## **Curriculum Guide: Mechanical Engineering Technology**

| Course                        | Title   | Credits |
|-------------------------------|---|---------|
| Freshman                      |   |         |
| Fall                          |   |         |
| ET 101                        | Fundamentals of<br>Engineering Technology   | 2       |
| ET 105                        | Fundamentals of<br>Drawing  | 3       |
| CHEM 211<br>& CHEM 213        | Principles of Chemistry I<br>and Principles of<br>Chemistry I Laboratory<br>(Natural Science) | 5       |
| MATH 202                      | Calculus and Analytic<br>Geometry I (Quantitative<br>Literacy)                                | 4       |
| First Year Seminar            |   | 3       |
|                               | Credits   | 17      |
| Spring                        |   |         |
| ET 130                        | Basic Electrical Circuits I   | 3       |
| ET 142                        | Introduction to<br>Programming  | 3       |
| CHEM 212<br>& CHEM 214        | Principles of Chemistry II<br>and Principles of<br>Chemistry II Laboratory                    | 5       |
| MATH 203                      | Calculus and Analytic<br>Geometry II  | 4       |
| General Education requirement | Coomony II  | 3       |
|                               | Credits   | 18      |
| Sophomore                     |   |         |
| Fall                          |   |         |
| ENGR 213                      | Mechanics I   | 3       |
| ET 116                        | Basic Manufacturing<br>Processes  | 3       |
| MATH 260                      | Introductory Statistics   | 4       |
| PHYSICS 103 or PHYSICS 201    | Fundamentals of Physics I or Principles of Physics I  | 5       |
|                               | Credits   | 15      |
| Spring                        |   |         |
| ENGR 214                      | Mechanics II  | 3       |
| ENGR 220                      | Mechanics of Materials  | 3       |
| ET 207                        | Parametric Modeling   | 3       |
| PHYSICS 104 or PHYSICS 202    | Fundamentals of Physics  II  or Principles of  Physics II                                     | 5       |
| General Education requirement |   | 3       |
|                               | Credits   | 17      |
| Junior<br>Fall                |   |         |
| ET 118                        | Fluids I  | 3       |
| ET 221                        | Machine Components  | 3       |
| ET 308                        | Finite Element Analysis   | 3       |
| General Education requirement |   | 3       |
| General Education requirement |   | 3       |
|                               | Credits   | 15      |
| Spring                        |   |         |
| ET 318                        | Fluids II   | 3       |
| ET 322                        | Design Problems   | 3       |

| ET 324                        | Motors and Drives   | 3   |
|-------------------------------|---|-----|
| General Education requirement |   | 3   |
|                               | Credits   | 12  |
| Senior                        |   |     |
| Fall                          |   |     |
| CHEM 320                      | Thermodynamics and<br>Kinetics  | 3   |
| ET 360                        | Project Management  | 3   |
| ET 390                        | Mechatronics  | 4   |
| Elective                      |   | 1   |
| General Education requirement |   | 3   |
|                               | Credits   | 14  |
| Spring                        |   |     |
| ET 400<br>or ET 410           | Co-op/Internship in Engineering Technology (Capstone) or Capstone Project | 3   |
| ENGR 301                      | Engineering Materials   | 2   |
| Elective                      |   | 3   |
| General Education requirement |   | 3   |
|                               | Credits   | 11  |
|                               | Total Credits   | 119 |

## 120 credits required to earn degree

General Education categories \*requirement is met with a specific required course:

First Year Seminar-3 credits
Biological Science-3 credits
Fine Arts-3 credits
Global Culture-3 credits
Humanities-6 credits
Natural Sciences-3 credits\*
Social Sciences-6 credits
Sustainability Perspective-3 credits
Quantitative Literacy-3 credits\*
Capstone-3 credits\*