

# **Electrical/Mechanical Manufacturing Technician**

## **Technical Certificate of Credit**

Program Description – The Electrical/Mechanical Manufacturing Specialist Certificate of Credit prepares students for employment in a variety of industry settings which require electrical and mechanical skills with the ability to use applied math and make critical decisions in a manufacturing environment. The program provides learning opportunities that introduce, cultivate and strengthen both technical skills and work ethic skills which are important for obtaining a job in the manufacturing environment and advancing in that environment.

### **Required Courses:**

#### **Length of TCC – 3 Quarters**

#### **First Quarter – 10 weeks**

**SCT 100** - Introduction to Microcomputers 3 credit hours - 50 contact hours

**MAT 1013** – Algebraic Concepts – 5 credit hours – 50 contact hours

**IFC 100** – Industrial Safety Procedures – 2 credit hours – 30 contact hours

**IDS 107** – Basic Mechanics – 5 credit hours – 80 contact hours

**IFC 101** – Direct Current Circuits 1 – 4 credit hours – 50 contact hours

19 Credit Hours – 260 Contact Hours

#### **Second Quarter – 10 weeks**

**MAT 1015** – Geometry and Trigonometry – 5 credit hours – 50 contact hours

**IFC 102** – Alternating Current I – 4 credit hours – 50 contact hours

**IDS 103** – Industrial Wiring – 6 credit hours – 120 contact hours

**IDS 105** – DC and AC Motors – 3 credit hours – 50 contact hours

18 Credit Hours – 270 Contact Hours

#### **Third Quarter – 10 weeks**

**IDS 102** – Print Reading and Problem Solving – 4 credit hours – 50 contact hours

**ELT 106** – Electrical Prints, Schematics, and Symbols – 3 credit hours – 40 contact hours

**DDF 107** - Introduction to CAD – 6 credit hours – 100 contact hours

**IDS 141** – Basic Industrial PLCs – 6 credit hours – 100 contact hours

19 Credit Hours – 290 Contact Hours

**Total Credit Hours for TCC–56– Total Contact Hours for TCC- 820**