

Computer Science

Degree Requirements

Computer Science Major (12 semester course credits)

Required:

CS 063 Introduction to Computer Science (1)

CS 064 Computer Concepts and Intermediate Programming (1)

CS 111 Introduction to Computer Architecture (1)

CS 114 Programming Languages (1)

CS 122 Operating Systems (1)

CS 124 Data Structures and Algorithms (1)

CS 125 Theory of Algorithms (1)

MATH 004 Discrete Mathematics I (1)

MATH 006 Discrete Mathematics II (1)

And select three courses (with at least one selected from the first two) from the following:

CS 113 Compiler Design and Implementation (1)

CS 170 Software Engineering (1)

CS 127 Linear Optimization (1)

CS 128 Theory of Computation (1)

CS 131 Computer Networks (1)

CS 180 Topics in Computer Science (1)

Note: May be repeated with different topics.

CS 186 Web Programming (1)

Recommended:

MATH 047 Calculus I (1)

MATH 048 Calculus II (1)

MATH 050 Linear Algebra (1)

PHYS 061 General Physics I (1.25)

And additional courses in computer science and mathematics.

**Computer Science Minor
(6 semester course credits)**

Required:

CS 063 Introduction to Computer Science (1)

CS 064 Computer Concepts and Intermediate Programming (1)

CS 111 Introduction to Computer Architecture (1)

CS 124 Data Structures and Algorithms (1)

MATH 004 Discrete Mathematics I (1)

And select one course from the following:

CS 113 Compiler Design and Implementation (1)

CS 114 Programming Languages (1)

CS 122 Operating Systems (1)

CS 125 Theory of Algorithms (1)

CS 127 Linear Optimization (1)

CS 128 Theory of Computation (1)

CS 131 Computer Networks (1)

CS 170 Software Engineering (1)

CS 180 Topics in Computer Science (1)

CS 186 Web Programming (1)

**4+1 BA/MA Program in Interdisciplinary Computer Science
(43 course credits—34 for undergraduate plus 9 for graduate)**

Required:

The requirements for an undergraduate major different from computer science.

All other undergraduate degree requirements, including the GE requirements.

Four prerequisite computer science courses counted as undergraduate credits:

CS 063 Introduction to Computer Science (1)

CS 064 Computer Concepts and Intermediate Programming (1)

MATH 004 Discrete Mathematics I (1)

MATH 006 Discrete Mathematics II (1)

Six required computer science courses counted as graduate credits:

CS 111 Introduction to Computer Architecture (1)

CS 124 Data Structures and Algorithms (1)

CS 214* Programming Languages (1)

CS 222* Operating Systems (1)

CS 232* The Interdisciplinary Computer Science Research Process (1)

CS 250* Thesis for the Degree of Master of Arts in Interdisciplinary Computer Science (1)

Three elective computer science courses, at least two of which must be taken at the 200 level, counted as graduate credits and selected from the following:

CS 113 Compiler Design and Implementation (1)

CS 125 (225) Theory of Algorithms (1)

CS 127 (227) Linear Optimization (1)

CS 128 (228) Theory of Computation (1)

CS 131 (231) Computer Networks (1)

CS 170 (270) Software Engineering (1)

CS 180 (280) Topics in Computer Science (1)

CS 186 (286) Web Programming (1)

An interdisciplinary master's thesis combining the undergraduate major with computer science.

Residence of at least three years.

*See the Graduate Catalog for course description.