# Mechanical Design Technology A.A.S.

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NOTICE(s): For the A.A. S. Degree in Civil Engineering Technology, Mechanical Design Technology Specialty, the student must complete a minimum of 71 credit hours — a minimum of 56 in technical courses and a minimum of 15 in general education courses — all of which must be approved by the advisor. A maximum of 9 credit hours of technical electives may be selected from any approved area of Engineering Technology programs with prior written approval from the student's major advisor. Technical courses may vary to meet student needs and to provide options.
Admission Requirement: High school diploma or GED.

The courses in this program of study may not be offered every semester. It is important to consult with your advisor to determine course schedules to stay on track to graduate.

The student is responsible for verifying the transferability of credit in this program to a senior institution with the appropriate senior institution advisor.

## Area I — Written Composition

| Item # | Title | Hours |
|---|---|---|
| ENG 101 | English Composition I | 3 |
| | Sub-Total Credits | 3 |

## Area II — Humanities and Fine Arts

| Item # | Title | Hours |
|---|---|---|
| | Humanities/Fine Arts Elective | 3 |
| | Sub-Total Credits | 3 |

## Area III — Natural Sciences and Mathematics

| Item # | Title | Hours |
|---|---|---|
| INT 104 | Principles of Technology | 3 |
| | MTH 100: Intermediate College Algebra OR numerically higher | 3 |
| | Sub-Total Credits | 6 |

## Area IV — History, Social and Behavioral Sciences

| Item # | Title | Hours |
|---|---|---|
| | History, Social and Behavioral Sciences Elective | 3 |
| | Sub-Total Credits | 3 |

# Area V - Required Technical Courses

| Item # | Title | Hours |
|---|---|---|
| CET 101 | Introduction to Engineering Technology | 3 |
| CET 215 | Statics | 3 |
| CET 217 | Strength of Materials | 3 |
| | MDT 100 OR MTT 121 | 3 |
| MDT 105 | Introduction to Computer-Aided Design (CAD) | 3 |
| MDT 111 | Mechanical Drawing | 3 |
| MDT 146 | AutoCAD CADD | 3 |
| MDT 147 | Inventor CADD | 3 |
| MDT 202 | SOLIDWORKS CADD | 3 |
| MDT 211 | Advanced Mechanical Drawings | 3 |
| MDT 221 | Machine Design | 3 |
| ORI 101 | Orientation to College | 1 |
| WKO 101 | Workplace Skills Development I | 1 |
| | Sub-Total Credits | 35 |

# Additional Coursework:

Choose 21 credit hours from the following list.

| Item # | Title | Hours |
|---|---|---|
| CIS 146 | Computer Applications | 3 |
| MDT 122 | Architectural Drawing | 3 |
| MDT 123 | Architectural Drawing II | 3 |
| MDT 187 | Advanced Inventor Cadd | 3 |
| MDT 203 | CREO CADD | 3 |
| MDT 215A | Co-Op | 1 |
| MDT 215B | Co-Op | 1 |
| MDT 215C | Co-Op | 1 |
| MDT 216 | Co-Op | 2 |
| MDT 217 | Co-Op | 3 |
| MDT 252 | Advanced Solidworks CADD | 3 |
| MDT 261 | HVAC and Pipe Systems Design | 3 |
| MDT 271 | Structural and Weld Design | 3 |
| MDT 272 | Electrical and Electronic Design | 3 |
| MDT 280 | 3-D Studio Max | 3 |
| MDT 293 | Advanced Pro-Engineer | 3 |
| SPH 106 | Fundamentals of Oral Communication | 3 |
| | Sub-Total Credits | 44 |
| | | **71** |