Requirements for a Minor in Computer Engineering

A Minor in Computer Engineering is earned through completion of 20 credits. Twelve credits must be unique to the minor and may not count toward the fulfillment of majors or additional minors. No more than 8 credits can be used to satisfy the student’s major degree program requirements.

- Five courses (20 credits) selected from the list below.

- Students are expected to obtain the necessary background (prerequisites or equivalents) to complete chosen courses in the minor program.
- A minimum 2.00 GPA is required in the courses used to satisfy the minor, with no grade less than a C–.
- Students must have a declared major on record in order to apply for a minor in Computer Engineering.
- Applications for a Minor in Computer Engineering must be approved by the Associate Chair of Electrical & Computer Engineering Undergraduate Programs.
- Students planning to pursue a minor in Computer Engineering should apply as early as possible—or by May 1 of the junior year—to facilitate course planning.

The following courses may be used to satisfy the requirements of the CE minor:

- **ENG EC 311**: Logic Design
- **ENG EC 327**: Software Engineering
- **ENG EC 330**: Applied Algorithms for Engineers
- **ENG EC 413**: Computer Organization
- **ENG EC 440**: Introduction to Operating Systems
- **ENG EC 441**: Introduction to Computer Networking
- **ENG EC 444**: Smart and Connected Systems
- **ENG EC 447**: Software Design
- **ENG EC 504**: Advanced Data Structures
- **ENG EC 512**: Enterprise Client-Server Software Systems
- **ENG EC 513**: Computer Architecture
- **ENG EC 521**: Cybersecurity
- **ENG EC 526**: Parallel Programming
- **ENG EC 527**: Higher Performance Programming w/ Multicore
- **ENG EC 528**: Cloud Computing
o **ENG EC 535**: Introduction to Embedded Systems
o **ENG EC 541**: Computer Communications Networks
o **ENG EC/ME/SE 544**: Network Physical World
o **ENG EC 551**: Advanced Digital Design
o **ENG EC/BE 552**: Computational Synthetic Biology
o **ENG EC 571**: Digital VLSI Circuit Design
o Students may select no more than one of the following:
  ▪ **CAS CS 320**: Concepts of Programming Languages
  ▪ **CAS CS 350**: Fundamentals of Computing Systems
  ▪ **CAS CS 410**: Advanced Software Systems
  ▪ **CAS CS 411**: Software Engineering

Please reference the [list of duplicate classes](#) when planning your minor.