

**St. Mary's University**  
**BS in Mechanical Engineering 128 Hours**

*The maximum credit transferable from a junior college, or any combination of junior colleges, is 66 semester hours.*

**St. Mary's Core (41 hours)**

Requirements	Texas Common Course Equivalency	Hours Required
— First Year Experience	Not required for transfer students accepted with 30 or more credit hours however a student may need to take three (3) additional hours of elective credits in order to meet the required hours for this degree.	3
— Freshmen Composition I	ENGL 1301	3
— Literature	ENGL 1302 or any ENGL 23XX Literature course	3
— History	Any HIST 13XX or 23xx course	3
— Social Science	ENGR 1201. The remaining 4 hours must be taken at St. Mary's.	6
— Mathematics	MATH 2413	
— Natural or Physical Sciences	PHYS 2425 or PHYS 2325 and PHYS 2125	4
— Fine Arts	ENGR 1304	3
— Philosophy – Self	PHIL 1301	3
— Philosophy – Ethics	PHIL 2306	3
— Theology	Theology courses from other universities may be transferable with the approval of the Theology Department	3
— Intermediate Theology	Theology courses from other universities may be transferable with the approval of the Theology Department	3

**Mechanical Engineering Major Courses**

Requirements for this major:	Texas Common Course Equivalency	Hours Required
— CH 1401 – General Chemistry I	CHEM 1411 or CHEM 1311 and CHEM 1111	4
— PY 2404 – University Physics II	PHYS 2426 or PHYS 2326 and PHYS 2126	4
— MT 2413 – Calculus II	MATH 2414	4
— MT 2332 – Advanced Math for Engineers	MATH 2318 & MATH 2320 MATH 2318 & MATH 2320	3
— MT 2333 – Advanced Math for Engineers II	MATH 2318 & MATH 2415	3
— MT 2323 – Discrete Math Structures	MATH 2323	3
— MT 3303 – Probability & Statistics for Engineers	No equivalent	3
— EG 1194 – Python Programming for Engineering Lab	ENGR 2304 or COSC 1336 or COSC 1436	1
— EG 1294 – Python Programming for Engineering	ENGR 2304 or COSC 1336 or COSC 1436	3
— EG 2123 – Circuits and Systems Lab	ENGR 2405 or ENGR 2105	1
— EG 2323 – Circuits and Systems	ENG 2405 or ENGR 2305	3

— EG 2343 – Statics	ENGR 2301	3
— EG 3101 – Engineering Design & Analysis Workshop I	No equivalent	1
— EG 3102 – Engineering Design & Analysis Workshop II	No equivalent	1
— EG 4101 – Engineering Design & Analysis Workshop III	No equivalent	1
— EG 4301 – Senior Design Project I	No equivalent	3
— EG 4302 – Senior Design Project II	No equivalent	3
— EG 1241 – Fundamentals of Mechanical Engineering	No equivalent	2
— EG 2344 - Dynamics	ENGR 2302	3
— EG 2346 – Strength of Materials	ENGR 2332	3
— EG 3342 – Engineering Thermodynamics I	No equivalent	3
— EG 3343 – Fluid Mechanics	No equivalent	3
— EG 3341 – Materials Engineering	No equivalent	3
— EG 3347 – Mechanical Design I	No equivalent	3
— EG 3348 – Mechanical Design II	No equivalent	3
— EG 3349 – Computational Methods for Engineering	No equivalent	3
— EG 3141 – Materials Lab	No equivalent	1
— EG 3142 – Thermodynamics & Fluids Lab	No equivalent	1
— EG 4342 – Heat Transfer	No equivalent	3
— EG 3346 – Dynamics and Controls	No equivalent	3
— EG 4391 – Manufacturing Process	No equivalent	3
— EG 4141 – Measurements and Instrumentation Laboratory	No equivalent	1
— Engineering Elective I	ENGR 2306	3
— Engineering Elective II	No equivalent	3

**Total Semester hours for this degree: 128**

Updated 11/19/2025