

•NASA, Department of Defense, Power & consulting companies

• Aerospace, Automotive, Manufacturing, Oil and Gas

•Global Awareness

•Teamwork

•Volunteering

•Critical Thinking

•Collaboration

•Confidence

•Leadership

•Problem-solving

•Communication

College of Engineering | New Engineering Building, Room 3.100G | 432-552-3453 | Jamali\_m@utpb.edu

Bachelor of Science in Electrical Engineering

COLLEGE OF ENGINEERING

Degree Map | 2020-2021

|  |  |  |  |
| --- | --- | --- | --- |
| **YOUR CLASS****SCHEDULE** | **ACADEMIC****ADVISING** | **ENRICHING****EXPERIENCES** | **LIFELONG****SUCCESS** |
| • Complete core courses recommended for your degree plan• Focus on English, Calculus, Chemistry, Physics, and Programming courses • Enroll in 16 credit hours in Fall semester and 17 credit hours in Spring semester. | • Participate in New Student Orientation• Meet with your Academic Advising Center Freshman Advisor before registration.• Ask you Advisor about the College of Engineering recommended core courses for your degree plan | • Explore student organizations such as Institute of Electrical and Electronics Engineers (IEEE) and Society of Professional Engineers | * Participate in non-engineering campus organizations.
* Attend various 0n-campus lectures
* Participate in sports activities
* Seek freshman research opportunities
 |
| • Complete core courses recommended for your degree plan• Complete Physics II and Fundamentals of Circuits Analysis courses. • Enroll in 15 credit hours in Fall semester and 17 credit hours in Spring semester. | • Meet with your Academic Advising Center Advisor before registration.• Ask your Advisor about the College of Engineering recommended core courses for your degree plan | * Explore student organizations
* Consider becoming officer in one of the student organizations
 | * Participate in non-engineering campus organizations.
* Attend various 0n-campus lectures
* Participate in sports activities
* Seek summer internship opportunities
 |
| • Focus on Electrical Engineering courses• Enroll in 16 credit hours both in Fall and spring semesters. | • Meet with your Electrical Engineering Academic Advisor before registration. | * Consider becoming officer in one of the student organizations such as IEEE and Society of Professional Engineers
 | * Participate in non-engineering campus organizations.
* Attend various 0n-campus lectures
* Participate in sports activities
* Seek summer internship opportunities
* Attend workshops on job hunting and job interviews
 |
| • Focus on Electrical Engineering courses• Enroll in 16 credit hours in Fall semester and 13 credit hours in Spring semester. | * Meet with your Electrical Engineering Academic Advisor before registration.
* Discuss senior design projects with your advisor.
 | * Consider becoming officer in one of the student organizations such as IEEE and Society of Professional Engineers
 | * Participate in non-engineering campus organizations.
* Attend various 0n-campus lectures
* Participate in sports activities
* Seek full time job opportunities
* Attend career fairs
 |



**Semester 1 F1 (Freshman semester 1) Semester 2 F2 (Freshmen semester 2)**

ENGL 1301 English Composition I ENGL 1302 English Composition II

HIST 1301 History of the U. S. to 1877 HIST 1302 History of the U. S. since 1877

MATH 2413 Calculus I EENG 1303 Object-Oriented Programming

CHEM 1311 General Chemistry I MATH 2414 Calculus II

CHEM 1111 General Chemistry I Laboratory PHYS 2325 University Physics I

PLSC 2305 American National Politics PHYS 2125 University Physics I Laboratory

(17 semester credit hours) (17 semester credit hours)

**Semester 3 S1 (Sophomore semester 1) Semester 4 S2 (Sophomore semester 2)**

MATH 2415 Calculus III EENG 3373 Engineering Probability and Statistics

PHYS 2326 University Physics II MATH 3320 Differential Equations

PHYS 2126 University Physics II Laboratory ENGR 2305 Fundamentals of Circuit Analysis

MATH 3310 Linear Algebra EENG 2105 Fundamentals of Circuits Lab

EENG 2320 Foundations of Electrical Engineering EENG 2310 Digital Circuits Design

PLSC 2306 State and Local Politics EENG 2110 Digital Circuits Laboratory

(17 semester credit hours) (14 semester credit hours)

**Semester 1 J1 (Junior semester 1) Semester 2 J2 (Junior semester 2)**

EENG 3303 Electromagnetics EENG 3309 Electronic Circuits Analysis II

EENG 3380 Signals and Systems EENG 3314 Design Methods in Electrical Engineering

EENG 3304 Electric Circuits II EENG 3307 Microprocessors

COMM 1314 Intro to Public Speaking EENG 4330 Electric Machines

EENG 3306 Electronic Circuits Analysis I ENGR 4195 Professional Practice

EENG 3106 Electronic Circuits Analysis I Lab ENGL 23xx Language/Philosophy/Cultural Course

(16 semester credit hours) (16 semester credit hours)

**Semester 3 S1 (Senior 1 semester 3) Semester 4 S1 (Senior 2 semester 4)**

EENG 4325 Communication Theory EENG 4460 Senior Design

EENG 4310 Electric Power Systems EENG 43xx Technical Elective

EENG 4110 Electric Power Systems Laboratory EENG 43xx Technical Elective

EENG 43xx Technical Elective Social and Behavioral Science Course (3 credit hour

EENG 4340 Control Systems (13 semester credit hours)

Visual/Performing Arts (3 credit hours)

(16 semester credit hours)

College of Engineering | New Engineering Building, Room 3.100G | 432-552-3453 | Jamali\_m@utpb.edu

**Bachelor of Science in Electrical Engineering (BSEE) REQUIREMENTS**

Bachelor of Science in Electrical Engineering

College of Engineering

Degree Map | 2020-2021