

## 4-Year Academic Plan: Engineering - Electrical Concentration

The following is a sample outline demonstrating 4-year completion of this bachelor's degree. Each student's reality will vary slightly, as this plan does not include transfer work, Advanced Placement (AP), or concurrent enrollment credits. Math and English placement will be based on the student's ACT/SAT scores. PLEASE NOTE: The following plan assumes students are prepared to take the Math course listed. If prerequisites are required, additional semesters may be required to complete degree.

This is a **GUIDE ONLY**. Please meet with your academic advisor and consult DegreeWorks for specifics.

1st Year Fall (16 credits)					1st Year Spring (14 credits)				
ENGL	1010	Intro. to Academic Writing	3	F/S/Su	ENGL	2010	Intermediate Writing	3	F/S/Su
MATH	1210	Calculus I	4	F/S/Su	LM	1010	Information Literacy	1	F/S/Su
CHEM	1210/15	Principles of Chemistry I/Lab	5	F/Su	MATH	1220	Calculus II	4	F/S
XXXX	XXXX	GE Knowledge Area	3	F/S/Su	PHYS	2210/15	Physics for Science & Engrs/Lab	5	F/S/Su
ENGR	1000	Engineering Success Skills	1	F/S	ENGR	1050	Intro to Engineering Design	1	F/S
2nd Year Fall (15 credits)					2nd Year Spring (18 credits)				
XXXX	XXXX	American Institutions	3	F/S/Su	MATH	1040	Statistical Inference	4	F/S/Su
MATH	2250	Linear Algebra & Differential Eq	4	F	ENGR	1030	CAD & Analysis using SolidWorks	3	F/S
PHYS	2220/25	Physics for Science & Engr II/Lab	5	F/S	ENGR	2030	Dynamics	3	F/S
ENGR	2010	Statics	3	F/S	ENGR	2140/45	Strength of Materials/Lab	4	F/S
					ENGR	2250/55	Electrical Circuits/Lab	4	F/S/Su
3rd Year Fall (16 credits)					3rd Year Spring (15 credits)				
XXXX	XXXX	GE Knowledge Area	3	F/S/Su	XXXX	XXXX	GE Knowledge Area	3	F/S/Su
ENGR	2170	Programming for Engineers	3	F/S	MATH	2210	Calculus III	4	F/S
ENGR	3000	Thermodynamics	3	F	ENGR	3030	Project Management	3	S
ENGR	4030/35	Electronics/Lab	4	F	ENGR	3050/55	Fluid Mechanics/Lab	4	S/Su
ENGL	3150	Grant & Technical Writing or	3	S			Free Elective	1	
COMM	4240	Technical Writing		F/S					
4th Year Fall (13 credits)					4th Year Spring (13 credits)				
XXXX	XXXX	GE Knowledge Area	3	F/S/Su	ENGR	4000/05	Mechatronics/Lab	4	S
ENGR	3010	Material Science	3	F	ENGR	4060/65	Manufacturing/Lab	3	S
ENGR	4025	Engr Capstone Design Lab I	3	F	ENGR	4085	Engr Capstone Design Lab II	3	S
UD	ELEC	Upper Division Elective	3	F/S	ENGR	4600	Electromagnetics	3	S

Color Key:

General Education Courses (green)

Major-required courses that also fulfill GE requirement (purple)

Major Courses (black)

Electives/minor/etc. (red)

► **Must pass or attempt the FE exam twice**