

**MECHANICAL ENGINEERING PROGRAM: FIRST AND SECOND YEARS
STANDARD TRACK**

	SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV
MATHEMATICS	MATH UN1101 (3)	MATH UN1102 (3)	APMA E2000 (4) and E2001 (0) either semester	
				APMA E2101 (3) ¹ or Linear Algebra (3) ² and ODE (3) ³
PHYSICS (three sequences, choose one)	UN1401 (3) ————— UN1402 (3) —————> UN1403 (3) ⁴ UN1601 (3.5) ————— UN1602 (3.5) —————> UN2601 (3.5) ⁴ UN2801 (4.5) —————> UN2802 (4.5)			
CHEMISTRY	one semester lecture (3–4) UN1403 or UN1404 or UN2045 or UN1604	Lab UN1500 (3) ⁵		
UNIVERSITY WRITING	CC1010 (3) either semester			
REQUIRED NONTECHNICAL COURSES			HUMA CC1001, COCI CC1101, or Global Core (3–4) HUMA UN1121 or UN1123 (3)	HUMA CC1002, COCI CC1102, or Global Core (3–4) ECON UN1105 (4) and UN1155 recitation (0)
REQUIRED TECHNICAL COURSES				ENME E3105 (4)
COMPUTER SCIENCE	Computer language: COMS W1004 or COMS W1005 (3) or ENGI E1006 (3) (in semester I or III)			
PHYSICAL EDUCATION	UN1001 (1)	UN1002 (1)		
THE ART OF ENGINEERING	ENGI E1102 (4) either semester			

¹ Students who take APMA E2101 must complete an additional 3 point course in math or basic science with one of the following course designators: MATH, PHYS, CHEM, BIOL, STAT, APMA, or EEEB. One technical elective 3000-level or higher), with the approval of your ME faculty adviser, may be substituted for this purpose.

² Linear algebra may be fulfilled by either APMA E3101 or MATH UN2010.

³ Ordinary differential equations may be fulfilled by either MATH UN2030 or MATH UN3027.

⁴ May substitute EEEB UN2001, BIOL UN2005, or higher.

⁵ May substitute Physics Lab UN1494 (3) or UN3081 (2).

**MECHANICAL ENGINEERING: THIRD AND FOURTH YEARS
STANDARD TRACK**

	SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
REQUIRED COURSES	MECE E3018 (3) Lab I	MECE E3028 (3) Lab II	MECE E3409 (3) Machine design MECE E3420 (3) Engineering design: concept EEME E3601 (3) Intro. to continuous control sys.	MECE E3430 (3) Engineering design: creation
	MECE E3100 (3) Fluids I	ENME E3106 (3) Dynamics and vibrations		
	MECE E3301 (3) Thermodynamics	MECE E3311 (3) Heat transfer		
	MECE E3408 (3) Graphics and design	MECE E3610 (3) Materials and processes in manufacturing		
	MECE E3414 (3) ¹ Mechanics of solids for mechanical engineers	ELEN E1201 (3.5) ² Intro. elec. eng.		
	MECE E1008 (1) Intro to machining (either semester)			
TECHNICAL ELECTIVES³		12 points ⁵		
NONTECH ELECTIVES⁴	Students must complete the 27-point requirement. ⁶			
TOTAL ESTIMATED POINTS⁷	15–16	16.5–19.5	12–15	12

¹ Required for class of 2025 and beyond.

² Strongly recommended to be taken in Semester III or IV.

³ If APMA E2101 is taken instead of Linear algebra and ODE, students must complete an additional 3-point course in math or basic science with one of the following course designators: MATH, PHYS, CHEM, BIOL, STAT, APMA, or EEEB. One technical elective (3000-level or higher), with the approval of your ME faculty adviser, may be substituted for this purpose.

⁴ Not required for Combined Plan students.

⁵ 12 points required; 6 must be MECE courses. Any course with a description in the Mechanical Engineering section of the Bulletin counts as a MECE course.

⁶ See page 9; not required for Combined Plan students.

⁷ Students must complete a minimum of 128 points to graduate.

**MECHANICAL ENGINEERING PROGRAM: FIRST AND SECOND YEARS
EARLY DECISION TRACK**

	SEMESTER I	SEMESTER II	SEMESTER III	SEMESTER IV
MATHEMATICS	MATH UN1101 (3)	MATH UN1102 (3)	APMA E2000 (4) and E2001 (0) either semester	
				APMA E2101 (3) ¹ or Linear Algebra (3) ² and ODE (3) ³
PHYSICS (three sequences, choose one)	UN1401 (3) ————— UN1601 (3.5) ————— UN2801 (4.5) —————	UN1402 (3) ————— UN1602 (3.5) ————— UN2802 (4.5) —————	UN1403 (3) ⁴ UN2601 (3.5) ⁴	
CHEMISTRY	one semester lecture (3–4) UN1403 or UN1404 or UN2045 or UN1604	Lab UN1500 (3) ⁵		
UNIVERSITY WRITING	CC1010 (3) either semester			
REQUIRED NONTECHNICAL COURSES			HUMA CC1001, COCI CC1101, or Global Core (3–4)	HUMA CC1002, COCI CC1102, or Global Core (3–4)
REQUIRED TECHNICAL COURSES		ENME E3105 (4) Mechanics	MECE E3414 (3) ⁷ Mechanics of solids for mechanical engineers	ELEN E1201 (3.5) Intro. to elec. eng. MECE E3408 (3) Graphics and design
COMPUTER SCIENCE	Computer language: COMS W1004 or COMS W1005 (3) or ENGI E1006 (3) (in semester I and III)			
PHYSICAL EDUCATION	UN1001 (1)	UN1002 (1)		
THE ART OF ENGINEERING	ENGI E1102 (4) either semester			

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**MECHANICAL ENGINEERING: THIRD AND FOURTH YEARS
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REQUIRED COURSES	MECE E3018 (3) Lab I MECE E3100 (3) Fluids I MECE E3301 (3) Thermodynamics	MECE E3028 (3) Lab II ENME E3106 (3) Dynamics and vibrations MECE E3311 (3) Heat transfer MECE E3610 (3) Materials and processes in manufacturing	MECE E3409 (3) Machine design MECE E3420 (3) Engineering design: concept EEME E3601 (3) Intro. to continuous control sys.	MECE E3430 (3) Engineering design: creation
	MECE E1008 (1) Intro to machining (either semester)			
REQUIRED NONTECHNICAL COURSES	HUMA UN1121 or UN1123 (3)	ECON UN1105 (4) and UN1155 recitation (0)		
TECHNICAL ELECTIVES¹		12 points ³		
NONTECH ELECTIVES	Students must complete the 27-point requirement. ⁴			
TOTAL ESTIMATED POINTS²	12–16	16–19	12–15	12

¹ If APMA E2101 is taken instead of Linear Algebra and ODE, students must complete an additional 3-point course in math or basic science with one of the following course designators: MATH, PHYS, CHEM, BIOL, STAT, APMA, or EEEB. One technical elective (3000-level or higher), with the approval of your ME faculty adviser, may be substituted for this purpose.

² Students must complete a minimum of 128 points to graduate.

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