COMPUTER SCIENCE MAJOR — B.S.

Summary

Code	Title	Credits
Computer Science B.S. Major Requirements		70-79
Integrative Core Curriculum Requirements [1]		29-41
Electives		0-21
Total Credits		120

[1] *See Integrative Core Curriculum requirements, with information about the H&S CLA requirement.* (https://catalog.ithaca.edu/undergrad/schools/school-humanities-sciences/#integrativecorecurriculumicctext)

Degree Requirements

Prerequisite information: A grade of C or better is required for a course in computer science to fulfill a prerequisite for another computer science course.

Code	Title	Credits
CORE COURSES IN THE DEPARTMENT		
COMP 11500	Discrete Structures for Computer Science	4
COMP 17100	Principles of Computing Science I	4
COMP 17200	Principles of Computer Science II	4
COMP 21000	Introduction to Computer Organization and Systems	4
COMP 22000	Introduction to Data Structures	4
COMP 31100	Algorithms and Data Structures	4
COMP 32100	Programming Languages	4
or COMP 32500	HCI: User Interface Design and Development	
or COMP 36500	Computer Networks	
or COMP 37500	Database Systems	
COMP 34500	Introduction to Software Engineering	4
COMP xxxxx	Five elective courses in computer science [1]	15-20
Select one course at level-2, 3, or 4		
Select two courses at level-3 or 4		
Select two courses at level-4		
COURSES OUTSIDE THE DEPARTMENT		
Mathematics		
MATH 11100	Calculus I	4
MATH 11200	Calculus II	4
MATH 14400	Statistics for Business, Economics and Management	3-4
or MATH 21600	Statistical Analysis	
Laboratory Science Sequence		
Select one laboratory science sequence from the following:		7-8
Sequence I		
PHYS 11700 & PHYS 11800	Principles of Physics I: Mechanics and Principles of Physics II: Electricity and Magnetism	
Sequence II		
CHEM 12100 & CHEM 12200	Principles of Chemistry and Principles of Chemistry Laboratory	
OR		
CHEM 12300 & CHEM 22100	Principles of Chemistry - Enriched Section and Organic Chemistry I	
Sequence III		
BIOL 12100 & BIOL 12200	Principles of Biology, Cell and Molecular and Principles of Biology, Ecology and Evolution	
Sequence IV		
BIOL 11900 & BIOL 12000	Fundamentals of Biology I: Cells and Bodies and Fundamentals of Biology II: Ecology and Evolution	
Sequence V		
PHYS 10100 & PHYS 10200	Introduction to Physics I and Introduction to Physics II	
Science Elective		
Select an additional 3-4 credits from the following options:		3-4
BIOL / CHEM / PHYS	Any course required for majors in biology, chemistry, or physics	
MATH 21100	Calculus III	
MATH 23100	Linear Algebra	
Oral Communication		
Select one course from the following:		3
CMST 11000	Public Communication	
CMST 11500	Business & Professional Comm	
CMST 14000	Small Group Communication	
Total Credits		71-79

[1] *Students may use only one project course - COMP 370xx, COMP 470xx or COMP 47500 taken for at least 3 credits - to fulfill the electives requirement; COMP 49800 cannot be counted as a computer science elective.*