The flowchart below may not reflect all student schedules; courses can be shifted to different semesters where applicable. Many core curriculum courses are also offered in the summer (Su). Students are encouraged to register early and check Goldmine for course availability.

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

Bachelor of Science in Industrial and Systems Engineering (Starting with Calculus)

Required Semester Credit Hours (SCH): 120

* Required Semester Credit Hours (SCH): 120

Bachelor of Science in Industrial and Systems Engineering (Starting with Calculus)

Freshman Year
First Semester
- MATH 1411 Calculus I
- RWS 1301 Rhetoric & Composition I
- UNIV 1301 Seminar Inquiry
- CHEM 1305 & 1105 General Chemistry & Lab

Second Semester
- MATH 1412 Calculus II
- PHYS 2420 Introductory Mechanics
- COMM 1302 Business/Profession Comm
- MME 2303 or MECH 2331*

Sophomore Year
First Semester
- MECH 1305 Graphic & Design Fundamentals
- MECH 1321* or CE 2315*
- MECH 2333 Decision Support Systems
- MATH 1312* Calculus II

Second Semester
- MATH 2313* Calculus III
- MECH 2342*, or EE 2350
- MECH 2315* or CE 2315*
- MATH 3323* Matrix Algebra

Junior Year
First Semester
- MATH 2326* Numerical Analysis
- IE 3373* Engr Prob. & Stat Models
- IE 3374 Intro to Work Design
- IE 3375 Systems Engineering

Second Semester
- IE 4343 Work Design- Prod & Safety
- IE 4345 Industrial Systems Sim.
- IE 4390 Probabilistic Operations Res
- IE 4385 Statist Quality Cntr/Reliabil

Senior Year
First Semester
- IE 3390 Operations Research I
- IE 4391 Production & Inventory Ctrl
- IE 4392 Statistics

Second Semester
- IE 4393 Data Analysis & Applications
- IE 4266 Senior Design
- IE 4267 Professional Practicum
- IE 4268 Senior Design

* C or better required.

Arrow indicates a prerequisite.

Color-coded boxes group the course subject.

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

Last Updated: January 2022