## Mechanical Design Technology Certificate

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**NOTICE(s):** For the certificate in Civil Engineering Technology, Mechanical Design Technology Specialty, the student must complete at least 47 credit hours – at least 41 in technical courses and at least 6 in general education courses – all of which must be approved by the advisor. Technical courses, which may vary to meet student needs and to provide options, must be selected from those listed below. 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 III — Natural Sciences and Mathematics

| Item # | Title   | Hours |
|--------|---|-------|
|        | MTH 100: Intermediate College Algebra OR numerically higher | 3     |
|        | Sub-Total Credits   | 3     |

## Area V - Required Technical Courses

| Item #  | Title                                       | Hours |
|---------|---|-------|
| CET 101 | Introduction to Engineering Technology      | 3     |
| MDT 100 | Engineering Blueprints                      | 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 211 | Advanced Mechanical Drawings                | 3     |
| ORI 101 | Orientation to College                      | 1     |
| WKO 101 | Workplace Skills Development I              | 1     |
|         | Sub-Total Credits                           | 23    |

# Additional Coursework:

Choose 18 credit hours from the following list.

| Item #   | Title                              | Hours |
|----------|------------------------------------|-------|
| CIS 146  | Computer Applications              | 3     |
| MDT 122  | Architectural Drawing              | 3     |
| MDT 202  | SOLIDWORKS 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 221  | Machine Design                     | 3     |
| MDT 261  | HVAC and Pipe Systems Design       | 3     |
| MDT 271  | Structural and Weld Design         | 3     |
| MDT 272  | Electrical and Electronic Design   | 3     |
| SPH 106  | Fundamentals of Oral Communication | 3     |
|          | Sub-Total Credits                  | 32    |
|          |                                    | 47    |