ANDERSON UNIVERSITY

Academic Advising

Computer Engineering Major Bachelor of Science (91 credit 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 of embedded systems and computer systems. Students will have the opportunity to see various applications of Computer Engineering to digital system design and computer design.

49 credit hours from the Common Engineering Core, Including Mathematics and Basic Sciences:

- 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, 3 credit hours
- ENGR 2030, Circuit Analysis, 3 credit hours
- ENGR 2080, Service Through Engineering and Technology, 3 credit hours (*LACC AU6)
- ENGR 2090, Systems Engineering, 3 credit hours (*LACC AU6)
- ENGR 2310, Computational Problem Solving, 3 credit hours
- ENGR 4950, Senior Design I, 2 credit hours
- ENGR 4960, Senior Design II, 2 credit hours
- CHEM 2110, General Chemistry I, 4 credit hours (*LACC RC4)
- MATH 2010, Calculus I, 4 credit hours (*LACC RC3)
- MATH 2020, Calculus II, 4 credit hours
- MATH 3010, Linear Algebra with Differential Equations, 4 credit hours
- MATH 3100, Differential Equations, 3 credit hours
- PHYS 2240, General Physics I, 4 credit hours (*LACC RC4)
- PHYS 2250, General Physics, II, 4 credit hours

42 credit hours of major specific requirements:

- MATH 2200/CPSC 2250, Discrete Mathematics, 4 credit hours
- MATH 4010, Probability, 3 credit hours
- ENGR 2200, Foundations of Digital Electronics, 2 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 3280, Microcontrollers, 3 credit hours
- ENGR 4250, Digital Signal Processing, 3 credit hours
- 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, 4 credit hours
- ENGR/CPSC Breadth Elective, 3 credit hours: Take at least 3 hours from ENGR 2110, 3080, 4020, or CPSC 3410, 3520

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

All required courses within all engineering majors and complementary majors must be completed with a minimum grade of C-.

Questions? Please contact the Department of Engineering.

ANDERSON UNIVERSITY

Academic Advising

Computer Engineering

SEMESTER 1		SEMESTER 2	
MATH 2010 (LACC RC3)	4 hours	MATH 2020	4 hours
CHEM 2110 (LACC RC4)	4 hours	PHYS 2240 (LACC RC4)	4 hours
ENGR 2001, 2002, 2003	3 hours	ENGR 2310	3 hours
ENGL 1110 (LACC RC1)	3 hours	ENGR 2090 (LACC AU6)	3 hours
LART 1050 (LACC AU1)	1 hour	ENGL 1120 (LACC RC1)	3 hours
Total: 15 Hours		**Total: 17 Hours**	

SEMESTER 3		SEMESTER 4	
MATH 3010	4 hours	MATH 3100	3 hours
PHYS 2250	4 hours	ENGR elective	3 hours
ENGR 2010	3 hours	ENGR 2200	2 hours
ENGR 2030	3 hours	Speaking & Listening (LACC RC2)	3-4 hours
ENGR 2080 (LACC AU6)	3 hours	Christian Ways of Knowing (LACC AU3)	3 hours
Total: 17 Hours		**Total: 14-15 Hours**	

SEMESTER 5		SEMESTER 6	
MATH 4010	3 hours	MATH 2200 / CPSC 2250	4 hours
CPSC 2500	4 hours	CPSC 2430 (Odd) or 4420 (Even)	2-4 hours
ENGR 3030	3 hours	ENGR 3260 (Even) or 4250 (Odd)	3 hours
ENGR 3220 (Even) or 3270 (Odd)	3 hours	Personal Wellness (LACC AU4)	2-3 hours
CPSC 2420 (E) or ENGR 3280 (O)	2-3 hours	BIBL 2000 (LACC AU2)	3 hours
Total: 15-16 Hours		**Total: 14-17 Hours**	

SEMESTER 7		SEMESTER 8	
ENGR 4950	2 hours	ENGR 4960	2 hours
ENGR 3220 (Even) or 3270 (Odd)	3 hours	CPSC 2430 (Odd) or 4420 (Even)	2-4 hours
CPSC 2420 (E) or ENGR 3280 (O)	2-3 hours	ENGR 3260 (Even) or 4250 (Odd)	3 hours
Civil Discourse (LACC AU5)	2-3 hours	H & A Ways of Knowing (LACC RC6)	3 hours
S & B Ways of Knowing (LACC RC5)	3 hours	LACC Elective (RC 2, 3, 5 or 6)	3-4 hours
Total: 12-14 Hours		**Total: 13-16 Hours**	

Questions? Please contact the Department of Engineering.