Computer Science BS Degree

**For "Undecided Engineering" students who switch to CS following the freshman year,
start with CS 105, 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 *(Together with Spring E 122 counts as one Free elective)*	MGT 103	Intro to Entrepreneurship *(Extra course)*		
E 121 + E 120	Engineering Design I Engineering Graphics *(Together count as one Free elective)*	E 122	Engineering Design II *(Together with Fall E 101 counts as one Free elective)*		
E 115	Intro. to Programming *(Does not count; extra course)*			CS 105	Intro to Scientific Programming *(offered via WebCampus)*
CH 115	Chemistry I *(Counts as Science I)*	PEP 111	Mechanics *(Counts as Math/Science elective)*		
CH 117	Chemistry Lab *(Counts as Science Lab)*	Science	*(Counts as Science II only if CH 116 or CH 281 is taken; a different course will count as Math/Science elective)*		
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 *(CS 385 offered on campus; equivalent course CS 590 offered via WebCampus)*
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		Science/Math elective
HUM	Humanities 200 level		*(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*		

			Term 2, this course should be CH 116 or CH 281.)		
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		
		CS 496	Principles of Programming Languages		
		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		Science/Math elective		
CS 485	Societal Impact of Information Technologies (1 credit)	CS	Technical elective		
CS	Software development elective	HSS 371 or HPL 455	Computers & Society or Ethical Issues in Science and Technology		