

**St. Mary's University**  
**BS in Mechanical Engineering Degree Plan – 120 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	6
___ Mathematics	Satisfied by MATH 1342 in the courses required for this major	4
___ Natural or Physical Sciences	Satisfied by PHYS 1101 and PHYS 1301 in the courses required for this major	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

**Biology Major Courses (78 hours)**

Requirements for this major:	Texas Common Course Equivalency	Hours Required
___ CH 1401 – General Chemistry I	CHEM 1111 and CHEM 1311	4
___ EG 1141 – Mechanical Eng. Fund. Lab	No equivalency.	1
___ EG 1194 – Python Programming for EG Lab	ENGR 2304 fulfills this requirement and the course.	1
___ EG 1294 – Python Programming for EG	ENGR 2304 fulfills this requirement and the lab.	2
___ EG 2123 – Circuits & Systems Lab	ENGR 2105	1
___ EG 2143 – Machining & Prototyping Lab	No equivalency.	1
___ EG 2323 – Circuits & Systems	ENGR 2305	3
___ EG 2343 – Statics	ENGR 2301	3
___ EG 2344 – Dynamics	ENGR 2302	3
___ EG 2346 – Strength Material	ENGR 2332	3
___ EG 3101 – Eng. Design & Analysis Workshop I	No equivalency.	1
___ EG 3102 – Eng. Design & Analysis Workshop II	No equivalency.	1
___ EG 3141 – Materials Laboratory	No equivalency.	1
___ EG 3142 – Thermodynamic & Fluids Lab	No equivalency.	1
___ EG 3341 – Materials Engineering	No equivalency.	3
___ EG 3342 – Engineering Thermodynamics I	No equivalency.	3
___ EG 3343 – Fluid Mechanics	No equivalency.	3
___ EG 3346 – Dynamics & Controls	No equivalency.	3
___ EG 3347 – Mechanical Design I	No equivalency.	3

___	EG 3348 – Mechanical Design II	No equivalency.	3
___	EG 3349 – Computational Methods for Engineering	No equivalency.	3
___	EG 3395 – Industrial Statistics and Design of Experiments	No equivalency.	3
___	EG 4101 – Eng. Design & Analysis Workshop III	No equivalency.	1
___	EG 4141 – Measurements and Instrumental Laboratory	No equivalency.	1
___	EG 4191 – Manufacturing Process Laboratory	No equivalency.	1
___	EG 4291 – Manufacturing Processes	No equivalency.	2
___	EG 4301 – Senior Design Project I	No equivalency.	3
___	EG 4302 – Senior Design Project II	No equivalency.	3
___	EG 4342 – Heat Transfer	No equivalency.	3
___	MT 2332 – Advanced Math for Engineers I	No equivalency.	3
___	MT 2333 – Advanced Math for Engineers II	No equivalency.	3
___	MT 2413 – Calculus II	MATH 2414	4
___	PY 2404 – University Physics II	PHYS 2426	4
___	3 hours of major electives	BIOL 1406, CHEM 1312 with CHEM 1112	3
___	6 hours of major electives	No equivalency.	6

**Please note:** Some courses may transfer to fulfill major course requirements or as elective hours. Students should consult with the department chair, Gopalakrishnan Easwaran, Ph.D. at [geaswaran@stmarytx.edu](mailto:geaswaran@stmarytx.edu)

**Total Semester hours for this degree**

**120**

For questions regarding other transfer courses not listed, contact the Office of the Registrar at [registrar@stmarytx.edu](mailto:registrar@stmarytx.edu).