

MECHANICAL ENGINEERING UNDERGRADUATE CURRICULUM FALL 2020

Freshman	Fall	EG-UY 1001 <i>Engrg & Tech Forum</i> Pre: None Co: None 1 cr	EG-UY 1003 <i>Engineering Design</i> Pre: None Co: None 3 cr	MA-UY 1024/1324 <i>Calculus I</i> Pre: Placement Exam Co: EX1 4 cr	CM-UY 1004 <i>Chemistry</i> Pre: None Co: EX1 4 cr	EXPOS-UA 1 <i>Writing The Essay</i> Pre: Placement Exam Co: None 4 cr		16 Credits	
	Spring	MA-UY 1124/1424 <i>Calculus II</i> Pre: Calc I Co: EX1 4 cr	PH-UY 1013 <i>Mechanics</i> Pre: Calc I Co: Calc II, EX1 3 cr	ME-UY 1012 <i>Intro To Mechanical Engineering</i> Pre: None Co: None 2 cr	CS-UY 1133 <i>Engrg Prob Solving Programming</i> Pre: None Co: CS 1133 LAB, EX1 3 cr	CS-UY 1133 LAB <i>Programming Lab</i> Pre: None Co: CS 1133 0 cr		EXPOS-UA 2 <i>Advanced College Essay</i> Pre: EXPOS-UA 1 Co: None 4 cr	16 Credits
Sophomore	Fall	MA-UY 2034 <i>Linear Algebra & Differential Eqs</i> Pre: Calc II Co: None 4 cr	PH-UY 2023 <i>Elect Magnetism & Fluids</i> Pre: PH 1013, Calc II Co: PH 2121, EX1 3 cr	PH-UY 2121 <i>General Physics Lab I</i> Pre: PH 1013, Calc II Co: PH 2023 1 cr	ME-UY 2813 <i>Intro To Materials Science</i> Co: PH 1013 Co: ME 2811 3 cr	ME-UY 2811 <i>Materials Science Lab</i> Co: ME 2813 1 cr	ME-UY 2112 <i>CAD</i> Pre: None Co: None 2 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr	18 Credits
	Spring	MA-UY 2114 <i>Multi-Dimensional Calculus</i> Pre: Calc II Co: None 4 cr	MA-UY 2224 <i>Data Analysis</i> Pre: Calc II Co: None 4 cr	PH-UY 2033 <i>Wave, Optics & Thermodynamics</i> Pre: PH 2023, PH2121 Co: PH 2131, EX1 3 cr	PH-UY 2131 <i>General Physics Lab II</i> Pre: PH2023, PH 2121 Co: PH 2033 1 cr	ME-UY 2213 <i>Statics</i> Pre: Calc I, PH 1013 Co: ME 2211 3 cr	ME-UY 2211 <i>Statics lab</i> Pre: None Co: ME 2213 1 cr		16 Credits
Junior	Fall	ME-UY 3333 <i>Thermodynamics</i> Pre: Calc II Co: None 3 cr	ME-UY 3213 <i>Mechanics Of Materials</i> Pre: ME 2213, Calc II Co: ME 3211 3 cr	ME-UY 3211 <i>Mechanics Of Materials Lab</i> Pre: None Co: ME 3213 1 cr	ME-UY 3513 <i>Measurement Systems</i> Pre: PH 2023 Co: ME 3511 3 cr	ME-UY 3511 <i>Measurement Systems Lab</i> Pre: None Co: ME 3513 1 cr	ME-UY 3223 <i>Dynamics</i> Pre: ME 2213 3 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr	18 Credits
	Spring	ME-UY 3233 <i>Machine Design</i> Pre: ME 3213 Co: None 3 cr	ME-UY 3313 <i>Fluid Mechanics</i> Pre: MA 2114 Co: ME 3333, 3311 3 cr	ME-UY 3311 <i>Fluid Mechanics Lab</i> Pre: None Co: ME 3313 1 cr	ME-UY 3413 <i>Automatic Controls</i> Pre: ME 3513 Co: ME 3411 3 cr	ME-UY 3411 <i>Automatic Controls Lab</i> Pre: ME3511 Co: ME 3413 1 cr	STEM2 Course <i>Elective</i> Pre: As Required 3 cr		14 Credits
Senior	Fall	ME-UY 4112 <i>Senior Design I</i> Pre: ME 2112 Co: ME 4214 Co (Any 2 of 3): ME 3233, ME 3413, ME 4313 2 cr	ME-UY 4214 <i>Finite Element Method</i> Pre: ME 3213, MA 2034, MA 2114 Co: None 4 cr	ME-UY 4313 <i>Heat Transfer</i> Pre: ME 3313 Co: ME 4311 3 cr	ME-UY 4311 <i>Heat Transfer Lab</i> Pre: ME 3311 Co: ME 4313 1 cr	STEM2 Course <i>Elective</i> Pre: As Required 3 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr		17 Credits
	Spring	ME-UY 4113 <i>Senior Design II</i> Pre: ME 4112 Co: None 3 cr	Free <i>Elective</i> Pre: As Required 3 cr	Free <i>Elective</i> Pre: As Required 3 cr	Free <i>Elective</i> Pre: As Required 3 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr			16 Credits

