COMPUTER SCIENCE MINOR

College of Arts and Sciences, College of Engineering

Program Website (https://www.cs.cornell.edu/undergrad/csminor/)

Program Description

Students affiliated with all majors except the Computer Science (CS) and Information Science, Systems, and Technology (ISST) majors are eligible to participate in this minor. This minor is for students who anticipate that computer science will play a prominent role in their academic and professional career. Completion of a Computer Science minor, with a well-selected set of classes, can serve as good preparation for further study in computer science through our two-semester Master of Engineering (M.Eng.) program, or our four-semester Master of Science (MS) program.

The Computer Science minor is for students who anticipate that computer science will have a prominent role to play in their academic and professional career. It is designed for students in all majors to supplement their primary studies. Computer science is applicable to almost any major and career choice; from Communication, Psychology, and Law to Architecture, Music, and Engineering. The theoretical foundations of information and computation provide students with the appropriate skills for academic and professional careers. Completion of the CS minor, with a well-selected set of classes, can serve as good preparation for further study through our 2-semester CS M.Eng program or our 4-semester MS program.

The CS minor is available to Cornell undergraduate students except CS majors and ISST majors.

Academic standards

- At least a letter grade of C is required for each course in the minor.
- All qualifying courses must be taken at Cornell for a letter grade.
- No substitutions allowed.

Minor Requirements

At least six courses (18 credits) chosen as follows:

Required Courses

Code	Title	Hours
Select one of the following:		
CS 2110	Object-Oriented Programming and Data Structures	
CS 2112	Object-Oriented Design and Data Structures - Honors	
ENGRD 2140	Computer Systems Programming	
Select one of the following:		4
CS 3110	Data Structures and Functional Programming	
CS 3410	Computer System Organization and Programming	
CS 3420	Embedded Systems	

Additional Courses

Code	Title	Hours
CS non-seminar courses at a 3000-level or higher [1]		4 Courses

[1] with the following exceptions:
Allowed:

CS 2800 Mathematical Foundations of Computing or CS 2802 Mathematical Foundations of Computing - Honors
Not Allowed:
CS 4090 Teaching Experience in Computer Science, CS 4997 Practical Training in Computer Science, CS 4998 Team Projects, CS 4999 Independent Reading and Research.

Note

Cross-listed courses cannot be applied to the minor unless taken under the CS rubric, with the exceptions of ECE 2400 Computer Systems Programming and ECE 3140 Embedded Systems and CS courses also listed as ENGRD.

Graduation Requirements for Engineering Minor Degree Programs

Requirements

Students may pursue minors in any department in any college that offers them, subject to limitations placed by the department offering the minor or by the students' major. Completed minors will appear on the student's transcript. Not all departments offer minors. Additional information on specific minors can be found above, in the *Engineering Undergraduate Handbook*, in the undergraduate major office of the department or school offering the minor, and in Engineering Advising.

An engineering minor recognizes formal study of a particular subject area in engineering normally outside the major. Students undertaking a minor are expected to complete the requirements during the time of their continuous undergraduate enrollment at Cornell. Completing the requirements for an engineering minor (along with a major) may require more than the traditional eight semesters at Cornell. However, courses that fulfill minor requirements may also satisfy other degree requirements (e.g., distribution courses, advisor-approved, or major-approved electives), and completion within eight semesters is possible.

An engineering minor requires:

- successful completion of all requirements for an undergraduate degree.
- enrollment in a major that approves participation in the minor.
- satisfactory completion of six courses (at least 18 credits) in a college-approved minor.

Students may apply for certification of a minor at any time after the required course work has been completed in accordance with published standards. An official notation of certification of a minor appears on the Cornell transcript following graduation.