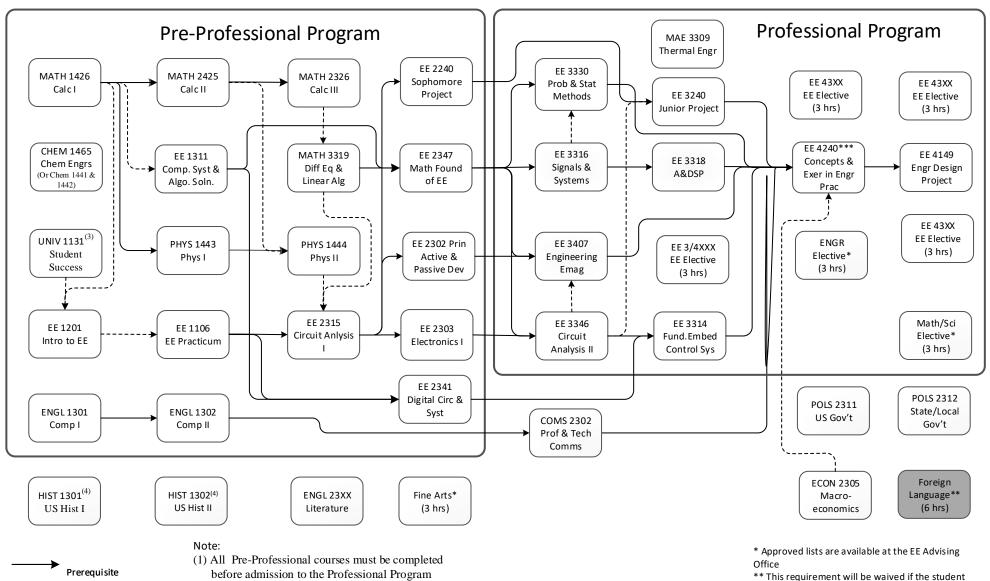
## BSEE Degree Plan (2021 – 2022)

Student Name

**UTA ID Number** 



- before admission to the Professional Program
- (2) Not all pre-regs are shown on this chart; check the online course catalog for more details
- (3) UNIV 1131 for Freshman only; for transfer student: ENGR 1101
- (4) Can be substituted with HIST 1331 and HIST 1332

has 2 High School Units of foreign language. \*\*\*EE4240 must be taken the semester before EE4149 and after completing all prerequisites. An EE proficiency exam will be administered prior to admission to this course and may determine concurrent enrollment in additional courses.

17 Hours

Prerequisite or

Concurrent Enrollment

18 Hours

16 Hours

17 Hours

16 Hours

14 Hours

14 Hours

13 Hours

# Bachelor of Science in Electrical Engineering Degree Plan Requirements Fall 2021 Catalog



Student Name:	UTA ID#:

In the tables below "T" is used to indicate transfer credits.

### General Education/Core Curriculum

т	Course	Hours Earned	Hours
	US History I*		3
	US History II*		3
	POLS 2311 Government of the US		3
	POLS 2312 State and Local Government		3
	Creative Arts*		3
	ENGL 1301 Rhetoric and Composition I		3
	ENGL 1302 Rhetoric and Composition II		3
	Literature or approved substitution		3
	ECON 2305 Princ of Macroeconomics		3
	COMS 2302 Prof & Tech Comm for Engr		3
	TOTAL General Education/Core		30

#### Mathematics

т	Course	Hours Earned	Hours
	MATH 1426 Calculus I		4
	MATH 2425 Calculus II		4
	MATH 2326 Calculus III		3
	MATH 3319 Diff Eqs & Linear Algebra		3
	TOTAL Mathematics		14

#### Science

Т	Course	Hours Earned	Hours
	CHEM 1465 Chemistry for Engineers		4
	PHYS 1443 General Technical Physics 1		4
	PHYS 1444 General Technical Physics 2		4
	TOTAL Science		12

## Foreign Language

- \_\_ Earned in High School,
- \_\_ Earned in College, or
- \_\_ Exempt (ESL)

