ANDERSON UNIVERSITY

Academic Advising

Mechanical Engineering Major Bachelor of Science (92 credit hours)

Students in Mechanical Engineering will learn the principles and skills necessary to understand how heat and mechanical power can be used in the design and operation of machines and other tools. Graduates of the Mechanical Engineering program will have a diverse background, with skills that can be ready for employment in industries such as automotive, aerospace, manufacturing, and consumer goods.

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 3020: Calculus III, 4 credit hours
- ENGR 2070: Thermodynamics, 3 credit hours
- ENGR 2110: Dynamics, 3 credit hours
- ENGR 3030: Signals and Controls, 3 credit hours
- ENGR 3140: Strength of Materials Laboratory, 1 credit hour
- ENGR 3150: Kinematics Laboratory, 1 credit hour
- ENGR 3110: Kinematics and Robotics, 3 credit hours
- ENGR 3160: Vibrations, 2 credit hours
- ENGR 3180: Materials and Processes, 3 credit hours
- ENGR 3190: Thermodynamics: Cycle Analysis, 2 credit hours
- ENGR 3510: Solid Mechanics, 3 credit hours
- ENGR 3850: Engineering Projects Lab, 1 credit hour
- ENGR 4140: Thermal Properties Laboratory, 1 credit hour
- ENGR 4110: Machine Design, 3 credit hours
- ENGR 4130: Fluid Mechanics, 3 credit hours
- ENGR 4160: Heat and Mass Transfer, 3 credit hours
- ENGR 4320: Fluid Mechanics Lab, 1 credit hour
- ENGR Breadth Elective, 3 credit hours: Take at least 3 hours from ENGR 3xxx or above

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

Mechanical 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	MATH 3020	4 hours
ENGR 2010	3 hours	ENGR 2110	3 hours
ENGR 2030	3 hours	ENGR 3510	3 hours
ENGR 2080 (LACC W7)	3 hours	Modern Language (LACC W6)	4 hours
Total: 17 Hours		**Total: 17 Hours**	

SEMESTER 5		SEMESTER 6	
ENGR 2070	3 hours	ENGR 3190	2 hours
ENGR 3110	3 hours	ENGR 4110	3 hours
ENGR 3140	1 hour	ENGR 3160 (Odd) or 3850	2 hours
ENGR 4130	3 hours	ENGR 3180 (Even) or 4160 (Odd)	3 hours
Personal Wellness (LAC F7)	2 hours	COMM 1000 (LAC F4)	3 hours
BIBL 2000 (LAC F6)	3 hours	Civil Discourse (LAC F2)	3 hours
Total: 15 Hours		**Total: 16 Hours**	

SEMESTER 7		SEMESTER 8	
ENGR 4950 (LAC WI)	2 hours	ENGR 4960 (LAC WI, SI)	2 hours
ENGR 3030	3 hours	ENGR 3180 (Even) or 4160 (Odd)	3 hours
ENGR 3150	1 hour	ENGR 4140 and ENGR 4320	2 hours
ENGR Elective	3 hours	ENGR 3160 (Odd) or 3850	2 hours
Civic Ways Knowing (LAC W3)	3 hours	Aesthetic Ways Knowing (LAC W4)	3 hours
Christian Ways Knowing (LAC W1)	3 hours	Social Ways Knowing (LAC W5)	3 hours
Total: 15 Hours		**Total: 15 Hours**	

Questions? Please contact the Department of Engineering.

Rev'd 1/2025