

Computer Science BS Degree

For “Undecided Engineering” students who switch to CS following the freshman year,
start with CS 115, and take co-op schedule A

(Notes about how to map Engineering curriculum to CS curriculum indicated in *red italics*)

FALL		SPRING		SUMMER	
TERM 1		TERM 2			
MA 121 followed by MA 122	Differential Calculus Integral Calculus	MA 123 followed by MA 124	Series, Vectors, Functions, and Surfaces Calculus of Two Variables		
E 101	Engineering Experiences <i>(Together with Spring E 122 counts as one Free elective)</i>	MGT 103	Intro to Entrepreneurship (Extra course)		
E 121 + E 120	Engineering Design I Engineering Graphics <i>(Together count as one Free elective)</i>	E 122	Engineering Design II <i>(Together with Fall E 101 counts as one Free elective)</i>		
E 115	Intro. to Programming <i>(Does not count; extra course)</i>				
CH 115	Chemistry I <i>(Counts as Science I)</i>	PEP 111	Mechanics <i>(Counts as Math/Science elective)</i>		
CH 117	Chemistry Lab <i>(Counts as Science Lab)</i>	Science	<i>(Counts as Science II only if CH 116 or CH 281 is taken; a different course will count as Math/Science elective)</i>		
CAL 103/105	Humanities	CAL 105/103	Humanities		
PE 200	Phys. Ed. I	PE 200	Phys. Ed. II		
TERM 3		TERM 4			
CS 115	Intro to Computer Science	CS 284	Data Structures	CS 385 or CS 590	Algorithms <i>(CS 385 offered on campus; equivalent course CS 590 offered via WebCampus)</i>
CS 135	Discrete Structures	CS 383 or CS 550	Computer Organization & Programming	MA 222	Probability & Statistics
CS 146	Intro. to Web Programming and Project Development	HUM	Humanities	HUM	Humanities elective
BT 353	Project Management	HUM	Humanities 300 level		Free elective
HUM	Humanities 200 level		<i>(If CH 116 or CH 281 was taken in Term 2, this course should be a Math/Science elective. If a different science course was taken in</i>		Science/Math elective

			<i>Term 2, this course should be CH 116 or CH 281.)</i>		
PE 200	Phys. Ed. III	PE 200	Phys. Ed. IV		
Co-op		TERM 5		Co-op	
		CS 392	Systems Programming		
		CS 347	Software Development Process		
			Math/Science elective		
		CS 522 or CS 546 or CS 548	Mobile Systems & App or Web Programming or Enterprise Software Architecture & Design		
		CS	Tech elective		
TERM 6		Co-op		Co-op	
CS 334	Automata & Computation				
CS 442	Database Mgmt Systems				
CS 443	Database Practicum				
MA 331	Intermediate Statistics				
HUM	Humanities				
TERM 7		TERM 8			
CS 423	Senior Design I	CS 424	Senior Design II		
CS 306	Intro to IT Security	CS 492	Operating Systems		
CS 511	Concurrent Programming	CS 496	Principles of Programming Languages		
CS	Software development elective	CS	Technical elective		
CS 485	Societal Impact of Information Technologies (1 credit)	HSS 371 or HPL 455	Computers & Society or Ethical Issues in Science and Technology		