

NVCC Engineering Advising Sheet with Mason Equivalencies

Recommended Course of Study for Students Transferring to BSSE

NVCC AS Engineering	Course Name	NVCC Credits	GMU Equivalent	BSSE Transfer	GMU Credits
1st Semester					
CHM 111	College Chemistry I	4	CHEM 211	CHEM 211	4
EGR 120	Introduction to Engineering	2	ENGR 107	ENGR 107	2
ENG 111	College Composition I	3	ENGH 101	ENGH 101	3
MTH 173	Calculus w/ Analytic Geometry I	5	MATH 113	MATH 113	4
SDV 100	College Success Skills	1	UNIV 100	No credit	
Social Science (ECO 202) ¹	Elective (Microeconomics)	3	ECON 103	ECON 103	3
2nd Semester	1st Sem Total	18			
EGR 126 (CSC 201) ²	Computer Programming for Engrs (Computer Science I)	4	CEIE 117 CS 112	CS 112	4
ENG 112 (ENG 125) ³	College Composition II (Literature)	3	ENGH ---- ENGH 201	ENGH 201	3
MTH 174	Calculus w/ Analytic Geometry II	5	MATH 114	MATH 114	4
PED 116	Lifetime Fitness and Wellness	1	PHED ----	No credit	
PHY 231	General University Physics I	5	PHYS 160, 161	PHYS 160, 161	3, 1
3rd Semester	2nd Sem Total	18			
CST elective (CST 100) ⁴	Principles of Public Speaking	3	COMM 100	COMM 100	3
EGR 240 ⁵	Solid Mechanics (Statics)	3	CEIE 210	CEIE 210	3
--- ⁶	Humanities/ Fine Arts Elective	3		Arts elective	3
MTH 277	Vector Calculus	4	MATH 213	MATH 213	3
--- ⁷	Social Science elective	3		Global understanding	3
4th Semester	3rd Sem Total	16			
EGR elective (CSC 202) ⁸	Computer Science 2	4	CS 211	CS 211	3
EGR 245 ⁹	Engineering Mechanics-Dynamics	3	ENGR ----	SYST 101	3
EGR 246 ¹⁰	Mechanics of Materials	3	CEIE L310	CEIE L310	3
--- ¹¹	Humanities/ Fine Arts Elective	3		World History	3
PHY 232	General University Physics II	5	PHYS 260, 261, 266	PHYS 260, 261	3, 1
Addl Courses Recommended¹²	4th Sem Total	18			
MTH 285	Linear Algebra	3	MATH 203	MATH 203	3
MTH 291	Differential Equations	3	MATH 214	MATH 214	3
		6			
	TOTAL	76		TOTAL	68

¹ Students should take ECO 202 as a social science elective to meet microeconomic requirement for the BSSE.

² EGR 126 is required for the AS ENGR, but does not transfer toward the BSSE. Students should request to substitute CSC 201 for EGR 126. Students without prior programming experience will need to take CSC 130 as a prerequisite to CSC 201.

³ Students can take ENG 125 (instead of ENG 112) to satisfy Mason core requirement for Literature.

⁴ Students should take CST 100 as their CST elective to meet oral communication requirement for BSSE.

⁵ EGR 240 will credit as technical elective under the BSSE Engineering Systems specialization area. The other 2 technical electives are CEIE 240 - Hydraulics and CEIE 310 – Mechanics of Materials.

⁶ ART 100, 101, 102; MUS 121, 122; CST 130, 141 are acceptable courses to meet Mason core requirement for Arts.

⁷ Students should take a course satisfying the Mason core requirement for global understanding. Acceptable courses include HIS 135, 203, 231, 232, 241, 242, 251, 252, 253 or 254 or PLS 241.

⁸ It is recommended that students request to substitute CSC 202 for the Engineering elective to satisfy the BSSE requirement for computer science.

⁹ EGR 245, which transfers to Mason as ENGR ---- will be substituted for SYST 101. A substitution form will be filled out.

¹⁰ EGR 246 will credit as technical elective under the BSSE Engineering Systems specialization area. However this course transfers to Mason as a lower-division course.

¹¹ Students should take HIS 101, HIS 102 or HIS 112 as their humanities elective to meet Mason core requirement for World History.

¹² Students transferring to the BSSE degree program should also take MTH 285 because it is prerequisite for OR 441 at Mason. Students can take MTH 291 at NVCC or the equivalent MATH 214 at Mason.