

# Frederick Community College & West Virginia University

Engineering Area of Concentration within STEM A.S. (Transfer) leading to

Bachelor of Science in Mechanical Engineering B.S.M.E.

Materials Science Area of Emphasis

Suggested Plan of Study



Frederick Community College	Hours	WVU Equivalents	Hours
<b>Year One, 1<sup>st</sup> Semester</b>			
ENGL 101	3	ENGL 101	3
MATH 185	4	MATH 155	4
ENGR 100	3	ENGR 1TC (sub for ENGR 101)	3
ANTH 101 or PSYC 101 or SOCY 101 (or another Social & Behavioral Sciences Elective Gen Ed)	3	ANTH 105 or PSYC 101 or SOC 101	3
Arts Elective (Gen Ed)	3	Elective	3
<b>TOTAL</b>	16		16
<b>Year One, 2<sup>nd</sup> Semester</b>			
CHEM 101	4	CHEM 115 & CHEM 115L	4
ECON 202 (Social & Behavioral Sciences Elective Gen Ed)	3	ECON 201 (Required)	3
MATH 195	4	MATH 156	4
MATH 220	1	MATH 2TC	1
Communication Elective (Gen Ed)	3	Elective	3
<b>TOTAL</b>	15		15
<b>Year Two, 1<sup>st</sup> Semester</b>			
ENGR 110 (STEM Elective)	3	MAE 241 (Required)	3
PHYS 151	4	PHYS 111 & PHYS 111L	4
CHEM 102	4	CHEM 116 & CHEM 116L (AoE)	4
MATH 285 (STEM Elective)	4	MATH 251 (Required)	4
<b>TOTAL</b>	15		15
<b>Year Two, 2<sup>nd</sup> Semester</b>			
ENGL 102 (Humanities Elective Gen Ed)	3	ENGL 102 (Required)	3
MATH 275	3	MATH 261	3
Physical Education, Health, or Nutrition Requirement	1 or 3	Elective	1 or 3
PHYS 252 (Gen Ed Elective)	4	PHYS 112 & PHYS 112L (Required)	4
ENGR 212 (Free Elective)	3	MAE 242 (Required)	3
<b>TOTAL</b>	14 or 16		14 or 16

<b>West Virginia University</b>			
Summer Session		ENGR 102 or elective	3
Year Three, 1 <sup>st</sup> Semester		Year Three, 2 <sup>nd</sup> Semester	
MAE 202	1	IENG 302 & IENG 302L <sup>(AoE)</sup>	3
MAE 211 & MAE 211L	3	MAE 243	3
MAE 212L	1	MAE 342	3
MAE 216L	1	MAE 353	3
MAE 253	2	MAE 354 <sup>(SP only / AoE)</sup>	3
MAE 316	3	MAE 355 <sup>(SP only / AoE)</sup>	3
MAE 320	3		
<b>TOTAL</b>		<b>TOTAL</b>	
		15	18
Year Four, 1 <sup>st</sup> Semester		Year Four, 2 <sup>nd</sup> Semester	
EE 221 & EE 221L	4	MAE 423	3
MAE 254L <sup>(AoE)</sup>	1	MAE 472S	3
MAE 331	3	CHE 366 <sup>(SP only / AoE)</sup>	3
MAE 456 & MAE 456L	3	Technical Elective <sup>(2)</sup>	3
MAE 471S	3	Technical Elective <sup>(3)</sup>	3
Technical Elective <sup>(1)</sup>	3		
<b>TOTAL</b>		<b>TOTAL</b>	
		17	15

Students entering WVU at the sophomore level or above, have earned a C- or better in CHEM 115, MATH 155, MATH 156, and PHYS 111, and have completed at least three credit hours in a discipline specific course, may request to take an approved elective (or approved transfer credit) as a substitute for either ENGR 101 or 102 or the combination. For this agreement, ENGR 100 (ENGR 1TC) will be utilized as a substitution for WVU's required ENGR 101.

Students must have a cumulative GPA of 2.25 in all college coursework attempted, and a C or better in MATH 155 (MATH 185), CHEM 115/L (CHEM 101), ENGL 101 (ENGL 101), ENGR 101, and ENGR 102 (or approved substitutions) to be admitted directly to the Mechanical Engineering in the Statler College of Engineering and Mineral Resources upon transferring to West Virginia University.

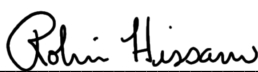
Students transferring to West Virginia University with an Associate of Arts or Associate of Science degree will have satisfied the General Education Foundation requirements at WVU.

Students who have questions about admission into their intended program, GEF requirements, or any other issue relating to academics at West Virginia University should contact the Office of Undergraduate Education at WVU.

The above transfer articulation of credit between West Virginia University and Frederick Community College, is approved by the Dean, or the Dean's designee, and effective the date of the signature.

Robin Hissam

Print Name



Signature

01/04/2023

Date

Robin Hissam, Ph.D., Associate Dean of Academic and Student Performance for Benjamin M. Statler College of Engineering and Mineral Resources at West Virginia University