Begin to earn credits toward a Master's Degree while taking undergraduate courses!
CLICK HERE

Bachelor of MECHANICAL ENGINEERING and Electrical Engineering, Integrated (MCE)

4-Year Recommended Course Sequence with *Calculus Entry*

Click on the Course Name to access the course in the Undergraduate Catalog 24-25

Updated July 2025

Fall Semester 1	Spring Semester 2	Fall Semester 3	Spring Semester 4	Fall Semester 5	Spring Semester 6	Fall Semester 7	Spring Semester 8
★ **INQ 170 [3]** Inquiry Launch to Engineering	**MCE 181 [2]** CAE Lab II **(MCE 180)**	**ESC 201 [3]** Statics **(PHY 241)**	**ESC 202 [3]** Dynamics **(ESC 201)**	**ESC 321 [3]** Thermodynamics **(MTH 182)**	**EEC 384 [2]** Digital Systems Lab **(EEC 383)**	**MCE 450 [2]** Design Project I **Or** **EEC 493 [2]** Design Project I	**MCE 451 [3]** Design Project II **Or** **EEC 494 [3]** Design Project II
MTH 181 [4] Calculus I	**MTH 182 [4]** Calculus II **(MTH 181)**	**ESC 250 [3]** Diff EQ for Eng. **(MTH 182)**	**ESC 301 [3]** Fluid Mechanics **(ESC 250 or MTH 286)**	**EEC 313 [3]** Electronics I **(EEC 310)**	**MCE 371 [3]** Vibrations **(ESC 202, ESC 250 or MTH 286)**	**MCE 441 [3]** Intro to Linear Controls Systems **(ESC 350 or MTH 288, MCE 371)**	**American Civic Literacy Elective [3]**
MCE 180 [2] CAE Lab I	**PHY 241 [5]** Physics I **(MTH 181)**	**ESC 350 [3]** Linear Algebra for Engineers **(MTH 182, ESC 152)**	**EEC 310 [4]** Electric Circuits I **(ESC 350)**	**ESC 211 [3]** Strength of Materials **(ESC 201)**	**MCE 362 [3]** Machine Analysis **(ESC 211, MCE 276)**	**Complexities of Pluralistic Society Elective [3]**	**PHL 215 [3]** Technology Ethics **HCC Elective**
ESC 152 [3] Programming with MATLAB **OR** **ESC 151 [3]** C Programming	**MCE 276 [3]** Materials & Manufacturing Processes **(**MCE 181, *MCE 286)**	**PHY 242 [5]** Physics II **(PHY 241, MTH 182)**	**EEC 312 [2]** Electric Circuits Lab **(**EEC 310)**	**EEC 383 [3]** Digital Systems **(EEC 310 or PHY 242/244)**	**MCE 470 [3]** Engr. Measurements **(ESC 211, MCE 315, MCE 324, MCE 371, *MCE 480)**	**General Elective [3]**	**MCE Lab Elective [3]**
ENG 100 [3] Intensive Writing **or** **ENG 101 [3]** College Writing I	**MCE 286 [1]** Manufacturing Processes Lab **(*MCE 276)**	**ENG 108 [3]** AI Writing (Preferred) **(ENG 101)** **Or** **ENG 102 [3] College Writing II** **(ENG 101)**	**Society and Human Behavior Elective [3]**	**EEC 315 [2]** Electronics Lab **(EEC 312, *EEC 313)**	**MCE 480 [1]** Engineering Measurements Lab **(*MCE 470)**	****EEC Tech Elective [3]** 300-400 Level **[3]**	****MCE Elective or EEC Tech Elective [3 or 4]** **400-500 Level Courses [3]**
					Global Human Perspectives Elective [3]		
15 Total Credit Hours	**15 Total Credit Hours**	**17 Total Credit Hours**	**15 Total Credit Hours**	**14 Total Credit Hours**	**15 Total Credit Hours**	**15 Total Credit Hours**	**15 Total Credit Hours**

Total Credits for MCE & EE Degree: 120

(Prerequisites) • (*Pre/co-requisite) • [# of Course Credits] • MCE XXX = Only Offered That Fall/Spring Semester

- Required MCE Courses
- Required Science Courses
- Required English Courses
- Required Math Courses
- Core Curriculum Electives