

# COMPUTER SCIENCE B.S.

## Program Requirements

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## Minimum Requirements for Computer Science B.S.: 120 credits

Students must earn a C- grade or better in each course.

Code	Title	Credits
<b>General University Requirements</b>		
Complete the general university requirements. ( <a href="http://catalog.uaf.edu/bachelors/#gurbachelorsdegreestext">http://catalog.uaf.edu/bachelors/#gurbachelorsdegreestext</a> )		
<b>General Education Requirements</b>		
Complete the general education requirements. ( <a href="http://catalog.uaf.edu/bachelors/#generaleducationrequirementstext">http://catalog.uaf.edu/bachelors/#generaleducationrequirementstext</a> )		36-40
As part of the general education requirements, complete the following:		
MATH F251X	Calculus I	
<b>B.S. Degree Requirements</b>		
Complete the B.S. degree requirements. ( <a href="http://catalog.uaf.edu/bachelors/#bachelorofsciencetext">http://catalog.uaf.edu/bachelors/#bachelorofsciencetext</a> )		16
As part of the B.S. requirements, complete the following:		
MATH F252X	Calculus II	
PHYS F211X	General Physics I	
PHYS F212X	General Physics II	
Any approved ethics course		
<b>Computer Science Program Requirements</b>		
Complete one of the following:		3
MATH F302	Differential Equations	
MATH F314	Linear Algebra	
MATH F371	Probability	
MATH F405	Abstract Algebra	
MATH F408	Mathematical Statistics	
MATH F426	Numerical Analysis	
MATH F460	Mathematical Modeling	
Complete the following:		
CS F201	Computer Science I	3
CS F202	Computer Science II	3
CS F241	Computer Hardware Concepts	4
CS F301	Assembly Language Programming	3
CS F311	Data Structures and Algorithms	3
CS F321	Operating Systems	3
CS F331	Programming Languages	3
CS F371	Computer Ethics and Technical Communication	3
CS F372	Software Construction	3
CS F411	Analysis of Algorithms	3
CS F441	System Architecture	3-4
or EE F443	Computer Engineering Analysis and Design	
CS F471	Senior Capstone I <sup>1</sup>	3

CS F472	Senior Capstone II <sup>1</sup>	3
MATH F253X	Calculus III	4
MATH F307	Discrete Mathematics	3
STAT F300	Statistics	3
<b>Electives</b>		
Electives in computer science at the F300 or F400 level, or approved electives.		9
General Electives		1-6
<b>Total Credits</b>		<b>120</b>

<sup>1</sup> Fulfills the baccalaureate capstone requirement.