Sample Plan of Study

Sample plans represent one way to complete a program of study. Actual course selection and sequence will vary and should be discussed with an academic advisor. For additional sample plans, see MyUI.

First Year

Fall
- MATH:1550 Engineering Mathematics I: Single Variable Calculus 4
- CHEM:1110 Principles of Chemistry I 4
- ENGR:1100 Introduction to Engineering Problem Solving 3
- ENGR:1300 Introduction to Engineering Computing 3
- ENGR:1000 Engineering Success for First-Year Students 1

Spring
- RHET:1030 Rhetoric 4
- PHYS:1611 Introductory Physics I 4
- MATH:1560 Engineering Mathematics II: Multivariable Calculus 4
- MATH:2550 Engineering Mathematics III: Matrix Algebra 2
- CS:1210 Computer Science I: Fundamentals 4

Second Year

Fall
- GE: Approved Course Subjects 3
- MATH:2560 Engineering Mathematics IV: Variable Calculus 3
- PHYS:1612 Introductory Physics II 4
- ENGR:2120 Electrical Circuits 3
- ENGR:2730 Computers in Engineering 3

Spring
- GE: Diversity, Equity, and Inclusion 3
- CS:2210 Discrete Structures 3

Third Year

Fall
- GE: Engineering Be Creative 3
- STAT:2020 Probability and Statistics for the Engineering and Physical Sciences 3
- ECE:3320 Introduction to Digital Design 3
- ECE:3330 Introduction to Software Design 3
- Focus Area: computer science elective 3 - 4
- ECE:3000 Electrical and Computer Engineering Professional Seminar 1

Spring
- GE: Approved Course Subjects 3
- CS:3330 Algorithms 3
- CS:3820 Programming Language Concepts 3
- ECE:3350 Computer Architecture and Organization 3
- ECE:3360 Embedded Systems 3
- Focus Area: additional elective 2

Fourth Year

Fall
- CS:3620 Operating Systems 3
- ECE:3540 Communication Networks 3
- ECE:4880 Principles of Electrical and Computer Engineering Design 3
- Focus Area: ECE elective 3 - 4
- Focus Area: additional elective 3

Spring
- GE: Approved Course Subjects 3
- ECE:4890 Senior Electrical and Computer Engineering Design 3
- Focus Area: theory elective 3
- Focus Area: advanced computer science elective 3 - 4
- Focus Area: ECE course numbered 5001-5995 3
- Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)

Total Hours 129-132

Notes:
- a Typically this course is offered in fall and spring semesters. Check MyUI for course availability since offerings are subject to change.
- b Enrollment in math courses requires completion of a placement exam.
- c Typically this course is offered in fall, spring, and summer sessions. Check MyUI for course availability since offerings are subject to change.
- d Enrollment in chemistry courses requires completion of a placement exam.
- e Typically this course is offered in fall semesters only. Check MyUI for course availability since offerings are subject to change.
- f See General Catalog for list of approved course subjects.
- g Students select a course from one of two GE CLAS Core areas: Diversity and Inclusion or Values and Culture.
h. See General Catalog for list of approved courses. Students who intend to enroll in a Be Creative course with prerequisites must request a waiver by completing the Request Prerequisite Special Permission form on MyUI.

i. Students choose two focus area electives from computer science courses not already required for the major. At least one course must be considered advanced for the elective; see General Catalog for criteria. See the Department of Electrical and Computer Engineering website or consult an advisor for more information.

j. Typically this course is offered in spring semesters only. Check MyUI for course availability since offerings are subject to change.

k. Students select additional courses to reach a minimum of 17 s.h. in focus area electives. See General Catalog, the Department of Electrical and Computer Engineering website, or consult an advisor for more information.

l. Students choose two focus area electives from courses with prefix ECE not already required for the major. One must be a course numbered 3400 or above. At least one of the two must be numbered between 5001-5995. Students must consult an academic advisor and gain approval from the undergraduate curriculum chair to count ECE:5998 toward this requirement. See General Catalog, the Department of Electrical and Computer Engineering website, or consult an advisor for more information.

m. See General Catalog for list of approved courses. Specific recommendations vary based on focus area.

n. Please see Academic Calendar, Office of the Registrar website for current degree application deadlines. Students should apply for a degree for the session in which all requirements will be met. For any questions on appropriate timing, contact your academic advisor or Graduation Services.