B.S. in Electrical Engineering

Electrical Engineering

The Bachelor of Science degree program in Electrical Engineering is accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org (http://www.abet.org/)

The electrical engineering program at St. Mary's University is best known for its high academic standards and innovative student projects. Every engineering senior completes a year-long design project, some of which have even been patented. The curriculum emphasizes new research findings and industry advances, including computer-aided design tools.

Students become well-versed in science and mathematics; current and relevant technical knowledge; extensive, practical hands-on experience in laboratories; and the opportunity to participate in faculty research projects.

Unique facilities available to electrical engineering students include an electrical engineering laboratory accessible 24-hours a day; an energy conversion laboratory for motors, generators and transformers; a manufacturing and robotics laboratory; and a research laboratory equipped with both UNIX and Windows workstations.

Click on the course number to view course title and description.

Code	Title	Semester Hours
BS Electrical Engineering Degree Plan (128 hours) - ABET Accredited		
Core Requirements (41 hours)		
First Year Seminar		3
FYE 1301	First Year Seminar	
Freshmen Composition I		3
EN 1311	Rhetoric and Composition	
or EN 1313	Rhetoric and Composition for International Students	
Literature		3
Any EN 23XX literature course		
History		3
Any 1000, 2000, or 3000-level HS course		
Social Science		6
EG 1303	Engineering and Society	
EG 2393	Engineering Economy	
Mathematics		4
MT 2412		
Natural or Physical Sciences		4
PY 1404		
Fine Arts		3
EG 1301		
Philosophy - Self		3
PL 1301	Intro to Philosophy	
Philosophy - Ethics		3
PL 2301	Foundations of Ethics	
Theology - God		3
TH 1301	Introduction to Theology	
Intermediate Theology		3
Any TH 33xx course		
Engineering Management Major Courses (85 hours)		
CH 1401	General Chemistry I	4
EG 1113	C Programming for Engineering Lab	1
EG 1122	MATLAB Programming	1
EG 1213	C Programming for Engineering	2
EG 2113	Logic Design Laboratory	1

EG 2121	Circuit Analysis Laboratory	1
EG 2126	Electronics I Laboratory	1
EG 2313	Fundamentals of Logic Design	3
EG 2321		3
EG 2324	Circuits Analysis II	3
EG 2326	Electronics I	3
EG 2343	Statics	3
EG 3101	Eng. Design & Analysis Workshop I	1
EG 3102	Eng. Design & Analysis Workshop II	1
EG 3121	Electronics II Laboratory	1
EG 3126	Adv Electronics Design Lab	1
EG 3226	Advanced Electronics Design	2
EG 3321	Electronics II	3
EG 3323	Microprocessors I	3
EG 3324	Microprocessors II	3
EG 3325	Signals and Systems	3
EG 3326	Electromagnetic Theory	3
EG 3328	Control Systems	3
EG 3395	Industrial Statistics and Design of Experiments	3
EG 4101	Eng. Design & Analysis Workshop III	1
EG 4122	Energy Conversion Laboratory	1
EG 4301	Senior Design Project I	3
EG 4302	Senior Design Project II	3
EG 4322	Energy Conversion	3
EG 4323	Semiconductor Devices	3
EG 4325	Digital Signal Processing	3
EG 4328	Communication Theory	3
MT 2332	Advanced Math for Engineers I	3
MT 2333	Adv Math for Engineers II	3
MT 2413	Calculus II	4
PY 2404	University Physics II	4
Total Semester Hours		**128**

This is a recommended degree plan subject to changes. Please meet with your advisor on a regular basis.

Click on the course number to view course title and description.

First Year

Fall	Semester Hours	Spring	Semester Hours
EG 1303	3	EG 1122	1
EG 1302	3	EG 1301	3
MT 2412	4	MT 2413	4
PY 1404	4	PY 2404	4
FYE 1301	3	PL 1301	3
		EN 1311	3
	17		**18**

Second Year

Fall	Semester Hours	Spring	Semester Hours
CH 1401	4	EG 2126	1
EG 2113	1	EG 2324	3
EG 2121	1	EG 2326	3
EG 2343	3	MT 3313	3

Fall	Semester Hours	Spring	Semester Hours
EG 2313	3	PL 2301	3
EG 2321	3	Literature	3
MT 3312	3		
	18		**16**

Third Year

Fall	Semester Hours	Spring	Semester Hours
EG 3121	1	EG 3324	3
EG 3321	3	EG 3326	3
EG 3323	3	EG 3126	1
EG 3325	3	EG 3226	2
EG 3395	3	EG 3328	3
EG 3101	1	EG 3102	1
History	3	TH 1301	3
	17		**16**

Fourth Year

Fall	Semester Hours	Spring	Semester Hours
EG 4301	3	EG 3393	3
EG 4325[*]	3	EG 4122	1
EG 4323	3	EG 4328[*]	3
EG 4322	3	EG 4302	3
EG 4101	1	Advanced Theology	3
	13		**13**

Total Semester Hours 128

[*]   Students in combined BS#MS program may register for an equivalent EG63XX or EG73XX (with EG Chair's approval)