

## Mechanical Engineering Technology

### Mechanical Engineering Technology

STANTON CAMPUS

Spring 2023

The mechanical engineering technician applies theory and principles of mechanical engineering technology to develop and test processes, equipment, and mechanical systems in cooperation with an engineering staff; reviews project construction and engineering drawings to determine specifications, procedures, objectives, problems, and possible solutions; sets up and conducts tests and experiments for complete units or systems to investigate engineering theories regarding improvement in design or performance; analyzes indicated and calculated test results against design or rated specifications; records test procedures, results, and suggestions for improvement; and prepares engineering drawings, charts, and graphs. The Mechanical Engineering Technology program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

#### PROGRAM SPECIFIC ADVISEMENT STATEMENT

##### Courses - Semester 1

|   | Credits | Lecture | Lab |
|---|---------|---------|-----|
| <a href="#">SSC 100 - First Year Seminar</a>          | 1       | 1       | 0   |
| <a href="#">ENG 101 - Composition I</a>               | 3       | 3       | 0   |
| <a href="#">(MAT 183 - Reasoning with Functions I</a> | 5       | 5       |     |
| OR <a href="#">MAT 281 - Calculus I</a> )             | 4       | 4       | 1   |
| <a href="#">MET 115 - Intro to Mech Eng Tech</a>      | 3       | 3       |     |
| <a href="#">MET 123 - Modern MFG Techniques</a>       | 3       | 2       | 4   |
| <a href="#">EDD 131 - Engineering Graphics/CAD</a>    | 3       | 2       | 4   |

##### Courses - Semester 2

|  | Credits | Lecture | Lab |
|--|---------|---------|-----|
| <a href="#">ENG 102 - Composition II</a>                     | 3       | 3       | 0   |
| <a href="#">(MAT 193 - Reasoning with Functions II</a>       | 4       | 4       |     |
| OR <a href="#">MAT 282 - Calculus II</a> )                   | 4       | 4       | 1   |
| <a href="#">MET 225 - Adv. Manufacturing Techniques</a>      | 3       | 2       | 4   |
| <a href="#">(MET 132 - Statics</a>                           | 3       | 3       | 1   |
| OR <a href="#">CET 258 - Statics with Calculus</a> )         | 3       | 3       | 1   |
| <a href="#">(MET 242 - Strength of Materials</a>             | 3       | 2       | 2   |
| OR <a href="#">CET 270 - Solid Mechanics with Calculus</a> ) | 3       | 3       | 1   |
| <a href="#">(PHY 205 - General Physics I</a>                 | 4       | 3       | 3   |
| OR <a href="#">PHY 281 - Physics I with Calculus</a> )       | 4       | 3       | 3   |

##### Courses - Semester 3

|   | Credits | Lecture | Lab |
|---|---------|---------|-----|
| <a href="#">MET 264 - Material Science</a>      | 4       | 3       | 2   |
| <a href="#">MET 241 - Fluid Mechanics</a>       | 4       | 3       | 2   |
| <a href="#">MET 243 - Dynamics</a>              | 3       | 3       | 1   |
| <a href="#">ELC 248 - Electro-Mech. Systems</a> | 4       | 3       | 3   |

##### Courses - Semester 4

|   | Credits | Lecture | Lab |
|---|---------|---------|-----|
| <a href="#">MET 245 - Machine Design</a>      | 3       | 3       | 0   |
| <a href="#">MET 271 - Engineering Project</a> | 3       | 1       | 5   |

#### Approved Electives

Select two social science elective to take in the fourth semester.

| Group | Courses   | Credits | Lecture | Lab |
|-------|---|---------|---------|-----|
|       | <a href="#">COM 111 - Human Communications</a>          | 3       | 3       | 0   |
|       | <a href="#">ECO 111 - Macroeconomics</a>                | 3       | 3       | 0   |
|       | <a href="#">ECO 122 - Microeconomics</a>                | 3       | 3       | 0   |
|       | <a href="#">HIS 111 - U. S. History: Pre-Civil War</a>  | 3       | 3       | 0   |
|       | <a href="#">HIS 112 - U. S. History: Post-Civil War</a> | 3       | 3       | 0   |
|       | <a href="#">POL 111 - Political Science</a>             | 3       | 3       | 0   |
|       | <a href="#">PSY 100 - Human Relations</a>               | 3       | 3       | 0   |
|       | <a href="#">PSY 121 - General Psychology</a>            | 3       | 3       | 0   |
|       | <a href="#">SOC 111 - Sociology</a>                     | 3       | 3       | 0   |

*To complete program requirements, you must pass the above courses and earn at least **65 credits**. The number of courses and credits required for graduation may be more depending on college readiness and the elective courses offered in your program major (if electives are a part of the program).*