

Bachelor of Science in Computer Engineering | Sample Plan

This suggested plan applies to students entering in Academic Year 2022-2023 who are ready for calculus.

Semester 1			Semester 2		
Course	Title	Credits	Course	Title	Credits
MA 1160 or 1161	Calculus with Technology I (1)	4	MA 2160	Calculus with Technology II	4
ENG 1101	Engineering Analysis & Problem Solving (1)	3	CS 1122 (2)	Introduction to Programming II	3
CS 1121 (2)	Introduction to Programming I	3	PH 2100	University Physics I - Mechanics	3
PH 1100	Physics by Inquiry I Lab	1	UN 1025	Global Issues (3)	3
UN 1015	Composition (2)	3	ENG 1102	Engineering Modeling & Design (optional)	3
				<i>(or, may move other general education to fill)</i>	
	Total credits:	14		Total credits:	16
Semester 3			Semester 4		
Course	Title	Credits	Course	Title	Credits
MA 2321 (4)	Elementary Linear Algebra	2	EE 2112	Electric Circuits II and Lab	4
MA 3521 (4)	Elementary Differential Equations	2	CS 2311	Discrete Structures	3
EE 2174	Digital Logic and Lab	4	CS 2321	Data Structures	3
EE 2111	Electric Circuits I	3	PH 1200	Physics by Inquiry II Lab	1
CS 1142	Programming at the H/S Interface	3	PH 2200	University Physics II - Electricity & Magnetism	3
	Critical & Creative Thinking course (2)	3		Social Resp./Ethical Reasoning course (2)	3
	Total credits:	17		Total credits:	17
Semester 5			Semester 6		
Course	Title	Credits	Course	Title	Credits
MA 3710	Engineering Statistics	3	EE3901	Design Fundamentals	2
EE 3131	Electronics and Lab	4	EE 3173	Hardware/Software Integration	4
EE3160 or CS 3331	Signals and Systems or Concurrent Programming	3	CS 3411	Systems Programming	3
CS 3421	Computer Organization	3	CS 4321	Introduction to Algorithms	3
	HASS Comm/Comp course (2)	3		2nd Discipline Lab Science (5)	3-4
				Free Electives	2
	Total credits:	16		Total credits:	17-18
Semester 7			Semester 8		
Course	Title	Credits	Course	Title	Credits
EE 4901 (6)	EE Senior Design Project I	2	EE 4910 (6)	EE Senior Design Project II	2
EE 4173	Computer Systems Eng. & Performance	3		CpE Technical Elective (7)	3
EE 4272/CS 4461	Computer Networks	3		CpE Technical Elective (7)	3
	CpE Technical Elective (7)	3		CpE Technical Elective (7)	3
	Math/Science Elective	3		HASS Humanities/Fine Arts course (2)	3
	HASS Social/Behavioral Science course (2)	3		HASS course (2)	3
	Total credits:	17		Total credits:	17

Total credits: 128 + 3 units of co-curricular activities (2)

Follow prerequisites and semester offerings. This is a **suggested** plan which can vary by individual student, and shows a path through the program to avoid conflicts. **Students are responsible for monitoring their progress** and viewing elective lists in the uAchieve degree audit.

(1) Students who begin in Precalculus (MA 1032) could take MA 2160 (Calc II) in summer before 2nd year.

(2) May substitute CS 1131 (Accelerated Intro to Programming, 5 credits) for CS 1121 + CS 1122. Add 1 credit of technical electives.

(3) Follow the University General Education Core and HASS requirements. All students must take 3 units of co-curricular activities.

(4) May substitute MA 2321 and MA 3520, however these courses are taken in separate semesters.

(5) Choose from CH 1150/1151 (University Chemistry); BL 1400/1410 (Principles of Biology); or GE 2000 (Understanding the Earth).

(6) Approved Engineering Design courses: (EE 4901 & EE 4910) or (MEEM 4901 & MEEM 4911) or Enterprise (ENT 3950, ENT 3960, ENT 4950, & ENT 4960). Approved enterprises include RSE, BMSE, WCE and Aerospace. See ECE advisor for details.

(7) CpE Technical Electives are chosen from an approved list. Choose courses that develop advanced skills in your interest area(s). Minimum 6 credits upper-level coursework; remaining credits may use ENG 1102, ENT 3950, ENT 3960, and/or up to 4 credits of co-op (UN 3002-3003).