Bachelor of Science in Engineering Innovation and Leadership (Mechanical Engineering Concentration Starting with Calculus)

Required Semester Credit Hours (SCH): 125

Refer to the University Catalog for all degree requirements at catalog.utep.edu.

Many core curriculum courses are also offered in the summer (Su). Students are encouraged to register early and check Goldmine for course availability.

The flowchart below may not reflect all student schedules; courses can be shifted to different semesters where applicable.

**Foundational Math & Science**
- **MATH 1312** Calculus II
- **MATH 2313** Calculus III
- **MATH 2326** Engineering Mathematics
- **MATH 3323** Matrix Algebra

**Engineering Leadership Major**
- **MECH 1321** Mechanics I: Statics
- **MECH 2311** Intro to Thermal-fluid Sci
- **MECH 2322** Mechanics of Materials
- **MECH 3312** Thermodynamics
- **MECH 3340** Mechanics II-Dynamics
- **MECH 3373** IE 3373*, or EE 3384*

**Computer Programming**
- **CS 1320** Computer Programming

**Foundational Core Curriculum**
- **RWS 1301** Rhetoric and Comp. I
- **RWS 1302** Rhetoric and Comp. II
- **PHYS 2320 & 2120** Introductory Mechanics & Lab
- **MATH 1411** Calculus
- **MATH 2313** Engineering Mathematics

**University Core Curriculum**
- **RWS 1301** History of U.S. to 1865
- **RWS 1302** History of U.S. since 1865
- **COMP 1306** Intro to Computing
- **PHIL 2306** Ethics

**Sophomore Year**
- **PHYS 2321** Introductory Electromagnet & Lab
- **PHYS 3321** Electricity & Magnetism
- **PHYS 3322** Electronics
- **PHIL 3306** Philosophy

**Junior Year**
- **MECH 3312** Thermodynamics
- **MECH 3340** Mechanics II-Dynamics
- **MECH 3373** IE 3373*, or EE 3384*
- **MECH 3374** Fluid Mechanics

**Senior Year**
- **MECH 3313** Heat Transfer
- **MECH 3314** Fluid Mechanics
- **MECH 3315** Heat Transfer

**Sample Degree Plan**

Catalog Year 2023-2024

Sample Degree Plan

See University Catalog

*F/S/S indicates the semesters Fall/Spring/Summer.

*C or better required.

Arrow indicates a prerequisite.

Color-coded boxes group the course subject.

Last Updated: May 2023