

# COMPUTER SCIENCE

**Award:** Associate of Science Degree

**Major:** Computer Science

**Additional Program Information:**

The Associate of Science in Computer Science prepares students with core knowledge and skills needed for entry into baccalaureate schools in computer science. Possible occupations for graduates are software development, network analysis, software security, and database design.

This program supports the Transfer Virginia common curriculum in Computer Science. The list of recommended transfer majors that fall under this award is not exclusive, and students should carefully consider the requirements to their intended four-year institution to determine if the A.S. Computer Science provides the most appropriate plan of study. Students are strongly encouraged to consult an academic advisor and review transfer options using the Transfer Virginia Portal at <https://www.transfervirginia.org/>. Many four-year institution specific guides are available that specify the appropriate elective choices for particular majors and pathways.

Nearly all four-year colleges and universities in Virginia, as well as some private institutions in the state, abide by the Virginia State Policy on Transfer. The policy states that students who complete the Blue Ridge Community College A.S. Computer Science will have met all lower division general education requirements at participating institutions. The policy does not guarantee admission to these institutions nor does it imply that each individual community college course will transfer. A copy of the Virginia State Policy on Transfer and additional information on articulation agreements with Virginia four-year colleges and universities is available in the Transfer Advising Center (<https://www.brcc.edu/student-support-services/advising/transfer-advising/>).

The degree sequencing shown below assumes an initial placement for MTH 263 (Calculus I). Students who do not have credit for MTH 161/MTH 162 or MTH 167 should work with an advisor to determine the prerequisite coursework needed given their mathematics background.

## Required Courses Curriculum

First Semester		Credit Hours
CSC 221	Introduction to Problem Solving and Programming	3
ENG 111	College Composition I	3
MTH 263	Calculus I	4
SDV ( <a href="https://catalog.brcc.edu/programs-study/sdv/">https://catalog.brcc.edu/programs-study/sdv/</a> )	Student Development	1
Science with Laboratory Electives ( <a href="https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-lab-science">https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-lab-science</a> )		4
<b>Credit Hours</b>		<b>15</b>
Second Semester		
CSC 222	Object-Oriented Programming	4
ENG 112	College Composition II	3
Select one of the following:		3-4
MTH 264	Calculus II	
MTH 245	Statistics I	
General Education Electives ( <a href="https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-additional-gen-ed">https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-additional-gen-ed</a> )		4
<b>Credit Hours</b>		<b>14-15</b>
Third Semester		
Select one of the following:		3-4
CSC 205	Computer Organization	
CSC 215	Computer Systems	
MTH 265	Calculus III	
Computer Science Electives ( <a href="https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-electives">https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-electives</a> )		3
Block II - Humanities/Art/Literature ( <a href="https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block II">https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block II</a> ) <sup>1</sup>		3
Block III - Social and Behavioral Science ( <a href="https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block III">https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block III</a> )		3
Block VI - History ( <a href="https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block VI">https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block VI</a> )		3
<b>Credit Hours</b>		<b>15-16</b>
Fourth Semester		
CSC 223	Data Structures and Analysis of Algorithms	4

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MTH 288	Discrete Mathematics	3
Computer Science Electives ( <a href="https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-electives">https://catalog.brcc.edu/programs-study/cs-science-electives/#cs-electives</a> )		6
Block II - Humanities/Art/Literature ( <a href="https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block II">https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block II</a> ) <sup>1</sup>		3
<b>Credit Hours</b>		<b>16</b>
<b>Total Credit Hours</b>		<b>60-62</b>

<sup>1</sup> Each of the two courses must be from different categories.