#### Mathematics/Science

Т	Course	Hours Earned	Hours
	One Math/Science Elective Course		3
	TOTAL Math/Science Elective		3

## Engineering

т	Course	Hours Earned	Hours
	UNIV 1131 Student Success		1
	MAE 3309 Thermal Engineering		3
	One Engineering Elective Course		3
	TOTAL Engineering		7

## Major: Electrical Engineering

Т	Course	Hours Earned	Hours
	EE 1106 EE Freshman Practicum		1
	EE 1201 Introduction to EE		2
	EE 1311 Comp Sys & Algorithmic Solution		3
	EE 2240 Sophomore Project Laboratory		2
	EE 2302 Princ of Active & Passive Devices		3
	EE 2303 Electronics I		3
	EE 2315 Circuit Analysis I		3
	EE 2341 Digital Circuits & Systems		3
	EE 2347 Mathematical Foundation of EE		3
	EE 3240 Junior Project Laboratory**		2
	EE 3314 Fund of Embedded Contrl Sys**		3
	EE 3316 Cont & Disc Time Signal & Sys**		3
	EE 3318 Analog & Digital Signal Proc**		3
	EE 3330 Prob. & Statistical Methods**		3
	EE 3346 Circuit Analysis II**		3
	EE 3407 Engineering Electromagnetics**		4
	EE 4149 Concept & Exerc in Eng Prac**		1
	EE 4240 Engineering Design Project**		2
	Four EE Elective Courses**		12
	TOTAL Electrical Engineering		59

<sup>\*</sup> Refer to the UTA catalog (https://catalog.uta.edu/degreerequirements/generalcorerequirements/)

<sup>\*\*</sup>Professional Level Courses

## BS in Electrical Engineering Course Pre/Co-requisite Requirements 2021-2022

- This document lists all courses required for a BS degree in Electrical Engineering along with any required pre-requisites and co-requisites.
- For Texas Common Course Number (TCCN), visit <a href="https://www.uta.edu/admissions/apply/transfer/transfer-guides">https://www.uta.edu/admissions/apply/transfer/transfer-guides</a>. Scroll down the page to view "Current Transfer Guides." Prior to registering, confirm with your UTA advisor any courses you plan to take outside of UTA.
- This document lists three categories of course requirements: 1. General Education; 2. Pre-professional; and 3. Professional.
- To be eligible to enroll in College of Engineering (COE) pre-professional and/or professional level courses, must be in "good standing" with the College

#### 1. General Education

#### U.S. History

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
Any U.S. History course from the UTA approved list	None	ENGL 1301 (HIST 1301/2)	None
Any U.S. History course from the UTA approved list	None	ENGL 1301 (HIST 1301/2)	None

#### **Political Science**

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
POLS 2311 – Government of the United States	None	None	None
POLS 2312 – State and Local Government	None	None	None

#### Social/Behavioral Science

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
ECON 2305 – Principles of Macroeconomics	None	None	None

#### Creative Arts

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
Any Creative Arts course from the UTA approved list	Varies	Varies	Varies

## Language, Philosophy, Culture

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
English Literature or approved sub	Varies	Varies	Varies

## Communication

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
ENGL 1301 – Rhetoric and Composition I	None	None	None
ENGL 1302 – Rhetoric and Composition II	Grade of C or better in ENGL 1301	None	None
COMS 2302 – Professional and Technical Communication	ENGL 1301 and 1302	None	None

## Mathematics

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options	
MATH 1426 – Calculus I	MATH 1421 or ALEKS scores	None	None	
MATH 2425 – Calculus II	C or better in MATH 1426	None	None	
MATH 2326 – Calculus III	C or better in MATH 2425 or HONR- SC 2425	None	None	
MATH 3319 – Differential Equations & Linear Algebra	C or better in MATH 2326 or concurrent enrollment	None	None	
MATH Elective (3000-4000 level course)	Varies	Varies	SCIENCE Elective (3000-4000 level course)	

## Science

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
CHEM 1465 – Chemistry for Engineers	C or better in MATH 1322, MATH 1324, MATH 1421, MATH 1426, HONR-SC 1426, MATH 2425, or HONR-SC 2425	None	CHEM 1441 + 1442**
PHYS 1443 – Physics I with Lab	MATH 1426	None	None
PHYS 1444 – Physics II with Lab	PHYS 1443	MATH 2425	None

