

## Basic Troubleshooting 499925

This course explores the science of troubleshooting and the importance of proper maintenance procedures; how to work well with others, aids in communication and trade responsibilities; examines actual troubleshooting techniques, aids in troubleshooting and how to use schematics and symbols; focuses on specific maintenance tasks such as solving mechanical and electrical problems, breakdown maintenance, and the how's and whys of planned maintenance.

**Prerequisite:** Consent of Instructor

**Recommended Grade Level:** 11 - 12

**Recommended Credit:** .5

### **Students will:**

1. Practice and perform safe shop procedures at all times.
2. Apply the technical math required for employment opportunities in maintenance.
3. Perform all duties with emphasis on integrity, responsibility, quality, discipline and teamwork.
4. Explain the reason efficient troubleshooting is important in a production plant.
5. List the steps in troubleshooting a machine/system.
6. Demonstrate good communication skills when dealing with plant personnel.
7. List the questions that should be asked when a machine/system fails.
8. List the signs of a machine in need of service.
9. List the information that should be recorded in a machine equipment record.
10. Identify calibration standards.
11. Identify different troubleshooting test equipment.
12. Use schematics when troubleshooting.
13. Identify differences in schematics when troubleshooting.
14. Use a troubleshooting chart.
15. Identify bearing wear problems.
16. Identify pump failure problems and solutions.
17. Identify types of hosing.
18. Identify current voltage characteristics of wire.
19. Apply all safety rules when working with electrical equipment.
20. Identify a pictorial diagram, blocking diagram, and schematic diagram.
21. Demonstrate how to troubleshoot an electrical problem.
22. List preventive maintenance procedures.