Bachelor of Science in Engineering Innovation and Leadership (Computer Science Concentration)

Required Semester Credit Hours (SCH): 125

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.

Sample Degree Plan 2021-2022

Degree Prerequisite

Math/Science

Foundational Engineering Leadership Major

Math/Science

University Core Curriculum

Freshman Year

First Semester (3-5 SCH)**

Math 1310

Calculus

Freshman Year

Second Semester (16 SCH)

RWS 1301

Rhetoric and Comp. I

Sophomore Year

First Semester (17 SCH)

HIST 1302

History of U.S. since 1865

Sophomore Year

Second Semester (16 SCH)

PHYS 2420

Introductory Mechanics

Junior Year

First Semester (6 SCH)

PHYS 2421

Introductory Electromagnetism

Junior Year

Second Semester (9 SCH)

CE 2276

Econ for Engrs & Scientists

Senior Year

First Semester (0 SCH)

PHIL 2306

Ethics

Senior Year

Second Semester (15 SCH)

Senior Year

Third Semester (13 SCH)

Senior Year

Third Semester (13 SCH)

Degree Prerequisite

MATH 1508

Precalculus

or

MATH 1310

Trigonometry & Conics

RWS 1301

Rhetoric and Comp. I

HIST 1301

History of U.S. to 1865

COMM 1302

Bus. and Prof. Comm.

EL 1301

Intro to Engineering Innovation and Leadership

CS 1401

Intro to Computer Science

Sophomore Year

Second Semester (16 SCH)

Math 1411

Calculus II

Sophomore Year

Second Semester (16 SCH)

Math 2300

Discrete Mathematics

Math 2326*

Differential Equations

Math 3323*

Matrix Algebra

Junior Year

First Semester (0 SCH)

EL 1402

Eng Design: People to Product

EL 3305*

Professional Practice I

MME 2303

Intro to Materials Sci and Engineering

Emphasis Elective

Senior Year

First Semester (0 SCH)

EL 3311*

Eng Design: People to Product

EL 3322*

Professional Practice II

MECH 2311

Intro to Thermal Fluid Science

Senior Year

Second Semester (17 SCH)

EL 3373*

Eng Prob. & Stat Models

PHIL 2306

Ethics

Senior Year

Third Semester (15 SCH)

CHEM 1305

General Chemistry

SE 3377 or MECH 2342

Summer

CE 2277

Conf. in Engineering Innovation and Leadership

Summer

PHIL 2306

Ethics

Summer

EL 4395*

CD I, Develop & Evaluation

Summer

EL 4396*

CD II, Develop & Evaluation

Summer

EL 4411*

Eng, Ed, and Lead Problems

See University Catalog

See University Catalog

See University Catalog

See University Catalog

See University Catalog

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

* C or better required.

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

Arrow indicates a prerequisite.

Color-coded boxes group the course subject.