



CAREER ENHANCEMENT CERTIFICATE
MECHANICAL ENGINEERING TECHNOLOGY –
MACHINE DESIGN

2024-25 Catalog

Effective Summer 2024

4056

The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.

Business, Engineering, and Information Technologies Division

Engineering Technology Department

| Course Number | Course Title | Credits | Pre- and Co-Requisites | Completed Sem./Year |
|---------------------------|--|-----------|--|---------------------|
| DET125 | Basic AutoCAD | 3 | | |
| MET124 | Statics and Strength of Materials | 4 | Pre-Co-PHY121 or Pre-Co-PHY221 | |
| MET221 | Advanced Strength of Materials | 2 | MET124 | |
| MET226 | Technical Project – Mechanical and Design | 2 | Pre-Co-MET228 and Pre-Co-DET125 | |
| MET228 | Machine Design | 4 | MET124 | |
| MTH135 | Precalculus [^] - <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement</i> | 5 | MTH025 or Proficiency | |
| PHY121 | College Physics I with Algebra (lab) [^] | 4 | MTH135 or (MTH125 and MTH130) or Proficiency | |
| TOTAL CREDIT HOURS | | 24 | | |

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

| <u>First Semester</u> | | <u>Credit Hours</u> | <u>Pre- and Co-requisites</u> |
|------------------------|--|---------------------|--|
| DET125 | Basic AutoCAD | 3 | |
| MTH135 | Precalculus [^] - <i>A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement</i> | 5 | MTH025 or Proficiency |
| | | 8 | |
| <u>Second Semester</u> | | | |
| PHY121 | College Physics I with Algebra (lab) [^] | 4 | MTH135 or (MTH125 and MTH130) or Proficiency |
| MET124 | Statics and Strength of Materials | 4 | Pre-Co-PHY121 or Pre-Co-PHY221 |
| | | 8 | |
| <u>Third Semester</u> | | | |
| MET221 | Advanced Strength of Materials | 2 | MET124 |
| MET226 | Technical Project – Mechanical and Design | 2 | Pre-Co-MET228 and Pre-Co-DET125 |
| MET228 | Machine Design | 4 | MET124 |
| | | 8 | |
| TOTAL CREDITS | | 24 | |

[^]Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Mechanical Engineering Technology Degree (4050).