

Marshall University - Weisberg Division of Engineering
B.S.M.E. Four-Year Curriculum Plan
(2021-2022)

Freshman Year

Fall Semester				Spring Semester			
Course Number and Name	CR	PR	CH	Course Number and Name	CR	PR	CH
ENGR 103 – Freshmen Engineering Seminar			1	ENGR 102 – Introduction to CAD		MTH 132	2
ENGR 104 – The Engineering Profession	ACT 24 or MTH 132		1	ME 111 – ME Computations		MTH 132	3
MTH 229 CT – Calculus I		ACT 27 or MTH 132	5	MTH 230 – Calculus II		MTH 229	4
CHM 211 – Principles of Chemistry		ACT 23 or CHM 111	3	ENG 101 – English Composition I			3
FYS 100 – First Year Seminar			3	PHY 202 – Physics Lab	PHY 211		1
CMM 103 or 207 – Communication			3	PHY 211 – Principles of Physics I	MTH 229		4
			Total				Total
			16				17

Sophomore Year

Fall Semester				Spring Semester			
Course Number and Name	CR	PR	CH	Course Number and Name	CR	PR	CH
ENGR 213 – Statics		MTH 229	3	ENGR 214 – Dynamics	MTH 230	ENGR 213	3
ENGR 215 – Engineering Materials		CHM 211	3	ENGR 216 – Mech. Of Def. Bodies		ENGR 213	3
ME 245 – Intro to Circuits & Instrumentation	PHY 213	MTH 230	3	ENGR 217 – Co-Op		ENGR 102 / CE 102 / CS 110	1
MTH 231 – Calculus III		MTH 230	4	ENGR 219 – Thermodynamics I	MTH 230	PHY 211	3
PHY 213 – Principles of Physics II		PHY 211	4	ME 240 – Manufacturing Processes		ENGR 215	3
			Total	MTH 335 – Differential Equations		MTH 230	3
			17				Total
							16

Junior Year

Fall Semester				Spring Semester			
Course Number and Name	CR	PR	CH	Course Number and Name	CR	PR	CH
ME 360 Fluid Dynamics		ENGR 214	4	ENG 201 – Advanced Composition II			3
ENGR 222 – Engineering Cost Analysis & Economy		MTH 229	3	ME 420 – Control Systems		ME 245, ENGR 335	3
ME 310 – Thermodynamics II		ENGR 219	3	ME 325 – DoE & Thermal Fluids Lab	ME 350	ME 310 & ME 360	2
ENGR 335 – Engineering Analysis		MTH 231	3	ME 350 – Heat Transfer		ME 310& ME 360	3
ME 340 – Design of Mac. Elements		ENGR 216	3	ME 410 – Kinematics & Design of Machines		ENGR 214 & 216	3
			Total	Social Science (CT, M/I, W)			3
			16				Total
							17

Senior Year

Fall Semester				Spring Semester			
Course Number and Name	CR	PR	CH	Course Number and Name	CR	PR	CH
ME Technical Elective I			3	ME 453 Capstone Design II		ME 452 & ME Design Elective	3
ME452 Capstone Design I		ME 325, 350, & 410 or by Permission	1	ME 455 – Metallurgy		ME 240	3
ME Technical Elective II			3	ME Technical Elective III			3
ME 425 – ME Lab II		ME 340	1	Humanities			3
ME Design Elective			3				
Fine Arts			3				
			Total				Total
			14				12

* CH = Credit Hour | PR = Pre-requisite | * CR = Concurrent Pre- Requisite