

James Madison University Advising Guide

BRCC Associate of Science Degree – Engineering Specialization Curriculum Outline and JMU Advising Guide for a major in Engineering

MTH 161 start (3 years to completion)

Note that starting in MTH 161 will require three years to complete the math/physics sequence, and there is no way to do this at a full-time load for all six semesters. Plan accordingly.

First Semester (Fall I)

Course #	Course Description	Credits
ENG 111	College Composition I	3
HIS ____	History Elective	3
MTH 161	Precalculus I	3
SDV ____	Student Development (SDV 101 “for STEM” strongly recommended, but SDV 100 may be used)	1
		10

Second Semester (Spring I)

Course #	Course Description	Credits
ENG 112	College Composition II	3
MTH 162	Precalculus II	3
_____	Humanities/Art/Literature Elective (must choose two from different groups)	3
_____	Social and Behavioral Science Elective	3
		12

Third Semester (Fall II)

Course #	Course Description	Credits
MTH 263	Calculus I	4
CHM 111	College Chemistry I	4
EGR 121	Foundations of Engineering	2
_____	Humanities/Art/Literature Elective (must choose two from different groups)	3
		13

Fourth Semester (Spring II)

Course #	Course Description	Credits
MTH 264	Calculus II	4
EGR 122	Engineering Design	3
CHM 112	College Chemistry II	4
_____	Engineering/Technical Elective (CSC 221 recommended)	3
		14

Fifth Semester (Fall III)

Course #	Course Description	Credits
MTH 264	Calculus II	4
EGR 240	Statics	3
PHY 241	University Physics I	4
		11

Sixth Semester (Spring III)

Course #	Course Description	Credits
MTH 267	Differential Equations	3
MTH 266	Linear Algebra	3
EGR 246	Mechanics of Materials	3
PHY 242	University Physics II	4
		13

Total credits required for Associate of Science Engineering Specialization degree/JMU Engineering requirements – 73