

ELECTRICAL ENGINEERING

Louisiana Tech University

FRESHMAN YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
ENGR 120	*	Engineering Problem Solving I	2	ENGR 121	*	Engineering Problem Solving II	2	ENGR 122	*	Engineering Problem Solving III	2
MATH 240	*	Precalculus	3	MATH 241	*	Calculus I	3	MATH 242	*	Calculus II	3
CHEM 100	*	General Chemistry	2	CHEM 101		General Chemistry	2	PHYS 201	*	Physics for Engr & Science I	3
COMM 101	□	Principles of Communication	3	CHEM 103		General Chemistry Laboratory	1	ENGL 102		Freshman Composition II	3
FYE 100		Freshman Year Experience	1	ENGL 101		Freshman Composition I	3				11
			11				11				11

SOPHOMORE YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
ENGR 221	*	Electrical Engineering & Circuits I	3	ENGR 220		Statics & Mechs of Materials	3	ENGR 222		Thermodynamics	3
MATH 243	*	Calculus III	3	MATH 244	*	Calculus IV	3	MATH 245*		Differential Equations	3
ELEN 242		Intro to Microprocessors	3	ELEN 223	*	Electrical Circuits II	3	PHYS 202		Physics for Engr & Sci. II	3
BISC 101		Fundamentals of Biology	3	Social Science Elective**			3	ENGL 303		Technical Writing	3
			12				12				12

JUNIOR YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
ELEN 224		Electrical Circuits III	3	ELEN 313		Intro to Elec & Magnetic Fields	3	ELEN 322		Digital Signal Processing	3
ELEN 229		Electrical Circuits Lab	1	ELEN 321		Linear Systems	3	ELEN 336		Electronic Circuits II	3
ELEN 334		Solid State Electronics	3	ELEN 335		Electronic Circuits I	3	ELEN 339		Electronic Circuits Lab	1
MATH 313		Intro to Numerical Analysis	3	ELEN 333		Intro to Digital Design	3	ELEN 411		Electric & Magnetic Fields	3
			10				12				10

SENIOR YEAR											
Fall Quarter			Hr	Winter Quarter			Hr	Spring Quarter			Hr
ELEN 405		Electrical Engr Design I	2	ELEN 407		Electrical Engr Design II	1	ELEN 408		Electrical Engr Design III	1
ELEN		Sr Option 1β	4	ELEN		Sr Option 2β	4	ELEN		Directed Elective◊	3
ELEN		Directed Elective◊	3	ELEN		Directed Elective◊	3	Fine Arts Appreciation			3
MATH/SCI		Elective◊	3	Humanities Elective***			3	Social Science Elective**			3
			12				11				10

Neither MATH 240 nor CHEM 100 count towards the electrical engineering degree.

* Requires grade of "C" or higher.

□ Must be completed within first year of enrollment

β Select from: FALL - ELEN 437 and 439 or ELEN 471 and 479; or WINTER - ELEN 461 and 469 or ELEN 481 and 489.

Courses in **bold** are typically offered only once per year.

◊ Directed electives are chosen in consultation with advisor and approved by the Program Chair. Three must be ELEN; the other must be MATH, STAT, or PHYS.

ELEN Directed Electives must be ELEN 400 level courses. The MATH/SCI elective must be a 300/400 level Math, STAT, or PHYS course.

**Social Science electives can be selected from Anthropology, Criminal Justice, Economics, Geography, International Studies, Interdisciplinary, Political Science, Psychology, and Sociology.

***Humanities electives can be selected from Classical Studies, Communications, Foreign Language, History, Literature, Philosophy, Religious Studies, Interdisciplinary.