

# Smart Manufacturing Engineering Major Course Flow (revised 02/18/2025)

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

(P) MTH 151  
(P) PHY 181

MME 211  
Static Modeling  
of Mechanical  
Systems

Min 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

MME 232  
Polymer  
Processes

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

ECE 205  
Electric Circuit  
Analysis

Combined math

MTH 246

CHM 141

CHM 144

ECO 201

STA 301  
or STA 261

MME 301  
Product  
Development

(P) MTH 251

MME 312  
Mechanics of  
Materials

MME 331  
Advance  
Manufacturing  
and Design

(P) STA 301 or STA  
261

MME 334  
Quality Planning &  
Control

MME 337  
Manufacturing  
Automation

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

MME/CPB 341  
Engineering  
Economics

(P/C) MTH 246

MME 305  
Measurements  
and  
Instrumentation

(P) STA 301 or  
STA 261

STA 363  
Intro to statistical  
Modeling

PA 2A S.S

PA 4A G.C

PA 4B G.C

Senior Standing

MME 448  
Senior Design  
Projects

Senior Standing

MME 449  
Senior Design  
Projects

(P) MTH 251

MME 411  
Machine &  
Tool Design

MME 432  
Digital  
Manufacturing

MME 435  
Process  
Engineering

MME 433  
Smart Factory

MME 470  
or  
STA 402  
Or  
STA 404

Technical Elective

ENG 313

Technical Elective

PA 4B or 4C G.C

Textual Description of Smart Manufacturing 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.