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	Spring	MA-UY 1124/1424 <i>Calculus II</i> Pre: Calc I Co: EX1 4 cr	PH-UY 1013 <i>Mechanics</i> Pre: Calc I Co: Calc II, EX1 3 cr	ME-UY 1012 <i>Intro To Mechanical Engineering</i> Pre: None Co: None 2 cr	CS-UY 1133 <i>Engrg Prob Solving Programming</i> Pre: None Co: CS 1133 LAB, EX1 3 cr	CS-UY 1133 LAB <i>Programming Lab</i> Pre: None Co: CS 1133 0 cr		EXPOS-UA 2 <i>Advanced College Essay</i> Pre: EXPOS-UA 1 Co: None 4 cr	16 Credits
Sophomore	Fall	MA-UY 2034 <i>Linear Algebra & Differential Eqs</i> Pre: Calc II Co: None 4 cr	PH-UY 2023 <i>Elect Magnetism & Fluids</i> Pre: PH 1013, Calc II Co: PH 2121, EX1 3 cr	PH-UY 2121 <i>General Physics Lab I</i> Pre: PH 1013, Calc II Co: PH 2023 1 cr	ME-UY 2813 <i>Intro To Materials Science</i> Co: PH 1013 Co: ME 2811 3 cr	ME-UY 2811 <i>Materials Science Lab</i> Co: ME 2813 1 cr	ME-UY 2112 <i>CAD</i> Pre: None Co: None 2 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr	18 Credits
	Spring	MA-UY 2114 <i>Multi-Dimensional Calculus</i> Pre: Calc II Co: None 4 cr	MA-UY 2224 <i>Data Analysis</i> Pre: Calc II Co: None 4 cr	PH-UY 2033 <i>Wave, Optics & Thermodynamics</i> Pre: PH 2023, PH2121 Co: PH 2131, EX1 3 cr	PH-UY 2131 <i>General Physics Lab II</i> Pre: PH2023, PH 2121 Co: PH 2033 1 cr	ME-UY 2213 <i>Statics</i> Pre: Calc I, PH 1013 Co: ME 2211 3 cr	ME-UY 2211 <i>Statics lab</i> Pre: None Co: ME 2213 1 cr	16 Credits	
Junior	Fall	ME-UY 3333 <i>Thermodynamics</i> Pre: Calc II Co: None 3 cr	ME-UY 3213 <i>Mechanics Of Materials</i> Pre: ME 2213, Calc II Co: ME 3211 3 cr	ME-UY 3211 <i>Mechanics Of Materials Lab</i> Pre: None Co: ME 3213 1 cr	ME-UY 3513 <i>Measurement Systems</i> Pre: PH 2023 Co: ME 3511 3 cr	ME-UY 3511 <i>Measurement Systems Lab</i> Pre: None Co: ME 3513 1 cr	ME-UY 3223 <i>Dynamics</i> Pre: ME 2213 3 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr	18 Credits
	Spring	ME-UY 3233 <i>Machine Design</i> Pre: ME 3213 Co: None 3 cr	ME-UY 3313 <i>Fluid Mechanics</i> Pre: MA 2114 Co: ME 3333, 3311 3 cr	ME-UY 3311 <i>Fluid Mechanics Lab</i> Pre: None Co: ME 3313 1 cr	ME-UY 3413 <i>Automatic Controls</i> Pre: ME 3513 Co: ME 3411 3 cr	ME-UY 3411 <i>Automatic Controls Lab</i> Pre: ME3511 Co: ME 3413 1 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr	15 Credits	
Senior	Fall	ME-UY 4112 <i>Senior Design I</i> Pre: ME 2112 Co: ME 4214 Co (Any 2 of 3): ME 3233, ME 3413, ME 4313 2 cr	ME-UY 4214 <i>Finite Element Method</i> Pre: ME 3213, MA 2034, MA 2114 Co: None 4 cr	ME-UY 4313 <i>Heat Transfer</i> Pre: ME 3313 Co: ME 4311 3 cr	ME-UY 4311 <i>Heat Transfer Lab</i> Pre: ME 3311 Co: ME 4313 1 cr	AE-UY 4603 <i>Compressible Flow</i> Pre: ME 3333, ME3313 Co: None 3 cr	AE-UY 4653 <i>Aircraft Flight Mechanics</i> Pre: ME 3223 Co: None 3 cr	16 Credits	
	Spring	ME-UY 4113 <i>Senior Design II</i> Pre: ME 4112 Co: None 3 cr	AE-UY 4613 <i>Aerodynamics</i> Pre: ME 3313 Co: None 3 cr	AE-UY 4633 <i>Aerospace Propulsion</i> Pre: AE 4603 Co: None 3 cr	Free <i>Elective</i> Pre: As Required 3 cr	HUSS <i>Elective</i> Pre: EXPOS-UA 1 or 2 As Required 4 cr	16 Credits		