Computer Science Department Credit Requirement Table for Bachelor Degree in 2017(106)

Type		Course Name		Credits		Remarks
				I Sem	II Sem	
University Required Courses (28 Credits)		College Chinese		2		
		College English		6		Students who did not pass the English Proficiency Exam in the university's standard should take "Advanced English" course, which is lectured by language center
		General Education	Core	10-12		Choose 4 fields among 6 fields and take 1 course in each selected field.
			Elective	8-10		At least 2 credits in Social Sciences and humanities respectively and the maximum is 10 credits
			Total	20		
		Physical Education		0		6 semesters required
		Student Service		0		2 semesters required, can be replaced by "Service Learning"
		Conduct				Must pass every semesters
Department Required Courses (52 credits)	Fundamental Required Course (30 credits)	General Physics (I、II)		3	3	
		Calculus (I、 II)		3	3	
		Introduction to Programming I (CS1355)		3		
		Introduction to Programming II (CS1356)		3		
		Data Structures(CS2351)		3		
		Linear Algebra (CS2334)		3		
		Probability(CS3332)		3		
		Discrete Mathematics (CS2336)		3		
	Core Required Courses (22 credits)	Digital Logic Design (CS2102)		3		
		Hardware Lab (CS2104)		3		
		Software Lab. (CS2410)		3		
		Computer Architecture (CS4100)		3		
		Design and Analysis of Algorithms(CS4311)		3		
		Operating Systems(CS3423)		3		
		System Integration Implementation I (CS3901)		2		
		System Integration Implementation II (CS3902)		2		

Professional Elective Courses (36 credits)	Elective Courses for Breadth and Depth Requirements	(1) All students should choose one course in each category at least (take five courses) (2) Students in ECS group (甲) should choose three courses in cat.A or cat.B at least.	15	Cat. A	Cat. B	Cat. C	Cat. D
				Engineering Mathematics (CS3334) Signal and Systems (CS2505) Scientific Computations (CS3330) Formal Language (CS3371)	Circuits and Electronics I (CS2100) Introduction to Integrated Circuit Design (CS3120) Introduction to Embedded Systems (CS4101) Compiler Design (CS3404) Digital System Design (CS4125)	Introduction to Computer Networks (CS3212) Software Engineering (CS4461) Cryptography and Network Security (CS3305) Introduction to parallel computing (CS4111)	Introduction to Database Systems (CS4710) Introduction to Artificial Intelligence (CS4601) Introduction to Multimedia (CS3570) Introduction to machine learning (CS4602)
	EECS Professional Electives		21	Please consult with advisor about related professional field(Courses No. with EE、CS、ISA、COM)			
	Other Electives (12 credits)		12	Please consult with advisor			
Minimum Credits for Bachelor Degree			**128**				
Notes	1. Please refer to CS department courses map for information about professional elective courses. 2. There will be 12 more total credits for Form 5 students. Please refer to the Department Office for more details. 3. Students pursuing a Double Major in CS department must fulfill the credit requirement of "Professional Electives courses"						