Bachelor of Science in Metallurgical and Materials Engineering (Starting with Precalculus)

Required Semester Credit Hours (SCH): 128

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.

Concentration areas include: Forensic Engineering and Materials Performance; Extractive and Process Metallurgy; Biomaterials; and General Metallurgical and Materials Engineering.

---

**Foundational University Core Curriculum**

- **First Semester**
  - MATH 1312: Calculus II (F/Sp/Su)
  - MATH 2326: Calculus III (F/Sp/Su)
  - PHYS 2320 & 2120: Introductory Mechanics (F/Sp/Su)
  - PHYS 2321 & 2121: Introductory Electromagnetism (F/Sp/Su)
  - MME 3309*: Heat, Elect Mat., & Devices (F/Sp/Su)
  - MME 3306*: Rate Processes (F/Sp/Su)
  - MME 3205*: Intro to Materials Sci., Eng., & Design (F/Sp/Su)

- **Second Semester**
  - MME 3406*: Mat. Science & Engineering (F/Sp/Su)
  - MME 3407*: Mod. Beh. of Mat. & Devices (F/Sp/Su)
  - MME 3413*: Mat. Characterization (F/Sp/Su)
  - MME 3308*: Applied Chemical Thermodynamics (F/Sp/Su)
  - MME 3315*: Senior Prof. Orientation (F/Sp/Su)
  - MME 3304*: Senior Project 1 (F/Sp/Su)
  - MME 4220: Senior Design Project 2 (F/Sp/Su)

---

**Major Courses**

- **First Semester**
  - MME 1205*: Computation & Graphics in Mat. Sciences (F/Sp)
  - MME 1210: Sophomore Design (F/Sp)
  - MME 1211: Internship (F/Sp)
  - MME 1405*: Intro to Metal Mat. Engr. Design & Lab. (F/Sp)
  - MME 1406*: Intro to Metal Mat. Design & Lab. (F/Sp)
  - MME 1407*: Intro to Metal Mat. Design & Lab. (F/Sp)

- **Second Semester**
  - MME 2210: Intro to Metal Mat. Design & Lab. (F/Sp)
  - MME 2211: Internship (F/Sp)
  - MME 2212: Intro to Metal Mat. Design & Lab. (F/Sp)
  - MME 2213: Intro to Metal Mat. Design & Lab. (F/Sp)

---

**Concentration Areas**

- Forensic Engineering and Materials Performance
- Extractive and Process Metallurgy
- Biomaterials
- General Metallurgical and Materials Engineering

---

*C or better required.

**Not counted in total degree required semester credit hours.

Arrow indicates a prerequisite.

Color-coded boxes group the course subject.

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

---

Last Updated: May 2023