GREAT BASIN COLLEGE

# Ind. Millwright Technology

## CERTIFICATE / ASSOCIATE DEGREE

*You can't go wrong...with millwrights!*

Skills, skills, skills...that's what it takes to be an industrial millwright mechanic. Everyday you'll tackle new challenges, experience extreme job satisfaction, and have employment security. The skills are highly valued and employment opportunities abound in a variety of areas including mining, manufacturing, service industry, hospitals, schools, hotels, large office buildings, agriculture, and food processing.

You will acquire skills in:

- Blueprint Reading
- Basic Shop and Risk Management
- Mechanical Power Transmission
- Fluid Power
- Metallurgy
- Electrical Theory
- Inventory and Planning
- Failure Analysis, and Predictive/Preventive Maintenance
- Boiler Operation
- Centrifugal Pumps, Pipefitting, and Valves

### MTC Scholarship Program

The Maintenance Training Cooperative, Inc. (MTC), a group of industrial-related employers, has made possible a special career and scholarship opportunity for our students. MTC sponsors a number of $5,000 scholarships that cover most of the tuition costs, fees and books for the fast-paced, 48-week Associate of Applied Science degree program. Paid on-the-job work experience is also possible with Nevada mining companies, their suppliers and equipment vendors.

### Distinctive Features

Fast-paced, 48-week program

- State-of-the-art technology, metallurgy, and condition monitoring equipment
- 100 percent employment opportunities after program completion
- Instructors have years of experience in the field
- A multi-tasked training field
- Associate of Applied Science in Industrial Millwright Technology
- Certificate of Achievement in Industrial Millwright Technology
- MTC Scholarships available

### Getting Started

- Contact Admissions and Records for admission procedures at 775.753.2102.
- Complete an official application for admission.
- Request that your official transcripts be sent to GBC.
- Contact Industrial Millwright Technology Faculty for advisement at 775.753.2008.


**www.gbcnv.edu**

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GREAT BASIN COLLEGE 1500 College Parkway Elko, NV 89801 775.753.2175 CAREER AND TECHNICAL EDUCATION

## The Program:

**Basic Shop**
- Hand and power tool use and maintenance
- Common shop calculations
- Precision measuring tools
- Blueprint reading
- Rigging
- Shop projects
- Overhead crane operation

**Mechanical Power Transmission**
- Gear use and maintenance
- Bearing use and maintenance
- Gear drive maintenance
- Fluid drive use and maintenance
- Coupling use and maintenance
- Basic shaft alignment procedures
- Lubrication fundamentals
- Blueprints
- Shop projects

**Fluid Power**
- Fluid power systems design and operation
- Component function
- Troubleshooting
- Blueprints
- Shop projects

**Metallurgy**
- Classification of materials
- Heat treatment and the effects on metals
- Heat treatment and temperature ranges
- Metal fatigue and causes
- Shop projects

**Failure Analysis and Predictive/Preventative Maintenance**
- Preventative maintenance programs
- Vibration analysis
- Thermograph
- Root cause analysis system
- Oil analysis
- Advanced shaft alignment
- Blueprints
- Shop projects

**Basic Electrical**
- AC and DC theory
- Test equipment
- Motor and motor control troubleshooting
- Motor maintenance
- Shop projects

**Welding**
- Welding I and II
- Blueprints
- AWS certification
- Shop projects

**Conveyor Systems**
- Component maintenance
- System troubleshooting
- Operations
- System safety
- Component identification
- System design and history

**Pneumatic Systems**
- Component identification
- Troubleshooting
- Operations
- Systems maintenance
- Systems designs and history

**Centrifugal Pump/Pipefitting and Valves**
- Principles of operation
- System components
- Troubleshooting
- Seal arrangements
- Blueprints
- Shop projects

**Inventory and Planning**
- Work orders
- Purchasing
- Warehouse
- Parts
- Tracking inventory