Engineering

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
Transfer Students: ENGR 1101 – Entrance to Engineering or Freshmen: UNIV 1131 – Student Success	None	None	None
MAE 3309 – Thermal Engineering	C or better in each of the following, CHEM 1465 (or concurrent enrollment) or CHEM 1441 and CHEM 1442 (or concurrent enrollment); MATH 2425 (or HONR-SC 2425) and PHYS 1444	None	None
ENGR Elective (3000-4000 level course)	Varies	Varies	None

2. Electrical Engineering Pre-Professional Engineering Courses

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
EE 1106 – Electrical Engineering Freshman Practicum	C or better in EE 1201 or concurrent enrollment	None	None
EE 1201 – Introduction to Electrical Engineering	C or better in MATH 1426 or concurrent enrollment	None	None
EE 1311 – Computing System and Algorithmic Solutions	C or better in MATH 1426 or concurrent enrollment	None	None
EE 2240 – Sophomore Project Laboratory	C or better in each of the following: EE 1311, EE 2315, EE 2303 (or concurrent enrollment), EE 2341 (or concurrent enrollment), and EE 2347 (or concurrent enrollment)	None	None
EE 2302 – Principles of Active and Passive Devices	C or better in both CHEM 1465 and EE 2315	None	None
EE 2303 – Electronics I	C or better in both EE 2315 and MATH 3319	None	None
EE 2315 – Circuit Analysis I	C or better in each of the following: EE 1106, MATH 2425, MATH 3319 (or concurrent enrollment) and PHYS 1444 (or concurrent enrollment)	None	None
EE 2341 – Digital Circuits and Systems	C or better in each of the following: EE 1311 and EE 2315 (or concurrent enrollment)	None	None

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
EE 2347 – Mathematical Foundation of Electrical Engineering	Grade of C or better in each of EE 1311, MATH 2325, and MATH 3319	None	None

## 3. Electrical Engineering Professional Engineering Courses (MUST BE ACCEPTED INTO THE EE PROFESSIONAL PROGRAM):

Course Required	Prerequisites	Corequisites*	UTA Alternative Course Options
EE 3240 – Junior Project Laboratory	C or better in each of the following: EE 2303, EE 2341, and EE 3346 (or concurrent enrollment).	None	None
EE 3314 – Fundamentals of Embedded Control Systems	C or better in each of the following: EE 2341, EE 3316, and EE 3318 (or concurrent enrollment).	None	None
EE 3316 – Continuous and Discrete Time Signals and Systems	C or better in each of the following: EE 2347 and EE 2315	None	None
EE 3318 – Analog and Digital Signal Processing	C or better in each of the following: EE 3316 and EE 3330 (or concurrent enrollment)	None	None
EE 3330 – Probability and Statistical Methods	C or better in each of the following: EE 2347 and EE 3316 (or concurrent enrollment)	None	None
EE 3346 – Circuit Analysis II	C or better in each of the following: EE 2347 and EE 2315	None	None
EE 3407 – Engineering Electromagnetics	C or better in each of the following: EE 2347, PHYS 1444, and EE 3346 (or concurrent enrollment)	None	None
EE 4149 – Engineering Design Project	C or better in EE 4240. Grade of C or better in all prior 3000 and 4000 level EE coursework.	None	None
EE 4240 – Concepts & Exercises in Engineering Practice	C or better in each of the following: COMS 2302, EE 3330, EE 3346, EE 3407, and ECON 2305	None	None
Electrical Engineering Elective 1	Varies	Varies	None
Electrical Engineering Elective 2	Varies	Varies	None
Electrical Engineering Elective 3	Varies	Varies	None
Electrical Engineering Elective 4	Varies	Varies	None

<sup>\*</sup>In order for a course to be considered a co-requisite, both courses must be registered for at UTA. \*\*UTA Alternative Course Options: CHEM 1441 + CHEM 1442 in place of CHEM 1465.