

PROFESSIONAL CORE COURSES (See Course Plan Below)	61	V							
ELECTIVE COURSES FROM OTHER ACADEMIC UNITS	12	V							
REMARKS	The total graduation credits will be 135 credits. Therefore, students must fulfill mandatory courses listed above plus electives courses from other academic units to apply for their graduation.								

【 Professional Core Courses Plan 】

Course Name	Credit(s)	1 st semester	2 nd semester	3 rd semester	4 th semester	5 th semester	6 th semester	7 th semester	8 th semester
Calculus (I)	3	V							
Discrete Mathematics	3	V							
C Computer Programming (I)	3	V							
C Computer Programming Practice laboratory (I)	1	V							
Calculus (II)	3		V						
C Computer Programming (II)	3		V						
C Computer Programming Practice laboratory (II)	1		V						
Digital Electronics	3		V						
Data Structures	3			V					
Linear Algebra	3			V					
Digital System	3			V					
Digital System Laboratory	1			V					
Operating Systems	3				V				
Probability	3				V				
Computer Organization	3				V				
Algorithms	3					V			
Assembly Language and Micro- computer	3					V			
Object-Oriented Programming	3					V			
Computer Science and Engineering Forum	1					V			

Course Name	Credit(s)	1 st semester	2 nd semester	3 rd semester	4 th semester	5 th semester	6 th semester	7 th semester	8 th semester
Assembly Language and Micro-Computer Practice	1					V			
Unix System Programming	3						V		
Design and Implementation of Compiler	3						V		
Computer Network	3						V		
Special Topics in Practice (I)	1						V		
Special Topics in Practice (II)	1							V	

Note:

1. Undergraduate students must take at least 61 credits from professional core courses and at least 30 credits from CSE Elective courses. Students also have to pass Collegiate Programming Exam(CPE) (At least solve two questions in one exam)
2. In addition to the university-wide requirements on the number of credits for graduate study, the department requires that at least 30 of the graduation credits must be from Elective courses offered by the department. Among these 30 credits, there must be at least one professional elective courses from one specific area the department's curriculum planning structure (for the department's curriculum planning structure, check [here](#).)
3. 28 credits of General Education are required for graduation. General Education courses are : Critical Thinking and Expression in Chinese, General English, Inter-College Elective Courses, General Education Courses (Liberal Arts courses), Service Learning Courses. For General Education requirements, students can visit the [General Education Quick Guide website](#) for more information.
4. Undergraduate students have to attend 6 interactive activities set by [Si Wan College](#). Students are suggested to attend all 6 activities no later than the 6th semester.
5. Undergraduate students must pass and submit English Proficiency Test Certificate to the Center for EMI Teaching Excellence prior to graduation.
6. For students whose graduation year level is equivalent to the graduates from overseas or Hong Kong and Macau schools at the same level as the second year of senior secondary schools in the domestic area, the required credits for graduation, as stipulated by this department, should be increased by 12 credits.
7. Students enrolled after academic year 2020 shall meet at least one of the following requirements:
 - a. Overseas Learning: Students shall participate in an exchange program or study abroad for a semester. Student may also choose to complete two

credits of courses or study plan with at least 36 hours at overseas institutions approved by the Department.

- b. Inter-disciplinary Learning: Students may complete a minor program or a double major program at NSYSU or other universities, or an education program, or a micro-program offered by the NSYSU (inter-college collaboration), or an integrated program (including personalized program), or a professional program offered by another department or institute.