

# Engineering Technology

## A.A.S. Engineering Technology: Mechanical/Manufacturing Emphasis

204402 Revised 12/2016 (Fall 2017)

| General Education Requirements                      |  | Credits      | Semester Taken | Prerequisites                                   |
|---|--|--------------|----------------|---|
| ENGL 101  | Composition and Reading I                                    | 3            |                | ENGL 30/90 or appropriate placement test score  |
| ENGL 215  | Technical Writing  | 3            |                | ENGL 101  |
| SPAN 100  | Beginning Occupational Spanish                               | 3            |                |   |
| COMM 100  | Fundamentals of Speech                                       | 3            |                | ENGL 30/90 or appropriate placement test score  |
| HIST 120  | U.S. History to 1865 <b>or</b>                               | 3            |                |   |
| HIST 121  | U.S. History since 1865 <b>or</b>                            |              |                |   |
| POLS 135  | Introduction to Political Science <b>or</b>                  |              |                |   |
| POLS 136  | Introduction to American National Politics <b>or</b>         |              |                |   |
| POLS 137  | Introduction to State and Local Politics                     |              |                |   |
| Option #1   |  | 5-8          |                | MATH 110 or satisfactory placement test score   |
| MATH 120  | College Algebra or   |              |                |   |
| MATH 120R   | College Algebra w/ Review                                    |              |                |   |
| MATH 130  | Trigonometry   |              |                |   |
| Option #2   |  | 5            |                | MATH 130 or appropriate placement test score.   |
| MATH 150  | PreCalculus or higher  |              |                |   |
| PHYS 130  | General Physics  | 5            |                |   |
| <b>Minimum Total General Education Credit Hours</b> |  | <b>18</b>    |                |   |
| <b>Specific Program Requirements:</b>               |  |              |                |   |
| EHSS 111  | Introduction to Health and Safety for General Industry       | 1            |                |   |
| ENGR 101  | Introduction to the Profession                               | 1            |                |   |
| ETEC 152  | Engineering Graphics and CADD I                              | 5            |                | MATH 40/40L or appropriate placement test score |
| ETEC 153  | Descriptive Geometry   | 3            |                | ETEC 152  |
| ETEC 200  | Applied Statics & Mechanics                                  | 3            |                | MATH 104 or 130                                 |
| ETEC 268  | Introduction to Structural Steel Design                      | 3            |                | ETEC 152  |
| ETEC 269  | CADD II  | 4            |                | ETEC 152 or 169                                 |
| <b>Specific Emphasis Requirements</b>               |  |              |                |   |
| <b>Mechanical/Manufacturing</b>                     |  |              |                |   |
| ETEC 258  | Introduction to Machine Design                               | 3            |                | ETEC 152  |
| ETEC 270  | Parametric Modeling Inventor <b>or</b>                       | 3            |                | ETEC 152  |
| ETEC 271  | Parametric Modeling Solidworks                               |              |                |   |
| ETEC 272  | Adv. Parametric Modeling and Prototyping, Inventor <b>or</b> | 3            |                | ETEC 270<br>ETEC 271                            |
| ETEC 273  | Advanced Parametric Modeling and Prototyping, Solidworks     |              |                |   |
| CIMM 101  | Machine Shop Safety  | 1            |                |   |
| CIMM 102  | Basic Lathe Operation  | 1            |                | CIMM 101  |
| CIMM 103  | Basic Mill Operation   | 1            |                | CIMM 101  |
| CIMM 121  | CNC Lathe Operation Fundamentals <b>or</b>                   | 4            |                | CIMM 110<br>CIMM 115                            |
| CIMM 122  | CNC Mill Operation Fundamentals                              |              |                |   |
| WELD 100  | Introduction to Welding/Cutting Processes                    | 1            |                |   |
| <b>Total Credit Hours Required</b>                  |  | <b>62-65</b> |                |   |