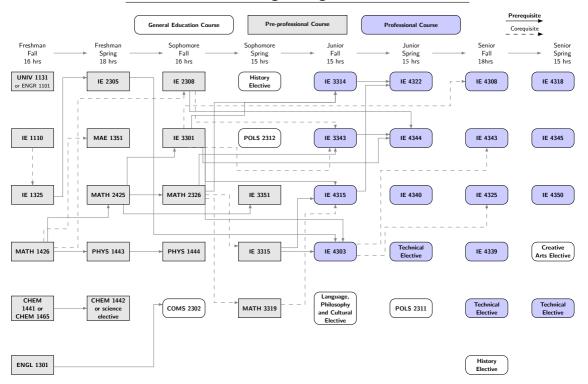
2025-2026 Industrial Engineering Curriculum Flow Chart



Notes: 1. To be in good academic standing within the IMSE department, each student must maintain a minimum 3-GPA calculation of 2.50 in the pre-professional program. In addition, there may be no more than four repeats of pre-professional engineering courses. In the professional program, each student must maintain a minimum UTA cumulative GPA of 2.0 and a minimum major GPA of 2.0. 2. No professional course may be taken unless the student is admitted into the professional program or obtains the consent of the Undergraduate Advisor. Professional courses may be taken to fill out a schedule in the semester that the last pre-professional course is taken. 3. Most professional courses are offered only once a year. Students are urged to plan their course sequence schedules carefully to avoid delaying their graduation.

BS in Industrial Engineering - Course Requirement Details

Freshman Fall – 16 Hours

Pre-Professional Courses:

UNIV 1131 or ENGR 1101 IE 1110 – Corequisite: IE 1325

IE 1325 MATH 1426

CHEM 1441 or CHEM 1465

ENGL 1301

Freshman Spring – 18 Hours

Pre-Professional Courses:

IE 2305– Prerequisite: IE 1325
MAE 1351– Corequisite: MATH 1426
MATH 2425– Prerequisite: MATH 1426
PHYS 1443– Prerequisite: MATH 1426

CHEM 1442 or science elective—Prerequisite: CHEM 1441 or CHEM 1465

Sophomore Fall – 16 Hours

Pre-Professional Courses:

IE 2308- Corequisite: MATH 1426
IE 3301- Prerequisite: MATH 2425
MATH 2326- Prerequisite: MATH 2425
PHYS 1444- Prerequisite: PHYS 1443
General Education Courses:
COMS 2302 - Prerequisite: ENGL 1301

Sophomore Spring – 15 Hours

Pre-Professional Courses:

IE 3351- Prerequisite: Math 2425
IE 3315 – Corequisite: MATH 2326
MATH 3319 – Corequisite: MATH 2326
General Education Courses:

History Elective POLS 2312

Junior Fall - 16 Hours

Professional Courses:

IE 3314– Prerequisites: IE 3301, MATH 2326 IE 3343 – Prerequisite: Math 2326; Corequisites:

IE 2308, IE 3301

IE 4315 – Prerequisites: IE 3301, IE 3315;

Corequisite: Math 3319

IE 4303- Prerequisites: IE 2305, IE 3301, IE

3315

General Education Course:

Language, Philosophy and Cultural Elective

Junior Spring – 15 Hours

Professional Courses:

IE 4322– Prerequisites: IE 3314, IE 4315 IE 4344– Prerequisites: IE 2308, IE 3343, IE

3301 IE 4340

One Technical Elective

General Education Courses:

POLS 2311

Senior Fall – 18 Hours

Professional Courses:

IE 4308– Corequisite: IE 3301 IE 4343– Corequisites: IE 4303 IE 4325 – Corequisite: IE 4303

IE 4339

One Technical Elective

General Education Courses

History Elective

Senior Spring – 15 Hours

Professional Courses:

IE 4318 IE 4345

IE 4350 - Prerequisite: All required 4000 level IE

courses or concurrent enrollment

One Technical Electives

General Education Courses:

Creative Arts Elective