ANDERSON UNIVERSITY

Academic Advising

Mechatronics Engineering Major Bachelor of Science (92 credit hours)

Mechatronics Engineering is the multidisciplinary union of mechanical, electrical, and computer engineering with application towards the design and control of electromechanical systems. Students pursuing a degree in mechatronics engineering will be exposed to topics from each of these disciplines, capped off by a course in Mechatronics System 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 W7)
- ENGR 2090, Systems Engineering, 3 credit hours (*LACC W7)
- ENGR 2310, Computational Problem Solving, 3 credit hours
- ENGR 4950, Senior Design I, 2 credit hours (*LACC WI)
- ENGR 4960, Senior Design II, 2 credit hours (*LACC WI, SI)
- CHEM 2110, General Chemistry I, 4 credit hours (*LACC W2)
- MATH 2010, Calculus I, 4 credit hours (*LACC F5)
- 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
- PHYS 2250, General Physics, II, 4 credit hours

43 credit hours of major specific requirements:

- MATH 2120, Introductory Statistics OR MATH 3020, Calculus III, 4 credit hours
- CPSC 2020, Fundamentals of of Computational Thinking and Programming OR CPSC 2500, Data Structures and Algorithms, 4 credit hours
- ENGR 2110, Dynamics, 3 credit hours
- ENGR 2200, Foundations of Digital Electronics, 2 credit hours
- ENGR 3030, Signals and Controls, 3 credit hours
- ENGR 3110, Kinematics and Robotics, 4 credit hours
- ENGR 3140: Strength of Materials Laboratory, 1 credit hour
- ENGR 3150: Kinematics Laboratory, 1 credit hour
- ENGR 3220, Electronics, 3 credit hours
- ENGR 3280, Microcontrollers, 3 credit hours
- ENGR 3510, Solid Mechanics, 4 credit hours
- ENGR 3850, Engineering Projects Lab, 1 credit hour
- ENGR 4020, Mechatronics System Design, 4 credit hours
- At least 6 hours from ENGR 3xxx or above, PHYS 3xxx or above, or CPSC 2xxx or above

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

ANDERSON UNIVERSITY

Academic Advising

Mechatronics Engineering

SEMESTER 1		SEMESTER 2	
MATH 2010 (LACC F5)	4 hours	MATH 2020	4 hours
CHEM 2110 (LACC W2)	4 hours	PHYS 2240	4 hours
ENGR 2001, 2002, 2003	3 hours	ENGR 2310	3 hours
ENGL 1110 (LACC F3)	3 hours	ENGR 2090 (LACC W7)	3 hours
LART 1050 (LACC F1)	1 hour	ENGL 1120 (LACC F3)	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 2110	3 hours
ENGR 2010	3 hours	ENGR 2200	2 hours
ENGR 2030	3 hours	ENGR 3510	3 hours
ENGR 2080 (LACC W7)	3 hours	CPSC 2020	4 hours
Total: 17 Hours		**Total: 15 Hours**	

SEMESTER 5		SEMESTER 6	
ENGR 3030	3 hours	MATH 2120 or 3020	4 hours
ENGR 3110	3 hours	ENGR 3850	2 hours
ENGR 3140	1 hour	ENGR 4020 (Even) or ENGR Elective	3-4 hours
ENGR 3220 (Even) or 3280 (Odd)	3 hours	Modern Language (LAC W6)	4 hours
COMM 1000 (LAC F4)	3 hours	Personal Wellness (LAC F7)	2 hours
BIBL 2000 (LAC F6)	3 hours		
Total: 16 Hours		**Total: 15-16 Hours**	

SEMESTER 7		SEMESTER 8	
ENGR 4950 (LAC WI)	2 hours	ENGR 4960 (LAC WI, SI)	2 hours
ENGR 3150	1 hour	ENGR 4020 (Even) or ENGR Elective	3-4 hours
ENGR 3220 (Even) or 3280 (Odd)	3 hours	ENGR Elective	3 hours
ENGR Elective	3 hours	Aesthetic Ways Knowing (LAC W4)	3 hours
Civic Ways Knowing (LAC W3)	3 hours	Social Ways Knowing (LAC W5)	3 hours
Christian Ways Knowing (LAC W1)	3 hours	Civil Discourse (LAC F2)	3 hours
Total: 15 Hours		**Total: 17-18 Hours**	

Questions? Please contact the Department of Engineering.

Rev'd 1/2025