

James Madison University Advising Guide

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

MTH 167 start (2 years to completion with summer)

First Semester (Fall I)

Course #	Course Description	Credits
ENG 111	College Composition I	3
HIS ____	History Elective	3
MTH 167	Precalculus with Trigonometry	5
CHM 111	General Chemistry I	4
EGR 121	Foundations of Engineering	2
SDV ____	Student Development (SDV 101 "for STEM" strongly recommended, but SDV 100 may be used)	1
		18

Second Semester (Spring I)

Course #	Course Description	Credits
ENG 112	College Composition II	3
CHM 112	General Chemistry II	4
MTH 263	Calculus I	4
EGR 122	Engineering Design	3
_____	Social and Behavioral Science Elective	3
		17

Summer catch-up:

MTH 264	Calculus II	4
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Third Semester (Fall II)

Course #	Course Description	Credits
MTH 265	Calculus III	4
PHY 241	University Physics I	4
EGR 240	Statics	3
_____	Humanities/Art/Literature Elective (must choose two from different groups)	3
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		17

Fourth Semester (Spring II)

Course #	Course Description	Credits
MTH 267	Differential Equations	3
MTH 266	Linear Algebra	3
PHY 242	University Physics II	4
_____	Engineering/Technical Elective (CSC 221 recommended)	3
EGR 246	Mechanics of Materials	3
		16

Total credits required for Associate of Science Engineering Specialization degree/JMU Engineering requirements – 71