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

Required Semester Credit Hours (SCH): 120

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 (3SCH)
- MATH 2313* Calculus III (3SCH)
- CHEM 1305 General Chemistry (3SCH)

University Core Curriculum*

- MATH 1411 Calculus (3SCH)
- PHYS 2420 Introductory Mechanics (3SCH)
- PHYS 2421 Introductory Electromagnet (3SCH)
- MME Elective (3SCH) With Advisor Approval
- HIST 1301 History of U.S. to 1865 (3SCH)
- HIST 1302 History of U.S. since 1865 (3SCH)

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- RWS 1301 Rhetoric and Comp. I (3SCH)
- RWS 1302 Rhetoric and Comp. II (3SCH)
- CE 2236 Econ for Engrs & Scientists (3SCH)
- CS 1320 Computer Programming for Sci/Engr (3SCH)
- MME Elective (3SCH) With Advisor Approval

Freshman Year

First Semester

- MATH 1312* Calculus II (F/Sp)
- RWS 1301 Rhetoric and Comp. I (F)
- HIST 1301 History of U.S. to 1865 (F)
- MME Elective (F)

Second Semester

- MATH 1313* Calculus III (F)
- MATH 2313* Calculus III (S)
- MATH 2326* Differential Equations (S)
- MME Elective (S)

Sophomore Year

First Semester

- EL 1301 Engr Innovation & Lead (F/Sp)
- PHYS 2420 Introductory Mechanics (F)
- PHYS 2421 Introductory Electromagnet (F)

Second Semester

- MATH 1411 Calculus (F)
- PHYS 2420 Introductory Mechanics (S)
- RU 1301 Rhetoric and Comp. II (S)
- MME Elective (S)

Junior Year

First Semester

- EL 2301* Modeling and Simulation (Fall/Spring/Summer)
- EL 3302* Engineering Measurements (Fall)
- CE 2377 or MECH 2342 (Fall)
- MME 2303 Intro to Materials Sci & Engineering (Fall)

Second Semester

- EL 3303* Professional Practice I (Fall)
- EL 3331* Engr Design:People to Prod (Fall)
- CE 2377 or MECH 2342 (Spring)
- MME 2434 Mechanics of Materials (Spring)

Third Semester

- EL 3332* Engr Entr: Prod to People (Fall)
- EL 3333* Engr Entr: Prod to People (Spring)
- MME 2305 Material & Energy Balance (Spring)
- MME 4316 Failure Analysis (Summer)

Senior Year

First Semester

- EL 3003* Elective (Fall)
- EL 3005* Elective (Fall)
- MME Elective (Fall)

Second Semester

- EL 3005* Elective (Spring)
- EL 3005* Elective (Summer)
- MME Elective (Summer)

Third Semester

- EL 3005* Elective (F/Sp/Su)
- MME Elective (F/Sp/Su)
- MME Elective (F/Sp/Su)

Fourth Semester

- MME 4316 Failure Analysis (F)
- CS 1320 Computer Programming for Sci/Engr (S)
- CS 1320 Computer Programming for Sci/Engr (S)