SCIENCE

Award: Associate of Science Degree

Maior: Science Additional Program Information: https://www.brcc.edu/academics/programs/science/

The Associate of Science in Science is designed to prepare students to transfer to four-year institutions and pursue a Bachelor of Science degree in an area of natural or physical sciences, or mathematics. This program supports the Transfer Virginia common curricula in Biology, Chemistry, Geology, Information Technology, Mathematics, and Physics. 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 Science A.S. 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 Science A.S. 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/). (https://www.brcc.edu/student-support-services/advising/transfer-advising/)

The degree sequencing shown assumes an initial mathematics placement for MTH 245, MTH 261 or MTH 263. Students should work with an advisor to determine the prerequisite coursework needed given their mathematics background. Four-year institutions also have varied requirements for foreign language competency depending on major. Students should consult transfer guides and work with an academic advisor to determine if it is preferable to complete their transfer institution's language requirement at BRCC. Placement into the intermediate (201) level of a language is possible; consult an academic advisor.

Required Courses Curriculum

Code	Title	Credit Hours
General Education		
Pathways under this degree may h the appropriate transfer guide for t	ave specific requirements or recommendations for General Education coursework. Students should consult their intended transfer major and senior institution.	
Block I - Written Communication		
Select both:		6
ENG 111	College Composition I	
ENG 112	College Composition II	
Select one of the following:		3-4
MTH 245	Statistics I	
MTH 261	Applied Calculus I	
MTH 263	Calculus I	
Science Electives (p. 2)		4
Block II - Humanities/Art/Literature (https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block II)		6
Block III - Social and Behavioral Science (https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block III)		3
Block VI - History (https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block VI)		3
Block VII - Specialized General Edu	ication Requirements (https://catalog.brcc.edu/programs-study/ucgselectives/#UCGS Block VII)	3
Select one of the following:		3
CST 100	Principles of Public Speaking	
CST 110	Introduction to Human Communication	
SDV (https://catalog.brcc.edu/ programs-study/sdv/)	Student Development ¹	1
Math and Science Electives (Choose two) (p. 2)		7-8
Transfer Electives (p. 2)		21
Total Credit Hours		60-62

lotal Credit Hours

¹ SDV 101 Orientation to STEM Transfer is preferred.

Science Electives Associate of Science: Science Electives

Code	Title	Credit Hours
BIO 101	General Biology I	4
CHM 111	General Chemistry I	4
GOL 105	Physical Geology	4
PHY 201	General College Physics I	4
PHY 241	University Physics I	4

Associate of Science: Additional Math and Science Electives

Code	Title	Credit Hours
BIO 101	General Biology I	4
BIO 102	General Biology II	4
BIO 141	Human Anatomy and Physiology I	4
BIO 142	Human Anatomy and Physiology II	4
BIO 205	General Microbiology	4
CHM 111	General Chemistry I	4
CHM 112	General Chemistry II	4
GOL 105	Physical Geology	4
GOL 110	Earth Science	4
MTH 245	Statistics I	3
MTH 261	Applied Calculus I	3
MTH 263	Calculus I	4
MTH 264	Calculus II	4
MTH 265	Calculus III	4
MTH 266	Linear Algebra	3
MTH 267	Differential Equations	3
MTH 288	Discrete Mathematics	3
PHY 201	General College Physics I	4
PHY 202	General College Physics II	4
PHY 241	University Physics I	4
PHY 242	University Physics II	4

Associate of Science: Transfer Electives

Code	Title	Credit Hours
BIO 101	General Biology I	4
BIO 102	General Biology II	4
BIO 141	Human Anatomy and Physiology I	4
BIO 142	Human Anatomy and Physiology II	4
BIO 205	General Microbiology	4
BIO 256	General Genetics	4
BIO 270	General Ecology	4
CHM 111	General Chemistry I	4
CHM 112	General Chemistry II	4
CSC 110	Principles of Computer Science	3
CSC 221	Introduction to Problem Solving and Programming	3

CSC 222	Object-Oriented Programming	4
ECO 201	Principles of Macroeconomics	3
ECO 202	Principles of Microeconomics	3
EDU 200	Foundations of Education	3
EDU 204	Teaching in a Diverse Society	3
EGR 121	Foundations of Engineering	2
EGR 122	Engineering Design	3
ETR 113	D.C. and A.C. Fundamentals I	4
GOL 105	Physical Geology	4
GOL 110	Earth Systems: An Environmental Geology Perspective	4
ITN 100	Introduction to Telecommunications	3
ITD 130	Database Fundamentals	3
ITN 170	Linux System Administration	3
ITN 260	Network Security Basics	3
ITN 262	Network Communication, Security and Authentication	3
MTH 161	Precalculus I ¹	3
MTH 162	Precalculus II ¹	3
MTH 167	Precalculus with Trigonometry ¹	5
MTH 245	Statistics I	3
MTH 261	Applied Calculus I	3
MTH 263	Calculus I	4
MTH 264	Calculus II	4
MTH 265	Calculus III	4
MTH 266	Linear Algebra	3
MTH 267	Differential Equations	3
MTH 288	Discrete Mathematics	3
PHY 201	General College Physics I	4
PHY 202	General College Physics II	4
PHY 241	University Physics I	4
PHY 242	University Physics II	4
PSY 230	Developmental Psychology	3
World Language ²		4

Students may not receive credit toward graduation for both MTH 167 and MTH 161 or MTH 167 and MTH 162.

² Any World Language 101, 102, 201, 202, including ASL (https://catalog.brcc.edu/courses-az/asl/) and SPA 115.

³ Students may also apply up to 3 credits of HLT 100, HLT 110, HLT 116 or PED 116 as part of their program