**Bachelor of Science**

**MECHANICAL ENGINEERING TECHNOLOGY**

**CONCENTRATIONS**

**Effective Fall 2020**

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| --- | --- | --- | --- |
| **Course**  | **Credits** | **Grade** | **Semester/Year** |
| **Mechanical Engineering Design (any 14 credits)** |
| AD 111 Human Centered Design Foundations | 4 |  |  |
| DD 103 Geometric Dimensioning and Tolerancing  | 2  |  |  |
| DD 105 Schematic Diagram Drafting  | 2  |  |  |
| IT 420 Quality Control  | 3  |  |  |
| MF 233 Numerical Control  | 4  |  |  |
| CN 153 Introduction to Construction Design | 3 |  |  |
| Any DD, ET, IT, MET or MF prefix course  | 1-4  |  |  |
| **Mechatronics (any 14 credits)** |
| ET 202 Industrial Wiring  | 2  |  |  |
| ET 250 Industrial Electric Machinery  | 4  |  |  |
| ET 252 Industrial Motor Controls  | 4  |  |  |
| ET 311 Applied Programmable Controllers  | 2  |  |  |
| ET 415 Controls | 3 |  |  |
| Any DD, ET, IT, MET or MF prefix course or AD 111 | 1-4  |  |  |
| **Manufacturing Engineering Technology (any 14 credits)** |
| DD 103 Geometric Dimensioning and Tolerancing  | 2  |  |  |
| ET 311 Applied Programmable Controllers | 2 |  |  |
| IT 300 Industrial Supervision  | 3  |  |  |
| IT 340 Enterprise Resource Planning  | 3  |  |  |
| IT 420 Quality Control  | 3  |  |  |
| MF 233 Numerical Control  | 4  |  |  |
| Any DD, ET, IT, MET or MF prefix course or AD 111 | 1-4  |  |  |
| **CNC Technology (any 14 credits)** |
| DD 103 Geometric Dimensioning and Tolerancing  | 2  |  |  |
| IT 420 Quality Control | 3 |  |  |
| MF 233 Numerical Control  | 4  |  |  |
| MF 235 Computer Numerical Control | 3 |  |  |
| MF 263 Advanced CNC Operations  | 4  |  |  |
| Any DD, ET, IT, MET or MF prefix course  | 1-4  |  |  |
| **Renewable Energies (any 14 credits)** |  |  |  |
| REN 200 Introduction to Alternative Energy  | 3 |  |  |
| REN 230 Bioenergy | 3 |  |  |
| REN 221 Solar Power | 3 |  |  |
| REN 222 Wind Power | 3 |  |  |
| Any DD, ET, IT, MET or MF prefix course or AD 111 | 2-4 |  |  |
|  |  |  |  |
| **Advanced Mathematics Concentration (any 14 credits)** |  |  |  |
| MA 163 Calculus II | 4 |  |  |
| MA 211 Linear Algebra | 3 |  |  |
| MA 265 Calculus III | 4 |  |  |
| MA 361 Differential Equations | 3 |  |  |
| Any DD, ET, IT, MET or MF prefix course or AD 111 | 1-4 |  |  |