

SCIENCE

Award: Associate of Science Degree

Major: Science

Specialization: Engineering

The A.S. degree program in Science with a specialization in Engineering is designed to prepare students to transfer to four year institutions to pursue a Bachelor of Sciences degree in an area of Engineering. The degree is intended for students who wish to continue their studies in the following fields: Civil, General, Industrial or Mechanical Engineering.^a The suggested curriculum and list of courses that follows includes the highest level college-transfer courses available at BRCC and is designed to allow students to transfer to their final institution with the highest standing possible in their intended major. Considering the number of institutions and majors that can be chosen, it is not feasible to offer a curriculum that satisfies the needs of all. For choices of electives, it is strongly recommended that all students begin with the following guidelines but that they also contact the institution(s) to which they wish to transfer and verify which courses will be best for their specific major and specialization.

Curriculum

Course No.	Title	Credits
First Semester		
MTH 173	Calculus with Analytic Geometry I	5
CHM 111	College Chemistry I	4
EGR 120	Introduction to Engineering	2
ENG 111	College Composition I	3
SDV	Student Development	1
	History Elective ^b	<u>3</u>
		18
Second Semester		
MTH 174	Calculus with Analytic Geometry II	5
CHM 112	College Chemistry II	4
EGR 140	Engineering Mechanics - Statics	3
	Social/Behavioral Science Elective ^b	3
ENG 112	College Composition II	<u>3</u>
		18
Third Semester		
MTH 277	Vector Calculus	4
PHY 241	University Physics I	4
	Engineering Elective ^c	3
	Health/Physical Education ^d	1
	Humanities/Fine Arts Elective ^b	3
	Literature ^b	<u>3</u>
		18
Fourth Semester		
MTH 291	Ordinary Differential Equations	3
MTH 177	Linear Algebra	2
PHY 242	University Physics II	4
	Engineering Elective ^c	3
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EGR 245	Engineering Mechanics - Dynamics	<u>3</u>
		18
Total credit required		72

^a This list of majors is not exclusive. The A.S. with a specialization in Engineering can be used for students who wish to transfer in other Engineering fields as well.

^b A list of approved electives is available in Admissions and Records..

^c The typical Engineering sequences for certain majors follows: JMU: EGR 115, EGR 206; UVA/VT: EGR 126 or CSC 201 plus two of either EGR 206 or EGR 246 or EGR 248.

^d Total of one credit of HLT/PED required in the program. (Excluding HLT 143-144.)