## Computer Engineering

*Catalog Year 2025-2026*

*Note: This is a recommended sequence and shifts are likely to occur due to prerequisite completion and course availability.*

| Semester One | Semester Two |
|---|---|
| CHEM 1127Q: General Chemistry I (4 credits) (TOI 6) | PHYS 1501Q: Physics for Engineers I (4 credits)(TOI 6) |
| MATH 1131Q: Calculus I (4 credits) | MATH 1132Q: Calculus II (4 credits) |
| CSE 1010: Intro to Computing for Engineers (3 credits) | CSE 2050: Data Structures & O. O. Design (3 credits) |
| ENGR 1000: Orientation to Engineering (1 credit) | ENGL 1007: Writing and Composition (4 credits) |
| ENGR 1195: AI4All (2 credits) | TOI Course (3 credits) |
| **14 credits** | **18 credits** |

| Semester Three | Semester Four |
|---|---|
| MATH 2110Q: Multivariable Calculus (4 credits) | MATH 2410Q: Elem. Differential Equations (3 credits) |
| PHYS 1502Q: Physics for Engineers II (4 credits)(TOI 6) | ECE 2001: Electrical Circuits (4 credits) |
| CSE 3100: Systems Programming (3 credits) | CSE 2500: Intro to Discrete Systems (3 credits) |
| CSE 2301: Prin. & Prac. Of Digital Logic Des. (4 credits) | TOI Course (3 credits) |
| | TOI Course (3 credits) |
| **15 credits** | **16 credits** |

| Semester Five | Semester Six |
|---|---|
| ECE 3101: Signals & Systems (3 credits) | ECE 3401: Digital Systems Design (3 credits) |
| ECE 3201: Electronic Circuit Des. & Analys. (4 credits) | CSE 4300: Operating Systems (3 credits) |
| CSE 3150: C++ Essen. **or** CSE 3160: Funct. Prog. Fund.(3 credits) | ECE 3411: Microproc. App. Lab (3 credits) |
| CSE 3666: Intro to Computer Architecture (3 credits) | STAT 3345Q: Probability Models for Engin. (3 credits) |
| MATH 2210Q: Applied Linear Algebra (3 credits) | TOI Course (3 credits) |
| **16 credits** | **15 credits** |

| Semester Seven | Semester Eight |
|---|---|
| ECE 4901: ECE Design I (2 credits) | ECE 4902: ECE Design II (3 credits) |
| ECE 4900W: Communic. Engineer. Solutions (1 credit) | ECE 3421: VLSI Design & Simulation (4 credits) |
| CSE 4302: Adv. Computer Architecture (3 credits) | Professional Requirement (3 credits) |
| Professional Requirement (3 credits) | Professional Requirement (3 credits) |
| Design Laboratory (3 credits) | Free Elective* (1 credit) |
| TOI Course (3 credits) | |
| **15 credits** | **14 credits** |

*as needed to reach total degree credits

**Total Credits: 126**

# College of Engineering
## Common Curriculum Requirements Check List

Qualifying MPE Score: _____

*22+ needed to register for MATH 1131Q and MATH 1132Q

**Competencies:**

☐ Language met

    <u>If not met:</u>

      ▪ Elementary I _____ AND Elementary II _____

      ▪ OR Intermediate 1_____

☐ ENGL 1007 or 1010 or 1011

☐ Writing (W course in major): _____

☐ *Writing (W course): _____

*Can complete second W course in one of the below TOIs

**Topic of Inquiry 1:** *Creativity: Design, Expression, Innovation*

☐ TOI 1 Course *(3 credits)*: _____

**Topic of Inquiry 2:** *Cultural Dimensions of Human Experiences*

☐ TOI 2 Course *(3 credits)*: _____

**Topic of Inquiry 3:** *Diversity, Equity, and Social Justice*

☐ TOI 3 Course *(3 credits)*: _____

**Topic of Inquiry 4:** *Environmental Literacy*

☐ TOI 4 Course *(3 credits)*: _____

**Topic of Inquiry 5:** *Individual Values and Social Institutions*

☐ TOI 5 Course *(3 credits)*: _____

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**Total Subject Areas in TOIs**

☐ Need at least 6 different subjects

    ○ Total subject areas completed: _____ out of 6 subjects

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**Topic of Inquiry 6:** *Science & Empirical Inquiry - Laboratory*

☐ TOI 6 Course *(4 credits)* and <u>Focus Area</u> (*9 minimum credits in single TOI*) **fulfilled** through completion of CoE lab science requirements

    Lab #1: _____, Lab #2: _____, Lab #3: _____

**<u>Important Notes:</u>**

    Approved TOIs & Competencies can be found in University Undergrad Catalog:
    https://catalog.uconn.edu/undergraduate/common-curriculum-appendix/