

| SUNY Canton Mechanical Engineering Technology - B. Tech. (0235) |                                               |    | Fall 2026 |      |
|-----------------------------------------------------------------|-----------------------------------------------|----|-----------|------|
| 1 <sup>st</sup> Semester                                        |                                               |    | Credit    | Term |
| MATH 123                                                        | Pre-Calculus                                  | 4  |           |      |
| MECH 121                                                        | Manufacturing Processes I                     | 3  |           |      |
| ENGS 101                                                        | Introduction to Engineering                   | 2  |           |      |
| PHYS 121/131                                                    | College/University Physics I                  | 3  |           |      |
| PHYS 125/135                                                    | Physics Lab 1                                 | 1  |           |      |
| MECH 101                                                        | Drawing for Engineers                         | 1  |           |      |
|                                                                 |                                               | 14 |           |      |
| 2 <sup>nd</sup> Semester                                        |                                               |    |           |      |
| MATH 161                                                        | Calculus I                                    | 4  |           |      |
| ENGL 101                                                        | Composition & The Spoken Word                 | 3  |           |      |
| PHYS 122/132                                                    | College/University Physics II                 | 3  |           |      |
| PHYS 126/136                                                    | Physics Lab 2                                 | 1  |           |      |
| MECH 102                                                        | Parametric Modeling                           | 2  |           |      |
| MECH 122                                                        | Introduction to 3D Printing                   | 1  |           |      |
|                                                                 | Elective <sup>1</sup>                         | 2  |           |      |
|                                                                 |                                               | 16 |           |      |
| 3 <sup>rd</sup> Semester                                        |                                               |    |           |      |
| MATH 162                                                        | Calculus II                                   | 4  |           |      |
| ENGS 201                                                        | Statics                                       | 3  |           |      |
| MECH 261                                                        | MET Electricity                               | 4  |           |      |
| MECH 241/<br>ENGS 314                                           | Fluid Mechanics / Fluid Mechanics I           | 3  |           |      |
| MECH 242                                                        | Fluid Power Lab                               | 1  |           |      |
|                                                                 | GER (6, 7, 8, 9, 10, 11) <sup>2</sup>         | 3  |           |      |
|                                                                 |                                               | 18 |           |      |
| 4 <sup>th</sup> Semester                                        |                                               |    |           |      |
| ENGS 203                                                        | Engineering Strength of Materials             | 3  |           |      |
| MECH 220                                                        | Engineering Materials                         | 3  |           |      |
| MECH 221                                                        | MET Lab <sup>3</sup>                          | 1  |           |      |
| MECH 301/<br>ENGS 202                                           | Technical Dynamics/Dynamics                   | 3  |           |      |
| MECH 303                                                        | GD&T (Geometric Dimensioning and Tolerancing) | 2  |           |      |
|                                                                 | Diversity Elective                            | 3  |           |      |
|                                                                 |                                               | 15 |           |      |
| 5 <sup>th</sup> Semester                                        |                                               |    |           |      |
|                                                                 | Elective (300 or 400 level) <sup>4</sup>      | 3  |           |      |
| ENGS 350                                                        | Mechanics of Machine Elements                 | 4  |           |      |
| MECH 342                                                        | Thermodynamics                                | 3  |           |      |
| MATH 364                                                        | Differential Equations                        | 4  |           |      |
| ENGS 102                                                        | Programming for Engineers                     | 2  |           |      |
|                                                                 |                                               | 16 |           |      |

| 6 <sup>th</sup> Semester |                                                       |    |  |  |
|--------------------------|-------------------------------------------------------|----|--|--|
| MECH 343                 | Heat Transfer                                         | 3  |  |  |
| MECH 312                 | Engineering Design                                    | 3  |  |  |
| SOET 400                 | Technical Communication                               | 3  |  |  |
| MATH 141                 | Statistics                                            | 3  |  |  |
|                          | Elective (300 or 400 level) <sup>4</sup>              | 3  |  |  |
|                          |                                                       | 15 |  |  |
| 7 <sup>th</sup> Semester |                                                       |    |  |  |
| MECH 377                 | Capstone Research & Proposal                          | 2  |  |  |
|                          | Elective (300 or 400 level) <sup>4</sup>              | 3  |  |  |
|                          | Elective (300 or 400 level) <sup>4</sup>              | 3  |  |  |
|                          | GER (6, 7, 8, 9, 10, 11) <sup>2</sup>                 | 3  |  |  |
|                          | GER (6, 7, 8, 9, 10, 11) <sup>2</sup>                 | 3  |  |  |
| MECH 310                 | Instrumentation and Controls for Mechanical Engineers | 3  |  |  |
|                          |                                                       | 17 |  |  |
| 8 <sup>th</sup> Semester |                                                       |    |  |  |
| MECH 477                 | Capstone Project                                      | 3  |  |  |
| ECON 370                 | Engineering Economics                                 | 3  |  |  |
| SOET 377                 | Engineering Ethics <sup>6</sup>                       | 1  |  |  |
|                          | Elective (300 or 400 level) <sup>4,5</sup>            | 3  |  |  |
|                          | Elective (300 or 400 level) <sup>4,5</sup>            | 3  |  |  |
|                          |                                                       | 13 |  |  |

#### NOTES:

- 1 Program electives selected from ACHP, AREA, ENGS, CITA, CONS, ELEC, MATH, MECH, SOET designators and AUTO 104.
- 2 Must complete 7 of 11 GERS and 30 total credits. Required GERS: (1/2), 3, 4, and 5. Need to pick 3 others.
- 3 Writing intensive course requirement.
- 4 Program electives are upper level from all ACHP, AREA, CITA, CONS, ELEC, MATH, PHYS, MECH, MKTX, SOET course listings. Program electives are selected by advisement based on student interest and career goals. BSAD 421 can also be used.
- 5 MECH 480 Co-Op can be equivalent up to 6 credit hours.
- 6 Can substitute SOET 378 or BSAD 319 if desired.

#### GER Elective Course must come from the following list:

##### Complete 7 of 11 GER's and 30 total credits

GER 1 Communication (Written)

GER 4 Mathematics

GER 7 Social Science

GER 10 World History and Global Awareness

GER 2 Communication (Oral)

GER 5 Natural Science

GER 8 Arts

GER 11 World Languages

GER 3 Diversity

GER 6 Humanities

GER 9 US History and Civic Engagement

GER's: 1 ☒ 2 ☒ 3 ☒ 4 ☒ 5 ☒ 6 \_\_\_\_\_ 7 \_\_\_\_\_ 8 \_\_\_\_\_ 9 \_\_\_\_\_ 10 \_\_\_\_\_ 11 \_\_\_\_\_

**Completed OSHA 10 Hour Safety Course and Certification is on Record: YES/NO**

**Graduation Requirements: Total Semester Credit Hours – 124**