



Commercial Maintenance Mechanics Mission Statement and Educational Goals

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Date Submitted:

7/17/2018

Division:

Technical Education

Discipline:

Commercial Maintenance Mechanics

Mission Statement

The Industrial Technology department of Southwestern Illinois College will provide students with and assess the fundamental technical skills and knowledge required for gainful employment in an entry level position in a Commercial Mechanics career field. The program is committed to providing local industry with highly trained Mechanics. Graduates gain the knowledge necessary to meet the ever changing needs of the industries in our district.

Educational Goals

This Discipline/Program at Southwestern Illinois College will graduate students that can:

1. Maintain a safe, efficient work environment, work ethic, and respond appropriately to medical emergencies in all the fields of study.
2. Demonstrate knowledge and use of common machine tools.
3. Define and use language and terminology used in the industry.
4. Identify commonly used tools used in industry.
5. Demonstrate how to use threading equipment and the types of fittings used in industry.
6. Utilize diagrams, drawings and technical manuals to troubleshoot and build systems in the industry.
7. Identify the different types of building materials needed to repair a facility.
8. Design, construct, and test basic electrical and electronic circuits.
9. Demonstrate knowledge of the mechanical refrigeration cycle and its application to air conditioning and refrigeration equipment.
10. Demonstrate competency in the use of the refrigeration service equipment commonly used in the Commercial Mechanics field.

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| 11. Demonstrate the ability to collect the data required to determine the operational status of commercial HVAC systems. |
| 12. Demonstrate knowledge of the regulations governing the use and safe handling of refrigerants. |
| 13. Demonstrate the principles of wiring and cabling commonly encountered systems in a commercial environment. |