Majors must also complete J E ENGR 2300, Introduction to Electrical Networks, with a minimum grade of C-.
A minimum grade of C- is necessary to meet the prerequisite requirement for any course.

General Education and Graduation Requirements

The following courses fulfill general education and graduation requirements and are required of Electrical Engineering majors:

PHIL 2259	Engineering Ethics	3
PHIL 3380	Philosophy of Science	3
HIST 1001	American Civilization to 1865 (MOTR HIST 101)	3
or HIST 1002	American Civilization 1865 to Present (MOTR HIST 102)	
Three additional Social Science courses [1]		9
Total Hours		18

[1]
One course must meet the Cultural Diversity requirement. Humanities and social sciences electives must meet both the University of Missouri-St. Louis General Education Requirements and the Humanities and Social Sciences Requirements of the Joint Undergraduate Engineering Program. Check with your advisor for details.

Pre-Engineering Requirements

Students seeking to major in engineering are first designated as 'Undeclared with an interest in Engineering majors' until they have completed Math 1800 Analytical Geometry & Calculus I. Upon successful completion of Math 1800 with a grade of C or better, students will be allowed to declare pre-engineering as their major. Math 1800 must be completed successfully within two attempts.

MATH 1800	Analytic Geometry and Calculus I	5
MATH 1900	Analytic Geometry and Calculus II	5
MATH 2000	Analytic Geometry and Calculus III	5
MATH 2020	Introduction to Differential Equations	3
CHEM 1111	Introductory Chemistry I (MOTR CHEM 150L)	5
PHYSICS 2111	Physics: Mechanics and Heat	4
PHYSICS 2111L	Mechanics and Heat Laboratory	1
PHYSICS 2112	Physics: Electricity, Magnetism, and Optics	4
PHYSICS 2112L	Electricity, Magnetism, and Optics Laboratory	1
ENGR 2310	Statics	3
ENGR 2320	Dynamics	3

ENGL 1100	First-Year Writing (MOTR ENGL 200)	3
Total Hours		42

Engineering Core Requirements

CMP SCI 1250	Introduction to Computing	3
J E COMM 2000	Engineering Studio I	1
J E MATH 3170	Engineering Mathematics	4
ENGL 3130	Technical Writing	3
Total Hours		11

Electrical Engineering Major Requirements

MATH 1320	Introduction to Probability and Statistics	3
J CMP SC 1002	Introduction to Computing Tools: Matlab Skills	1
J E ENGR 2320	Introduction to Electronic Circuits	3
J E ENGR 2300	Introduction to Electrical Networks	3
J E ENGR 2600	Introduction to Digital Logic and Computer Design	3
J E ENGR 3300	Engineering Electromagnetic Principles	3
J E ENGR 3320	Power, Energy and Polyphase Circuits	3
J E ENGR 3510	Signals and Systems	3
J E ENGR 4350	Electrical Energy Laboratory	3
J E ENGR 4410/J M ENGR 4310	Control Systems I	3
J E ENGR 4980	Electrical Engineering Design Projects	3
J E ENGR 4990	Electrical Engineering Senior Seminar	1
J M ENGR 3200	Thermodynamics	3
Lab Courses		**6**
Choose two of the following courses:		
J E ENGR 2330	Electrical and Electronic Circuits Laboratory	
J E ENGR 3310	Electronics Laboratory	
J E ENGR 4470	Robotics Laboratory	