

# Bachelor of Science in Mechanical Engineering (BSME) 2020/21

Freshman Year: 2020-2021								
Semester	Course		R	L	C	Grad	Notes (e.g. semester taken, if not as listed)	Y/N
Fall 2020	MATH1750	Engineering Calculus I	4	0	4			
	PHYS1250	Engineering Physics I	3	2	4			
	ENGL1100	English I	4	0	4			
	ENGR1000	Introduction to Engineering	1	4	3			
	ENGR1600	Fundamentals of CAD and CAM <i>OR</i> ENGR1800 Programming with MATLAB	0	2	1			
	FYS100	First Year Seminar	0	0	0			
<b>Semester Credits:</b>					<b>16</b>			
Spring 2020	MATH1850	Engineering Calculus II	4	0	4			
	PHYS1750	Engineering Physics II	4	0	4			
	ENGL2200	English II	4	0	4			
	ENGR1500	Intro. to Engineering Design	1	4	3			
	ENGR1800	Programming with MATLAB <i>OR</i> ENGR1600 Fundamentals of CAD and CAM	0	2	1			
<b>Semester Credits:</b>					<b>16</b>			
Sophomore Year: 2021-2022								
Fall 2021	ELECTIVE	Humanities or Social Science	4	0	4			
	ELEC2799	Circuit Theory and Applications	2	2	3			
	MECH2000	Engineering statics	4	0	4			
	MECH2300	Engineering Graphics	1	4	3			
	MATH2025	Multivariable Calculus	4	0	4			
<b>Semester Credits:</b>					<b>18</b>			
Spring 2021	ELECTIVE	Humanities or Social Science	4	0	4			
	MATH2500	Differential Equations	4	0	4			
	MECH2250	Engineering Thermodynamics I	3	2	4			
	MECH2500	Mechanics of Materials	3	2	4			
	CHEM1100	Engineering Chemistry	3	2	4			
<b>Semester Credits:</b>					<b>20</b>			
Summer 2021	COOP3000	Optional Co-op Work Term						
Junior Year: 2022-2023								
Fall 2022	ELECTIVE	Humanities or Social Science	4	0	4			
	ELECTIVE	Technical Elective	-	-	3			
	MECH2750	Engineering Thermodynamics II	3	2	4			
	MECH3000	Design of Machine Elements	4	0	4			
	MECH3100	Engineering Fluid Mechanics	3	2	4			
<b>Semester Credits:</b>					<b>19</b>			
<b>Spring 2023</b>	<b>COOP3500</b>	<b>CO-OP WORK TERM I</b>						
Summer 2023	MATH2100	Probability and Statics for Engineers	4	0	4			
	MECH3600	Materials Science	3	2	4			
	MECH3850	Engineering Dynamics	4	0	4			
	MECH3900	Engineering Heat Transfer	4	0	4			
<b>Semester Credits:</b>					<b>16</b>			
Senior Year: 2023-2024								
<b>Fall 2023</b>	<b>COOP4500</b>	<b>CO-OP WORK TERM II</b>						
Spring 2024	ELECTIVE	Humanities or Social Science	4	0	4			
	ELECTIVE	Technical Elective	-	-	3			
	MECH4000	Mechanical Vibrations	3	0	3			
	MECH4200	Simulation Based Design	2	4	4			
	MECH5000	Mechanical Capstone Analysis	1	4	3			
<b>Semester Credits:</b>					<b>17</b>			
Summer 2024	ELECTIVE	Humanities or Social Science	4	0	4			
	ELECTIVE	Technical Elective	-	-	3			
	ELECTIVE	General Elective	-	-	3			
	MECH5500	Mechanical Capstone Project	1	6	4			
<b>Semester Credits:</b>					<b>14</b>			
<b>Total Credits for Graduation:</b>					<b>136</b>			

**Please note that one of the five required Humanities and Social Science graduation requirements for BSME students must be in the area of Economics and one must be in the area of Ethics. The remaining three may be any Humanities/Social Science of your choosing.**