

Bachelor of Science- Mechanical Engineering

McCoy School of Engineering

2025-2026

Freshman Year

Grade	Fall – 14 hours	Grade	Spring – 17 hours
	Calculus 1 (4) MATH 1634 Pre-req: MATH 1534 or 1433 with a “C” better		Calculus 2 (4) MATH 1734 Pre-req: MATH 1634 with a “C” or better
	Introduction to Engineering (1) MENG 1101 Pre-req: None		MATH Elective (3) MATH 2753 OR STAT 3573
	Engineering Graphics (2) MENG 1132 Pre-req: None		Engineering Economics (3) MENG 1123 Pre-req: MATH 1233
	University Physics 1 (4) PHYS 1624 Co-req: MATH 1634		University Physics 2 (4) PHYS 2644 Co-req: MATH 1734; Pre-req: PHYS 1624
	CORE Communications (3) ENGL 1153, 2123, 2203, MCOM 2243, or SPCH 1133		Academic Research & Writing (3) ENGL 1143 Pre-req: Appropriate TSI, ACT, or SAT test scores

Sophomore Year

Grade	Fall – 17 hours	Grade	Spring- 16 hours
	Calculus 3 (4) MATH 2534 Pre-req: MATH 1734 with a “C” or better		Differential Equations (3) MATH 3433 Pre-req: MATH 1734 with a “C” or better
	Electric Circuits (4) MENG 2104 Pre-req: PHYS 2644		Mechanics of Solids (3) MENG 2223 Pre-req: MENG 2113 <i>SPR</i>
	Statics (3) MENG 2113 Pre-reqs: PHYS 1624 and MATH 1624		Thermodynamics (3) MENG 2203 Pre-req: PHYS 1624; MATH 1734 <i>SPR</i>
	Engineering Computation (2) MENG 2212 Pre-req: MATH 1634		Electronics (4) MENG 2204 Pre-req: MENG 2104
	General Chemistry (3) CHEM 1143 Co-req: MATH 1233 or MATH 1534		Dynamics (3) MENG 2213 Pre-req: MENG 2113
	General Chemistry Lab (1) CHEM 1141 Co-req: CHEM 1143		

Junior Year

Grade	Fall – 17 hours	Grade	Spring – 16 hours
	Fluid Mechanics (4) MENG 3104 Pre-req: MENG 2203 <i>FALL</i>		Applied Fluid Power Design (3) MENG 3203 Pre-req: MENG 3104 <i>SPR</i>
	Materials Science (4) MENG 3114 Pre-reqs: MENG 2223 and CHEM 1143 <i>FALL</i>		Mechanisms & Dynamics of Machines (3) MENG 3233 Pre-req: MENG 2213 <i>SPR</i>
	Measurements & Instrumentations (3) MENG 3123 Pre-reqs: MENG 2204 & MATH 3433 <i>FALL/SUM</i>		Heat Transfer (4) MENG 3234 Pre-req: MENG 3104 <i>SPR</i>
	Technical Writing (3) ENGL 3203 Pre-reqs: ENGL 1143 & Communications core		Computer Aided Engineering (3) MENG 3243 Pre-req: MENG 1132, 2223,3104 <i>SPR</i>
	CORE (3) HIST 1133		CORE (3) HIST 1233

Senior Year

Grade	Fall – 18 hours	Grade	Spring – 14 hours
	Mathematical Methods for Engr (3) MENG 4123 Pre-req: PHYS 1624, MATH 1734 <i>FALL</i>		Production & Automation Systems (2) MENG 4222 Pre-req: MENG 3203 <i>SPR</i>
	Machine Elements Design (4) MENG 4134 Pre-req: MENG 3233 <i>FALL</i>		Mechanical Engineering Analysis (3) MENG 4203 Pre-req: MENG 4123 <i>SPR</i>
	Senior Design 1 (3) MENG 4143 Pre-reqs: all 3000 level classes <i>FALL</i>		Senior Design 2 (3) MENG 4243 Co-req: MENG 4143 <i>SPR</i>
	Machine Control Programming (2) MENG 4122 Pre-reqs: MENG 3203 <i>FALL</i>		Control Systems (3) MENG 4253 Pre-req: MENG 4123 <i>SPR</i>
	CORE (3) POLS 1333		CORE (3) POLS 1433
	CORE (3) PHIL 2033		(empty cell)