

**St. Mary's University**  
**BS in Electrical 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

**Electrical Engineering Major Courses (87 hours)**

Requirements for this major:	Texas Common Course Equivalency	Hours Required
— CH 1401 – General Chemistry	CHEM 1411 or CHEM 1311 and CHEM 1111	4
— MT 2413 – Calculus II	MATH 2414	4
— MT 2332 – Advanced Math for Engineers I	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 1113 – C Programming for Engineering Lab	ENGR 2304 or COSC 1336 or COSC 1436	1
— EG 1213 – C Programming for Engineering	ENGR 2304 or COSC 1336 or COSC 1436	3
— EG 2121 – Circuits Analysis Lab	ENGR 2405 or ENGR 2105	1
— EG 2321 – Circuit Analysis I	ENGR 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 1122 – MATLAB Programming	No equivalent	1
—	EG 2113 – Logic Design Laboratory	ENGR 2106	1
—	EG 2313 – Fundamentals of Logic Design	ENGR 2306	3
—	EG 3325 – Signals and Systems	No equivalent	3
—	EG 2126 – Electronics I Lab	No equivalent	1
—	EG 2326 - Electronics	No equivalent	3
—	EG 2324 – Circuits Analysis II	No equivalent	3
—	EG 3323– Microprocessors I	No equivalent	3
—	EG 3326 – Electromagnetic Theory	No equivalent	3
—	EG 3328 – Control Systems	No equivalent	3
—	EG 3324 – Microprocessors II	No equivalent	3
—	EG 4322 – Energy Conversion	No equivalent	3
—	EG 4122 – Energy Conversion Lab	No equivalent	1
—	EG 4325 – Digital Signal Processing	No equivalent	3
—	EG 4328 – Communication Theory	No equivalent	3
—	EG 4323 – Semiconductor Devices	No equivalent	3
—	EG 3322 – Advanced Electronics Design	No equivalent	3
—	EG 3122 – Advanced Electronics Design Lab	No equivalent	1

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

**Updated 11/19/2025**