B.S. Computer Science

Program Admissions Requirements

There are no program admission requirements for the B.S. in Computer Science.

General Education

The listing below includes program requirements that also fulfill General Education requirements.

Code	Title	Credits
Objective 1		6
Objective 2		3
Objective 3 - MATH 1170		4
Objective 4		6
Objective 5 - PHYS 2211		7
Objective 6		6
Students must fulfill Objective 7 or Objective 8		**3**
Objective 7 - CS 1181		
Objective 8		
Objective 9		3
Total Credits		**38**

Major Requirements

All required courses for the CS major must be completed with a grade of C- or higher.

Code	Title	Credits
Mathematics and Science Courses:		
MATH 1170	Calculus I (Satisfies General Education Objective 3)	4
MATH 1175	Calculus II	4
MATH 2240	Linear Algebra	3
CS/MATH 1187	Applied Discrete Structures	3
or MATH 2287	Foundations of Mathematics	
PHYS 2211	Engineering Physics I (Partially satisfies General Education Objective 5)	4
Select one course in statistics from the following:		
MATH 3352	Introduction to Probability	3
or ECE 4411	Applied Engineering Methods	
or MATH 4450	Mathematical Statistics I	
Technical Communication Requirements:		
ENGL 3307	Professional and Technical Writing	3
or ENGL 3308	Business Communications	
Required Computer Science and Related Courses:		
CS 1181	Computer Science and Programming I (Satisfies General Education Objective 7)	3
CS 1337	Computer Organization and Architecture	3
CS 2235	Data Structures and Algorithms	3
CS 3309	Advanced Object-Oriented Programming	3
CS 3305	Introduction to Computational Theory	3
CS 3310	Databases	3
CS 3311	Secure Client Server Web Development	3
CS 3321	Introduction to Software Engineering	3
CS 3337	Secure Systems and Networks	3
CS 4412	Advanced Algorithms	3
CS 4416	Foundations in Cybersecurity and Resilience	3
CS 4461	Secure Operating Systems	3
CS 4476	Introduction to Compilers	3
CS 4488	Capstone Project	3
The CS Major also requires 9 additional 4000-level CS elective credits or ECE 4451 or ECE 4451L.		9
Total Credits		**75**

Degree Totals

Code	Title	Credits
Program Admission Requirements		0
General Education		38
Major Requirements (Required General Education credits removed.)		64
Upper Division Free Electives		0
Free Electives		18
Total Credits		**120**

ISU Degree Requirements (http://coursecat.isu.edu/undergraduate/degreerequirements/)

ISU General Education (http://coursecat.isu.edu/undergraduate/academicinformation/generaleducation/)

Major Academic Plan (MAP)