

Computer Engineering Major Bachelor of Science (86 credit hours)

2019-2020

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.

- CPSC 2250, Discrete Mathematics, 4 credit hours
- CPSC 2320(may substitute CPSC 2500), C++ Programming, 1 credit hour
- 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 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 4050, Data Communications, 3 credit hours
- ENGR 4950, Senior Design I, 2 credit hours
- ENGR 4960, Senior Design II, 2 credit hours
- MATH 2010, Calculus I, 4 credit hours
- 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

**Remaining Hours:**

- Any ENGR courses 3000-level or above
- Any CPSC courses 3000-level or above
  
- ENGR 4950, is a Writing Intensive course in the Liberal Arts Program.
- ENGR 4960, is both a Writing and Speaking Intensive course in the Liberal Arts Program.
- CHEM 2110, fulfills the Scientific Ways of Knowing requirement in the Liberal Arts Program
- MATH 2010, fulfills the Quantitative Ways of Knowing requirement in the Liberal Arts Program.

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

**NOTE:** All students must complete 120 total credit hours to graduate from Anderson University.

Proposed course sequence:

Freshman: MATH 2010, CHEM 2110, ENGR 2001, 2002, 2003; MATH 2020, PHYS 2240, ENGR 2310  
 Sophomore: MATH 3010, PHYS 2250, ENGR 2010, 2090, CPSC 2320, ENGR Skills Lab;  
 MATH 3020, 3100, ENGR 2030, 2110, ENGR Skills Lab  
 Junior: MATH 4010, ENGR 3030, CPSC 2500, ENGR 3220, ENGR Skills Lab;  
 CPSC 2250, 2420, 2430, ENGR 3270, ENGR Skills Lab  
 Senior: ENGR 3260, 3950, 4050, ENGR Skills Lab; CPSC 4420, ENGR 4960, ENGR Skills Lab

### Computer Engineering Suggested Course Sequence 2019-2020

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	Personal Wellness	2 Hours
ENGL 1100/ENGL 1110	3-4 Hours		
LART 1050	1 Hour		

SEMESTER 3		SEMESTER 4	
MATH 3010	4 Hours	MATH 3020	4 Hours
PHYS 2250	4 Hours	MATH 3100	3 Hours
ENGR 2010	2 Hours	ENGR 2030	3 Hours
ENGR 2090	2 Hours	ENGR 2110	2 Hours
CPSC 2320	1 Hour	ENGR Skills Lab	0-1 Hour
ENGR Skills Lab	0-1 Hour	Foreign Language	4 Hours
COMM 1000	3 Hours		

SEMESTER 5		SEMESTER 6	
MATH 4010	4 Hours	CPSC 2250	4 Hours
ENGR 3030	3 Hours	ENGR 3270	3 Hours
CPSC 2500	4 Hours	CPSC 2420	2 Hours
ENGR 3220	3 Hours	CPSC 2430	2 Hours
ENGR Skills Lab	0-1 Hour	ENGR Skills Lab	0-1 Hour
BIBL 2000	3 Hours		

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

SEMESTER 7		SEMESTER 8	
ENGR 4050	3 Hours	CPSC 4420	3 Hours
ENGR 3260	3 Hours	ENGR 4960	2 Hours
ENGR 4950	2 Hours	ENGR Skills Lab	0-1 Hour
ENGR Skills Lab	0-1 Hour	Christian Ways of Knowing (PHIL 3250)	3 Hours
Social/Behavioral Ways of Knowing (ECON 2010)	3 Hours	Global/Intercultural Ways of Knowing (ENGR 2080)	3 Hours
Civic Ways of Knowing (POSC 2100)	3 Hours	Aesthetic Ways of Knowing (COMM 2550)	3 Hours