St. Mary's University
BS in Industrial 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

Industrial 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 2317 – Differential Equations	MATH 2320	3
__	MT 2318 – Applied Linear Algebra	MATH 2318	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 2391 – Industrial Automation and Cont	No equivalent	3
__	EG 3341 – Materials Engineering	No equivalent	3
__	EG 3395 – Industrial Statistics and Design of Experiments	No equivalent	3
__	EG 3191 – Data Visualization and Analytics Lab	No equivalent	1
__	EG 3396 – Simulation	No equivalent	3
__	EG 3192 – Simulation Lab	No equivalent	1
__	EG 3394 – Lean Production Systems	No equivalent	3
__	EG 3398 – Six Sigma Quality	No equivalent	3
__	EG 4193 – Optimization and Decision Analytics Lab	No equivalent	3
__	EG 4393 – Optimization	No equivalent	3
__	EG 4395 – Stochastic Modeling and Risk Analysis	No equivalent	3
__	EG 4391 – Manufacturing Process	No equivalent	3
__	EG 4196 – Supply Chain and Logistics Engineering Lab	No equivalent	3
__	EG 4396 – Supply Chain and Logistics Engineering	No equivalent	3
__	EG 4194 – Smart Manufacturing Lab	No equivalent	1
__	EG 4394 – Smart Manufacturing	No equivalent	3
Total Semester hours for this degree: 128			

Updated 11/19/2025