

Computer Science, BA

Academic Plans

Four-Year Graduation Plan

The Four-Year Graduation Plan is not available to BA students majoring in computer science. Students work with their advisors on individual graduation plans.

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.

Computer Science, BA

Course	Title	Hours
Academic Career		
Any Semester		
Students who major in computer science may not also major or minor in computer science and engineering, data science, or informatics.		
GE CLAS Core: Sustainability ^a		
Hours		0
First Year		
Fall		
MATH:1005	College Algebra ^b	4
ENGL:1200 or RHET:1030	The Interpretation of Literature or Rhetoric: Writing and Communication	3 - 4
GE CLAS Core: Understanding Cultural Perspectives ^c		3
GE CLAS Core: World Languages First Level Proficiency or elective course ^d		4 - 5
CSI:1600	Success at Iowa	1
Hours		15-17
Spring		
CS:1110	Introduction to Computer Science	3
MATH:1010	Trigonometry	3
RHET:1030 or ENGL:1200	Rhetoric: Writing and Communication or The Interpretation of Literature	3 - 4
GE CLAS Core: Historical Perspectives ^c		3
GE CLAS Core: World Languages Second Level Proficiency or elective course ^d		4 - 5
Hours		16-18
Second Year		
Fall		
CS:1210	Computer Science I: Fundamentals	4
MATH:1850	Calculus I	4
GE CLAS Core: Social Sciences ^c		3
GE CLAS Core: World Languages Third Level Proficiency or elective course ^d		4 - 5
Elective course ^e		1
Hours		16-17

Spring

CS:2210	Discrete Structures	3
MATH:1860	Calculus II	4
GE CLAS Core: World Languages Fourth Level Proficiency or elective course ^d		4 - 5
Elective course ^e		3
Elective course ^e		2
Hours		16-17

Third Year

Fall

CS:2230	Computer Science II: Data Structures	4
Major: mathematics core course ^f		3 - 4
GE CLAS Core: Natural Sciences with Lab ^c		4
Elective course ^e		3
Elective course ^e		1
Hours		15-16

Spring

CS:2630 or ECE:3350	Computer Organization or Computer Architecture and Organization	3 - 4
CS:3330	Algorithms ^g	3
GE CLAS Core: Literary, Visual, and Performing Arts ^c		3
GE CLAS Core: Natural Sciences without Lab ^c		3
Elective course ^e		3
Hours		15-16

Fourth Year

Fall

CS:2820	Introduction to Software Development ^g	4
CS:3820	Programming Language Concepts ^g	3
GE CLAS Core: International and Global Issues ^c		3
Elective course ^e		3
Elective course ^e		3
Hours		16

Spring

CS:3640 or CS:3620	Introduction to Networks and Their Applications or Operating Systems	3
Major: advanced computer science elective ^h		3
GE CLAS Core: Values and Society ^c		3
Elective course ^e		3
Elective course ^e		3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall) ⁱ		
Hours		15
Total Hours		124-132

a Sustainability must be completed by choosing a course that has been approved for Sustainability AND for one of these General Education areas: Natural Sciences; Quantitative or Formal Reasoning; Social Sciences; Historical Perspectives; International and Global Issues; Literary, Visual, and Performing Arts; or Values and Society.

b Enrollment in math courses requires completion of a placement exam.

c GE CLAS Core courses may be completed in any order unless used as a prerequisite for another course. Students

should consult with an advisor about the best sequencing of courses.

- d Students who have completed four levels of a single language or two levels of two different languages in high school or college have satisfied the GE CLAS Core World Languages requirement. Students who have completed three levels of a single language may complete a fourth-level course in the same language or may choose an approved World Language and Cultural Exploration course. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course. Contact your academic advisor or CLAS Undergraduate Programs Office with questions concerning the World Languages requirement.
- e Students may use elective courses to earn credit towards the total s.h. required for graduation or to complete a double major, minors, or certificates.
- f Choose from MATH:2700, STAT:2020, or STAT:3120.
- g Students may take CS:2820, CS:3330, and CS:3820 in any order after completing CS:1210, CS:2210, and CS:2230.
- h Students may choose a computer science course (prefix CS) numbered 3620-5899 (except CS:3910, CS:3980, CS:4310), or a CS course numbered 5900 or above with department approval. A course used to complete a core requirement cannot also be used as a major elective.
- i Please see Academic Calendar, on 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 Degree Services.