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) **and** ORCA E2500 (3)[6] 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)	~~UN14~~02 (3) ~~UN16~~02 (3.5) ~~UN28~~02 (4.5)	~~UN14~~03 (3)[4] ~~UN26~~01 (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 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).
[6] Offered in spring semester.

MECHANICAL ENGINEERING: THIRD AND FOURTH YEARS
STANDARD TRACK

	SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
REQUIRED COURSES	MECE E3018 (3) Lab I MECE E3100 (3) Fluids I MECE E3301 (3) Thermodynamics MECE E3408 (3) Graphics and design MECE E3414 (3)[1] Mechanics of solids for mechanical engineers	MECE E3028 (3) Lab II ENME E3106 (3) Dynamics and vibrations MECE E3311 (3) Heat transfer MECE E3610 (3) Materials and processes in manufacturing ELEN E1201 (3.5)[2] Intro. elec. eng.	MECE E3409 (3) Machine design MECE E3420 (3) Engineering design: concept	MECE E3430 (3) Engineering design: creation EEME E3601 (3) Classical control sys.
	MECE E1008 (1) Intro to machining (either semester)			
TECHNICAL ELECTIVES[3]		9 points[5]		
NONTECH ELECTIVES[4]	Students must complete the 27-point requirement.[6]			
TOTAL ESTIMATED POINTS[7]	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] 9 points required; 6 must be MECE courses.
[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) **and** ORCA E2500 (3)[6] 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 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			

[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).

[6] Offered in spring semester.

[7] Required for class of 2025 and beyond.

MECHANICAL ENGINEERING: THIRD AND FOURTH YEARS
EARLY DECISION TRACK

	SEMESTER V	SEMESTER VI	SEMESTER VII	SEMESTER VIII
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	MECE E3430 (3) Engineering design: creation EEME E3601 (3) Classical control systems
	MECE E1008 (1) Intro to machining (either semester)			
REQUIRED NONTECHNICAL COURSES	HUMA UN1121 **or** UN1123 (3)	ECON UN1105 (4) **and** UN1155 recitation (0)		
TECHNICAL ELECTIVES[1]		9 points [3]		
NONTECH ELECTIVES	Students must complete the 27-point requirement.[4]			
TOTAL ESTIMATED POINTS[2]	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.

[3] 9 points required; 6 must be MECE courses.

[4] See page 9; not required for Combined Plan students.