

Course	Credits	Hours	First year				Second year				Third year				Forth year				Note
			Fall		Spring		Fall		Spring		Fall		Spring		Fall		Spring		
			class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
Advanced Java Programming and Licence JAVA	3	3							3										
Data Mining	3	3						3											
Web Programming WEB	3	3									3								
Introduction to Software Engineering	3	3									3								
Data Warehouse System	3	3									3								
R Language Data Processing R	3	3									3								
Systems Analysis and Design	3	3										3							
UNIX Operations Systems UNIX	3	3										3							
Social Networking Programming	3	3										3							
machine learning	3	3										3							
Business Intelligence	3	3										3							
Weka Practice Data Analysis WEKA	3	3										3							
Linux System Linux	3	3												3					
Social Network Mining	3	3												3					
Software Testing and Maintenance	3	3												3					
Big Data Analysis	3	3												3					
Object-Oriented Design Patterns	3	3												3					
Introduction to Multimedia	3	3					3												
Principle and Application of Sensors	3	3					3												
Unity3D Design Unity3D	3	3					3												
Introduction to Mobile Communication	3	3					3												
Matlab programming and Application Matlab	3	3						3											
TCP/IP Protocol TCP/IP	3	3						3											
Interactive media design	3	3						3											
Image processing	3	3								3									
Electronic Interactive Technology Programming	3	3								3									
Introduction to Video Communication	3	3								3									
Introduction to Information Security	3	3								3									
Cloud Computing-Virtualization Technologies	3	3								3									
Technologies of Internet of Things	3	3									3								

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			class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	class	lab	
Statistics analysis and Application	3	3											3						
Unix Programming Unix	3	3											3						Computer course
Peripheral Interface Design	3	3											3						Lab course
Introduction to Secret Sharing	3	3											3						
Cloud computing Security Management	3	3											3						
Cloud computing technology and applied	3	3											3						
Advanced Computer Architectures	3	3													3				
Distributed Systems	3	3													3				
Information Laws	3	3													3				
Social media project develop	3	3													3				
Performance Analysis	3	3																3	
Intelligent Computation	3	3																3	
Digital content and trend	3	3																3	
iOS Programming iOS	3	3									3								
The Lectures of Information Trend	2	2													2				
Internship	3	3													3				
Overseas Internship	2	2																2	
Subtotal	Core Required Courses	12																	
	Professional Required Courses	58																	
	Professional Elective Course Credits	46																	
	General Education course credits	12																	
	graduation credits	128																	

Notes:

1. The students of CSIE department must fulfill 128 credits to be eligible for graduation, including:

I.24 required credits demanded by the university

II.58 required credits demanded by the department

III.At least 46 elective credits which include:

A.At least one course from each of the two modules (totally 6 credits)

B.At least one of the following two courses: Information Law and Information Ethics.

IV.Pre-requisite policy: The minimum score of 40 for Programming Design II is the pre-requisite for Data Structure and Computer Algorithms

2. Courses from focused course programs set up by any individual IT department or cooperatively between IT and other Schools can be regarded as the CSIE professional elective courses. Courses selected from other Schools can be regarded as the other department credits with a limitation of at most 20 course credits.

3. Students can choose the courses from the CSIE Master program, which can be counted as their graduation credits.

4. If students cannot finish the requirement for graduation owing to the reason that some courses from each of the two programs cannot be delivered, the department chair can assign other courses as substitutions.
5. When retaking the required course, students can choose those which are with the same course name or the same course content as substitutions under the approval of the department chair. These courses can be regarded as their graduation credits.
6. Students need to complete at least 12 General Education course credits. General Education courses are divided into three areas: Humanities, Social Science, and Natural Science. Each area is divided into two subcategories: core and extended. Students need to take 1 two-credit course in both of the subcategories within each area to be eligible for graduation. Only 12 course credits will be counted toward graduation. Additional course credits earned in General Education courses are not counted toward graduation.
7. In accordance with the General Provisions for Study, undergraduate students need to satisfactorily complete Service Learning, meet the university-wide basic competencies of English, Information Technology, Chinese, and Sports, and pass the core competencies of their department to be eligible for graduation.
8. Education credits cannot be counted as the graduation credits.
9. Students who fulfill the requirement of each modules can apply for the corresponding certificate. The requirement of each modules will be specified in the other regulation.
10. The elective courses on this Course Outline may be counted toward total graduation credits by students who entered the university prior to the 2019-7 academic year.
11. focused course program specified in the other regulation, please refer to the CSIE department website.
12. The credits of interdisciplinary focused course program are not included in course structure diagram that can be regarded as the other department credits.