Computer Science Department Credit Requirement Table for Bachelor Degree in 2018(107)

Type		Course Name		Credits		Remarks
				I Sem	II Sem	
University Required Courses (28 Credits)		College Chinese		2		
		College English		8		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	8 -12		Choose 4 fields among 6 fields and take 1 course in each selected field.
			Elective	8-12		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		0		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		

<table>
<tr><td rowspan="3">Professional Elective Courses (36 credits)</td><td rowspan="2">Elective Courses for Breadth and Depth Requirements</td><td rowspan="2">(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.</td><td rowspan="2">15</td><td>Cat. A</td><td>Cat. B</td><td>Cat. C</td><td>Cat. D</td></tr>
<tr><td>Ordinary Differential Equations (EECS2030)
Signal and Systems (CS2505)
Scientific Computations (CS3330)
Formal Language (CS3371)</td><td>Circuits and Electronics I (CS2100)
Introduction to Integrated Circuit Design (CS3120)
Introduction to Embedded Systems (CS4101)
Compiler Design (CS3404)
Digital System Design (CS4125)</td><td>Introduction to Computer Networks (CS3212)
Software Engineering (CS4461)
Cryptography and Network Security (CS3305)
Introduction to parallel computing (CS4111)</td><td>Introduction to Database Systems (CS4710)
Introduction to Artificial Intelligence (CS4601)
Introduction to Multimedia (CS3570)
Introduction to machine learning (CS4602)</td></tr>
<tr><td colspan="2">EECS Professional Electives</td><td>21</td><td colspan="4">Please consult with advisor about related professional field(Courses No. with EE、CS、ISA、COM)</td></tr>
<tr><td colspan="3">Other Electives (12 credits)</td><td>10</td><td colspan="4">Please consult with advisor</td></tr>
<tr><td colspan="3">Minimum Credits for Bachelor Degree</td><td>128</td><td colspan="4"></td></tr>
<tr><td>Notes</td><td colspan="7">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"</td></tr>
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