

# **Southwestern Illinois College Industrial Mechanics Program**

## **Mission Statement:**

The Industrial Mechanics Program embraces the college mission statement as it offers lifelong learning opportunities to students who are seeking, or in the process of developing careers in the manufacturing and service industries, as journeyman machinists. Graduates will be able to meet standards established by the industries of District #522, which are developed by the program in collaboration with its advisory committee. Students will be provided access to “state of the art” labs for “hands on” experience that will support a world class-manufacturing base within the local community.

The program will provide high quality graduates with the required knowledge and skills to support our districts world-class industries.

## **Educational Goal:**

Upon completion of the Industrial Mechanics program, the student will be able to:

1. Maintain a safe, efficient working environment and respond appropriately to medical emergencies.
2. Demonstrate the use of precision measuring instruments including micrometers and dial indicators.
3. Identify common mechanics hand tools and safely demonstrate their proper application.
4. Demonstrate the ability to read and interpret a multiview drawing.
5. Perform safety inspection of common lifting devices and identify unsafe slings, shackles, chains, and hooks.
6. Demonstrate the use of common hand signals for cranes.
7. Demonstrate proper alignment techniques.
8. Explain the concepts of lubrication systems found in Industrial plants.
9. List the primary difference in operating principles between the different types of pumps and compressors.
10. Interact with fellow students to solve problems and work on lab projects.

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