AU
1	11	27	0	5	0	0	43
2	14	10	0	8	3	6	41
3	15	0	18	0	5	9	47
4	11	0	6	0	0	10	27
Total	51	37	24	13	8	25	158

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	
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	Double-counted as Planet Core
CY1602	Mathematics II	CNY-Core	4	CNYSP Course
IE1005	From Computational Thinking to Programming	C	3	
IE2108	Data Structure and Algorithm	C	3	
IM1002	Analog Electronics	C	3	
CC0005	Healthy Living & Mental Wellbeing in an Aging Society	CC	3	
			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
DA1000	Thinking and Communicating Visually I	C	3	
IE0005	Introduction to Data Science and Artificial Intelligence	FC	3	IE1005
IE2106	Engineering Mathematics I	C	3	CY1602
CC0006	Sustainability: Society, Economy & Environment	CC	3	
ML0004	Career and Entrepreneurial Development for the Future World	CC	2	
	Second Major Compulsory Course 3	BDE	3	
			20	

YEAR 2 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
CY0002	Ethics	CNY-Core	3	CNYSP Course
CY2001	Research Attachment 1	CNY-Core	4	CNYSP Course 2-semester long, course registered only in Sem 2 (similar to URECA)
IM1003	Object-Oriented Programming	C	3	
IE2104	Digital Electronics	C	3	
IM2073	Introduction to Design & Project	C	2	
SP0061	Science & Technology for Humanity	CC	3	
	Second Major Compulsory Course 4	BDE	3	
			21	

YEAR 3 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
IE3017	Computer Communications	C	3	
IE2110	Signals and Systems	C	3	
IM3180	Design & Innovation Project	C	3	
IM300X	Prescribed Elective 1	MPE	3	
IM4XXX	Technical Elective 1	MPE	3	
	Second Major Compulsory Course 5	BDE	3	
	SN Elective 1	BDE	3	Please see attached list of electives to choose from
			21	

YEAR 3 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
DA2002	Thinking and Communicating Visually II	C	3	
IE4001	Software Engineering	C	3	
IM300X	Prescribed Elective 2	MPE	3	
IM300X	Prescribed Elective 3	MPE	3	
IM4XXX	Design Elective 1	MPE	3	
IM4XXX	Technical Elective 2	MPE	3	
	SN Elective 2	BDE	3	Please see attached list of electives to choose from
			21	

YEAR 3 SPECIAL SEMESTER				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
IM3910	Professional Attachment	FC	5	
			5	

YEAR 4 SEMESTER 1				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
IM4081	CNYSF Overseas Final Year Project	C	8	CNYSF Course
			8	

YEAR 4 SEMESTER 2				
Course Code	Course Title	Type	AU	Pre-Requisite/Remarks
DA3000	Thinking and Communicating Visually III	C	3	DA1000
IM4XXX	Design Elective 2/ Technical Elective 3	MPE	3	
IM4XXX	Technical Elective 3/4	MPE	3	
	SN Elective 3	BDE	3	Please see attached list of electives to choose from
	SN Elective 4	BDE	4	
	Second Major Interdisciplinary Project	BDE	3	
			19	

Total AU for Graduation: **158**

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

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