

A.A.S. in MECHANICAL & MANUFACTURING ENGINEERING TECHNOLOGY (2314) 62 Credits

Essex County College, METCS Division – Curriculum Guide

STUDENT: _____

ID#: _____

| General Education Requirements (22 Crs.) | | Crs. | ✓ |
|---|---|-----------|---|
| Written & Oral Communications (6 Crs.) | | | |
| ENG 101 | College Composition I | 3 | |
| ENG 105 | Technical Writing | 3 | |
| Quantitative/Scientific Knowledge, Skills & Reasoning (10 Crs.) | | | |
| MTH 114 | Unified Calculus I | 3 | |
| MTH 213 | Unified Calculus II | 3 | |
| PHY 101 | College Physics I | 4 | |
| Society & Human Behavior (3 Crs.) | | | |
| ECO 101 | Principles of Economics I (Macro) | 3 | |
| Historical Perspective (3 Crs.) | | | |
| E.g., HST 101, 102, 111, 112, 121, 122, etc. | Choose One History Course | 3 | |
| Major Requirements (32 Crs.) | | | |
| ENR 112 | Dynamics for Technology | 3 | |
| ELC 115 | Electric Circuits DC & AC | 3 | |
| ENR 100 | Fundamentals of Engineering Design | 2 | |
| ENR 103 | Engineering Graphics | 2 | |
| ENR 110 | Statics for Technology | 3 | |
| ENR 205 | Advanced Computer Aided Design | 3 | |
| ENR 220 | Mechanics of Materials | 3 | |
| MET 211, or 225 or Technical Elective See METCS faculty advisor for technical elective approval | Machines and Controls Or Computer Numerical Control Or Approved Technical Elective | 3 | |
| MET 202, or 215 or Technical Elective See METCS faculty advisor for technical elective approval | Modern Manufacturing Systems and Robotics Or Fluid Mechanics Or Approved Technical Elective | 3 | |
| MET 203 | Engineering Materials and Processes | 3 | |
| PHY 102 | College Physics II | 4 | |
| Additional Requirements (8 Crs.) | | | |
| CSC 106 | Roadmap to Computer Engineers | 3 | |
| ENR 105 | Applied Computer Aided Design | 2 | |
| Approved Technical Elective* | | 3 | |
| Total Credits Required | | 62 | |

*Approved Technical Elective is to be selected in consultation with a faculty advisor in the Division of METCS