

# Mechanical Engineering Course Flow (revised 02/15/2025)

Student:

Advising Dates:

## Freshman Year

## Sophomore Year

Choose three each semester

## Junior Year

## Senior Year

CEC 111  
Imagination,  
Ingenuity, and  
Impact I  
(Fall only)

CEC 112  
Imagination,  
Ingenuity, and  
Impact II  
(Spring Only)

### Legend

P – pre-req

C – co-req

P/C – pre or co-req

MTH 151

MTH 251

PHY 181

PHY 182

PHY 183

Students in the Honors Program need to consult with Honors advisors on selection of their Honors customized educational plan INSTEAD of Miami's general education requirements.

ENG 111

PA 3B A.H

PA 3A A.H

PA 4C G.C

Combined math

MTH 246

CHM 141

CHM 144

MTH 252

STA 301  
or STA 261

ECO 201

PA 4B G.C

ENG 313

PA 4B or 4C G.C

(P/C) MME211

MME 201  
Modeling and  
Design

(P/C) STA 301  
or STA 261

MME 231  
Manufacturing  
Processes

(P) MTH 151  
(P/C) CHM 141

MME 223  
Engineering  
Materials

Min C-

(P) MTH 151  
(P) PHY 181  
MME 211

Static Modeling  
of Mechanical  
Systems

(P) MTH 251  
MME 312  
Mechanics of  
Materials

(P) MTH 251  
MME 311  
Dynamic  
Modeling of  
Mechanical  
Systems

(P) PHY 181  
(P) CHM 141  
(P) MTH 251

MME/CPB 314  
Engineering  
Thermodynamics

(P) MTH 252  
(P) PHY 181

MME/CPB 313  
Fluid Mechanics

(P/C) MTH 251  
(P) PHY 182

ECE 205  
Electric Circuit  
Analysis

(P/C) MTH 246  
MME 305  
Measurements  
and  
Instrumentation

(P) MTH 246  
(P/C) MTH 252  
(P/C) MME 305

MME 321  
System  
Modeling

(P) MTH 151  
(P/C) MTH 246

MME 202  
Numerical  
Methods

Senior Standing

MME 448  
Senior Design  
Projects

Senior Standing

MME 449  
Senior Design  
Projects

(P/C) MME/CPB  
403

MME 415  
Thermal Studio

(P) MTH 246

MME/CPB 403  
Heat Transfer

(P) MTH 151  
(P/C) STA 301  
or STA 261

MME/CPB 341  
Engineering  
Economics

Technical Elective

MCH Track  
Course 1  
(Fall Only)

MCH Track  
Course 2  
(Spring Only)

PA 4A G.C

PA 2A S.S

Textual Description of Mechanical Engineering Course Flowchart

This chart shows the courses needed to graduate, when those courses are typically taken, and the order in which the courses must be taken. The main area of the chart shows four boxes, one each for first-year, sophomore, junior, and senior years. Within each year, classes are shown in roughly two columns representing fall then spring semester. Courses are listed within each semester to indicate when the course is typically taken. An arrow leaving a course and pointing to another course indicates that the first course must be taken prior to taking the second course. Below all the years is a section containing a collection of courses that can be taken when convenient for the student and therefore no particular semester is recommended. All students may have some variation in degree plans, be sure to be communication with your academic advisor.