

Computer Engineering Major Bachelor of Science (85 credit hours)

2018-2019

- CPSC 2250: Discrete Mathematics, 4 credit hours
- CPSC 2320: C++ Programming, 1 credit hour (may substitute CPSC 2500)
- CPSC 2420: Computer Architecture, 2 credit hours
- CPSC 2430: Compilers and Languages, 2 credit hours
- CPSC 2500: Data Structures and Algorithms, 4 credit hours
- CPSC 3410: Computer Networks, 3 credit hours
- CPSC 4420: Operating Systems, 3 credit hours
- CHEM 2110: General Chemistry I, 4 credit hours
- ENGR 2001, Introduction to Engineering, 1 credit hour
- ENGR 2002, Introduction Mechanical Laboratory, 1 credit hour
- ENGR 2003, Introduction to Electrical and Computer Laboratory, 1 credit hour
- ENGR 2010: Statics, 2 credit hours
- ENGR 2030: Circuit Analysis, 3 credit hours
- ENGR 2090: Systems Engineering, 2 credit hours
- ENGR 2110: Dynamics, 2 credit hours
- ENGR 2310: Computational Problem Solving, 3 credit hours
- ENGR 3030: Signals and Controls, 3 credit hours
- ENGR 3220: Electronics, 3 credit hours
- ENGR 3260: Embedded Systems, 3 credit hours
- ENGR 3270: Digital Logic, 3 credit hours
- ENGR 4950: Senior Design I, 2 credit hours²
- ENGR 4960: Senior Design II, 2 credit hours³
- MATH 2010: Calculus I, 4 credit hours⁵
- MATH 2020: Calculus II, 4 credit hours
- MATH 3010: Linear Algebra with Differential Equations, 4 credit hours
- MATH 3020: Calculus III, 4 credit hours
- MATH 3100: Differential Equations, 3 credit hours
- MATH 4010: Mathematical Statistics, 4 credit hours
- PHYS 2240: General Physics I, 4 credit hours
- PHYS 2250: General Physics, II, 4 credit hours

Proposed course sequence:

Freshman: MATH 2010, CHEM 2110, ENGR 2001, 2002, 2003; MATH 2020, PHYS 2240, ENGR 2310

Sophomore: MATH 3010, PHYS 2250, ENGR 2020, 2070; MATH 3020, MATH 3100, ENGR 2010, 2030, 2050

Junior: MATH 4010, ENGR 3030, CPSC 2500; ENGR 3270, MATH 2200

Senior: ENGR 3260, 3220, 4950, CPSC 4420 or 3410; CPSC 4420 or 3410, ENGR 4960

Common Engineering Core Suggested Course Sequence

2018-2019

SEMESTER 1		SEMESTER 2	
CHEM 2110	4 Hours	ENGR 2310	3 Hours
ENGR 2001	1 Hours	MATH 2020	4 Hours
ENGR 2002	1 Hours	PHYS 2240	4 Hours
ENGR 2003	1 Hours	ENGL 1120	3 Hours
MATH 2010	4 Hours	LART 1100	2 Hours
ENGL 1100/ENGL 1110	3-4 Hours		
LART 1050	1 Hour		

SEMESTER 3		SEMESTER 4	
ENGR 2020	3 Hours	ENGR 2010	2 Hours
ENGR 2070	3 Hours	ENGR 2030	3 Hours
MATH 3010	4 Hours	ENGR 2050	1 Hour
PHYS 2250	4 Hours	MATH 3020	4 Hours
COMM 1000	3 Hours	MATH 3100	3 Hours

Computer Engineering Major Suggested Course Sequence

SEMESTER 5		SEMESTER 6	
CPSC 2500	4 Hours	ENGR 3270	3 Hours
ENGR 3030	3 Hours	MATH 2200	4 Hours
MATH 4010	4 Hours	Christian Ways of Knowing	3 Hours
BIBL 2000	3 Hours	Global/Intercultural	3 Hours
Aesthetic Way of Knowing	3 Hours	Civic Ways of Knowing	3 Hours
		Personal Wellness	2 Hours

SEMESTER 7		SEMESTER 8	
CPSC 3410 or CPSC 4420	4 Hours	CPSC 3410 or CPSC 4420	4 Hours
ENGR 3220	3 Hours	ENGR 4960	2 Hours
ENGR 3260	3 Hours	Social & Behavioral Ways of Knowing	3 Hours
ENGR 4950	2 Hours		
Foreign Language	4 Hours		

Computer Engineering students are exposed to the concepts of electricity, electronics, digital logic, computer architecture, computer organization, and computer science, and how they apply to the designing embedded systems and computer systems. Students will have the opportunity to see various applications of Computer Engineering to digital system design and computer design.

Questions? Please contact the [Department of Physical Sciences & Engineering](#).