



Welcome to the Electrical Engineering and Computer Science Department!

Working toward your Minor in Computer Science is a smart way to broaden your horizons and make yourself more marketable to employers. As a CS Minor, you are welcome (and encouraged) to schedule an appointment with your CS-LSA Faculty Advisor each term to check on your progress and seek advice about academics and computer-related career opportunities. The LSA CS Minor is open to students in CoE; School of Information; LSA; School of Music, Theatre & Dance; Stamps School of Art & Design; and Ross School of Business. Students who are receiving a degree in Computer Engineering, Computer Science, Data Science, and/or Electrical Engineering (or any combination of these majors) may not declare a CS Minor.

Getting Information about the LSA Computer Science Minor

Students interested in pursuing an academic Minor in Computer Science should meet with a CS-LSA Faculty Advisor in the CSE Undergraduate Advising Office, 2808 Beyster Bldg., North Campus. Students should use the online scheduler to make an appointment: <https://www.eecs.umich.edu/eecs/undergraduate/index.html>.

Declaring the LSA Computer Science Minor

At the time you declare, you should have satisfied the prerequisites to the Minor, and either have taken previously or be enrolled in and attending one or more of the core courses in the current term. You must also be in good academic standing. *You must declare before you can register for any of the approved electives.* To declare, students may either schedule an advising appointment using the link above or complete the CS Minor Declaration Request form (allow 2-3 weeks for processing): <http://goo.gl/MVsv2s>

Prerequisites to the Academic Minor (2 courses required):

- MATH 115, Math 120 (AP), or any course that satisfies the EECS 203 prerequisite
- Prior programming experience: EECS 183, ENGR 101, or ENGR 151.

Academic Minor Program (16 credits of courses as follows):

1. Three Core Courses (4 credits each):

- EECS 203: Discrete Mathematics (or MATH 465/565)
- EECS 280: Programming and Introductory Data Structures
- EECS 281: Data Structures and Algorithms

2. Approved CS Minor Elective Course: One 4-credit elective selected from:

EECS 388, 482*, 483* 484, 485, 487, 490, 492, or 493 (*Both EECS 482 and 483 have EECS 370 as an additional prerequisite.) **You must be declared to register for any of these courses. Declared CS Minor students must submit a CS Elective permission request using this form: <http://goo.gl/IYUz1k>.** Only one Elective course is permitted per CS Minor student. We are unable to fulfill additional requests.

A grade of “C” or better is required for all prerequisite, required, and elective CS Minor courses. Students are limited to attempting each of the three core courses (EECS 203, EECS 280, EECS 281) at most twice. An attempt includes, but is not limited to, a notation of any letter grade (“A-F”), withdraw (“W”), Pass/Fail (“P”/“F”), Transfer (“T”), or Incomplete (“I”) posted on your U-M transcript. At most one attempt from Summer 2014 and earlier will count against this limit. Exceptions to this rule can be granted by the CS-LSA Chief Program Advisor *only in extraordinary circumstances*.

Please note that the CS Minor takes a minimum of 4 terms to complete due to prerequisite sequencing. 1) Math 115/Math 120, EECS 183/ENGR 101/ENGR 151; 2) EECS 203, EECS 280; 3) EECS 281 (enforced prerequisites: EECS 203 and EECS 280); and 4) Approved CS Minor Elective (enforced prerequisite: EECS 281).

Questions about the LSA Computer Science Minor?

Contact: Professor Edmund Durfee, Chief Program Advisor (cslsaadvisor@umich.edu)
EECS-CSE Undergraduate Advising Office Staff (ugadmin@eecs.umich.edu)
2808 Beyster Bldg. (North Campus) | Phone: (734) 763-6563

LSA Minor Information: (Per: <http://www.lsa.umich.edu/students/academicsrequirements/lsadegreesrequirements/minors>)
 A minor must require no less than 15 credits of course work, show structure and coherence, and contain some upper-level courses. At least 10 out of the 15 credits must be taken in-residence. Students who declare and complete an approved minor will receive a notation on their student transcript but not on their diploma.

Policies for Minors - (Effective Winter 2016)

1. Each A.B. or B.S. student who wishes to complete an approved minor must develop a plan for the minor in consultation with a department or program advisor, who must also approve it.
2. After developing a plan for its minor with the student, the program/department advisor has the minor entered on the student's record.
3. The minor is not an option available to students earning the B.G.S. degree.
4. An individually designed minor is not allowed.
5. Students may not elect courses included in a minor by the Pass/Fail grading option.
6. A department or program may include Experiential or Directed Reading/Independent Study courses that are graded on a Credit/No Credit basis in a minor, but all other courses in the minor must be taken for a grade.
7. No course may be used to satisfy the requirements of more than one minor.
8. No course may be shared between the requirements of two minors, or between a minor and an undergraduate certificate.
9. **A maximum of one course may be shared between the requirements of the CS minor and any major, regardless of the U-M school/college in which a student is pursuing a degree.**
10. If the minor has prerequisites, courses used as prerequisites to a major may also count as prerequisites to the minor.
11. Advanced Placement or other test credits may not be used to meet the *requirements* of a minor, but may be used to meet *prerequisites*.
12. Courses elected to meet the requirements of a minor also may be part of the student's area distribution plan.
13. A student must earn an overall GPA of at least 2.0 in the minor, including any departmental prerequisites necessary for the completion of the minor.
14. Courses that are part of a student's minor may also meet the Language Requirement, the Upper-Level Writing Requirement, the Race & Ethnicity Requirement, or the Quantitative Reasoning Requirement.

LSA COMPUTER SCIENCE Minor: 2007 – Summer 2017 Progress Sheet					
Name:		Date:		UMID:	
Pre-Minor (Declaration) Requirements					College Requirements
Course	Hours	Term	Grade	Note:	<i>LSA students must consult with their LSA Newnan Advisor in Angell Hall to discuss college requirements. Engineering students should meet with their Program (Major) Advisor.</i>
MATH 115	4				
EECS 183*	4				
*EECS 183 or ENGR 101 or ENGR 151					
CS Minor Program Core: 12 cr. min.					
Course	Hours	Term	Grade	Note:	<i>Students should meet with their Program or Concentration Advisors to discuss major requirements and how they may interact with the minor. Only ONE COURSE may be shared between a major and the CS minor, regardless of the school/college in which a student is pursuing a degree.</i>
EECS 203 (or MATH 465/565)	4				
EECS 280	4				
EECS 281	4				
Approved CS Elective: 4 cr. min.; choose ONE below. (Students must be declared and request permission to register for the elective course!)					
Course	Hours	Term	Grade	Note:	<i>Students should meet with their Program or Concentration Advisors to discuss major requirements and how they may interact with the minor. Only ONE COURSE may be shared between a major and the CS minor, regardless of the school/college in which a student is pursuing a degree.</i>
EECS 388	4				
EECS 482	4				
EECS 483	4				
EECS 484	4				
EECS 485	4				
EECS 487	4				
EECS 490	4				
EECS 492	4				
EECS 493	4				