

Engineering (Bachelor of Science Engineering) Course Plan Electrical Concentration

TIER III: Math ACT of 25 or higher/Math RSAT of 590 or higher

Freshman Fall Semester			Freshman Spring Semester		
MATH 115	Precalculus	3	MATH 122	Calculus I	4
ENGR 100	Freshman Seminar*	1	BIOL 111	Basic Biology	4
ENGR 120	Foundations of Engineering Design I*	3	ENGR 121	Foundations of Engineering Design II*	3
ENGL 101	Academic Writing	3	ENGL 102	Academic Writing & Literature	3
CHEM 111	General Chemistry I	4	CHEM 113	General Chemistry II	4
			CUC 100	Connections	0.5
Semester Total:		14.0	Semester Total:		18.5

Sophomore Fall Semester			Sophomore Spring Semester		
Math 223	Calculus II	4	MATH 224	Calculus III	4
PHYS 251	Fundamentals of Physics I	4	ENGR 300	Engineering Economics	3
ENGR 220	Statics & Strength of Materials	3	PHYS 252	Fundamentals of Physics II	4
ECON 201	Microeconomics	3	ENGR 260	Electrical Circuits*	4
ENGL 2xx	Literature	3	PE 185	Lifetime Wellness	2
CUC 200	Connections	0.5			
Semester Total:		17.5	Semester Total:		17.0

Junior Fall Semester			Junior Spring Semester		
MATH 310	Differential Equations and Linear Algebra	4	ENGR 320	Fluids*	3
ELEC 325	Embedded Systems*	4	ELEC 350	Electromagnetic Theory*	4
ENGR 310	Thermodynamics*	3	ELEC 365	Linear Systems	4
ENGL 305	Technical Writing and Presentations	3	ELEC 395	Digital System Design*	3
ELEC 265	Electronics*	4	CHRS 125	Introduction to Christianity	3
Semester Total:		18.0	Semester Total:		17.0

Senior Fall Semester			Senior Spring Semester			
ENGR 491	Senior Design I	4	ENGR 492	Senior Design II	2	
HUM/FINE ARTS	Elective	3	ENGR 460	Statistical Methods for Engineers	3	
HIST 111 or 112	Western Civilization 1 or 2	3	ART 131, MUSIC 131 or THEA 131	Fine Arts	3	
ELEC 420	Controls and Communications	4	HUM/FINE ARTS or SOC/BEH SCI	Elective	3	
ELEC 435	Digital Signal Processing*	3	ELEC 440	Automation*	3	
			ELEC 480	Topics in Electrical Engineering*	3	
Semester Total:		17.0	Semester Total:		17.0	
					Degree Total	136

Engineering (Bachelor of Science Engineering) Course Plan Electrical Concentration

TIER III: Math ACT of 25 or higher/Math RSAT of 590 or higher

Total Math and Science Hours: 39 (includes Statistics for Engineers but not
Precalculus)

Total Engineering Hours: 61 (includes Engineering Economics)

ABET Requirements

Math and Basic Science: minimum of 30 semester credit hours

Engineering topics: minimum of 45 semester credit hours

LEGEND:

BOLD-FACED FONT – designates a course taught by the School of Engineering

BLUE BOX – indicates a course taken by all engineering students

* - indicates class-lab