Computer Science, B.A.

Academic Plans

Four-Year Graduation Plan
The Four-Year Graduation Plan is not available to B.A. 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, B.A.

Course Title Hours
First Year Fall
MATH:1005 College Algebra 4
RHET:1030 or ENGL:1200 Rhetoric or The Interpretation of Literature 3 - 4
GE CLAS Core: Diversity and Inclusion 3
GE CLAS Core: World Languages First Level Proficiency or elective course 4 - 5
CSI:1600 Success at Iowa 2

Hours 16-18

Spring
CS:1110 Introduction to Computer Science 3
RHET:1030 or ENGL:1200 Rhetoric or The Interpretation of Literature 3 - 4
MATH:1010 Trigonometry 3
GE CLAS Core: Historical Perspectives 3
GE CLAS Core: World Languages Second Level Proficiency or elective course 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 3
GE CLAS Core: World Languages Second Level Proficiency or elective course 4 - 5
Elective course 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 4 - 5
Elective course 3
Elective course 2

Hours 16-17

Third Year Fall
CS:2230 Computer Science II: Data Structures 4
Major: Math core course 3 - 4
GE CLAS Core: Natural Sciences with Lab 4
Elective course 3
Elective course 1

Hours 15-16

Spring
ECE:3350 or CS:2630 Computer Architecture and Organization or Computer Organization 3 - 4
CS:2820 Introduction to Software Development 4
GE CLAS Core: Literary, Visual, and Performing Arts 3
GE CLAS Core: Natural Sciences without Lab 3
Elective course 2

Hours 15-16

Fourth Year Fall
CS:3330 Algorithms 3
CS:3640 or CS:3620 Introduction to Networks and Their Applications or Operating Systems 3
GE CLAS Core: International and Global Issues 3
Elective course 3
Elective course 3

Hours 15

Spring
CS:3820 Programming Language Concepts 3
Major: Computer Science advanced elective 3
GE CLAS Core: Values and Culture 3
Elective course 3
Elective course 3
Degree Application: apply on MyUI before deadline (typically in February for spring, September for fall)

Total Hours 124-132

a Enrollment in math courses requires completion of a placement exam.
b 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.
c Students who have completed four years of a single language in high school have satisfied the GE CLAS Core World Languages requirement. Enrollment in world languages courses requires a placement exam, unless enrolling in a first-semester-level course.
d 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.
e Choose from MATH:2700, STAT:2020, or STAT:3120.
f Students may take CS:2820, CS:3330, and CS:3820 in any order after completing CS:1210, CS:2210, and CS:2230.
g Students may choose a computer science course (prefix CS) numbered 3620-5890 (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.
Please see Academic Calendar, 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 Graduation Services.