Bachelor of Science in Engineering Innovation and Leadership (Civil Engineering Concentration Starting with Precalculus)

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.

Degree Prerequisites

- MATH 1508: Precalculus or MATH 1310: Trigonometry & Conics with Precalculus

University Core Curriculum*

- Foundational
  - University Core Curriculum
  - Engineering Leadership Major
  - Math/Science
    - MATH 1411: Calculus
    - MATH 1312*: Calculus II
    - MATH 2313*: Calculus III
    - MATH 2326*: Differential Equations
    - CHEM 1305: General Chemistry
  - Rhetoric and Comp. I
  - History of U.S. to 1865
  - Computer Programming
  - Introductory Mechanics
  - Fundamentals of Lead Design & Practice
  - Intro to Fluid Mechanics

Freshman Year

- First Semester
  - MATH 1411: Calculus
  - RWS 1301: Rhetoric and Comp. I
  - HIST 1301: History of U.S. to 1865
  - CS 1320: Computer Programming

- Second Semester
  - MATH 1312*: Calculus II
  - PHYS 2320 & 2120: Introductory Mechanics & Lab
  - PHYS 2321 & 2121: Introductory Electromagnet & Lab
  - EL 1301: Eng. Innovation & Lead
  - EL 1302: Rhetoric and Comp. II

Sophomore Year

- First Semester
  - MATH 1326*: Engineering Fundamentals
  - PHYS 2330: Engineering Measurements
  - PHIL 2306
  - History of U.S. since 1865
  - Introductory Mechanics

- Second Semester
  - MATH 1312*: Calculus II
  - PHYS 2320 & 2120: Introductory Mechanics & Lab
  - PHYS 2321 & 2121: Introductory Electromagnet & Lab
  - EL 1301: Eng. Innovation & Lead

Junior Year

- First Semester
  - MATH 2326*: Differential Equations
  - CE 2315*: Statics
  - CE 2304: Mechanics of Materials

- Second Semester
  - MATH 2326*: Differential Equations
  - CE 2334*: Mechanics of Materials
  - CE 2338 or MECH 2340
  - CE 2375

Senior Year

- First Semester
  - EL 4395*: Prof Practice II
  - EL 4396*: Capstone Project
  - CE Upper Division Technical Elective

- Second Semester
  - EL 3005*: Capstone Project
  - EL 4171: Engineering Ed and Lead Problems
  - CE Upper Division Technical Elective

Color-coded boxes group the course subject.

- Foundations of Math/Science
- University Core Curriculum
- Engineering Leadership Major

F/Sp/Su indicates the semesters Fall/Spring/Summer.

* C or better required.
** SCH Not counted in total degree required semester credit hours.

Catalog Year 2022-2023

Sample Degree Plan

Last Updated: January 2022