

# MAINTENANCE MECHANIC/MILLWRIGHT APPRENTICESHIP

## Overview

### Maintenance Mechanic/Millwright Apprenticeship

Program Code: 50-423-1

For more information: [wctc.edu/millwright](http://www.wctc.edu/millwright/) (<http://www.wctc.edu/millwright/>)t (<https://www.wctc.edu/academics/programs-courses/programs/maintenance-mechanic-millwright/>)

Maintenance mechanics/millwrights install, dismantle, repair, maintain and move heavy industrial equipment based on blueprints, layouts or other drawings. Machine tools, conveyor systems and specialized maintenance equipment are among the types of machinery repaired by maintenance mechanic/millwrights. Receive high-quality, hands-on classroom instruction that complements on-the-job apprenticeship training critical for success in the industrial trades.

The minimum required course grades and program grade point average (GPA) for students under this catalog are:

Core Courses = C  
Program GPA = 2.0

**Build your degree along a career pathway.** Start with a couple of courses or an entry-level credential to enter the job market in your area of interest, then continue with higher credentials on your educational path for job advancement and higher wages.

## Career Pathway

1. Maintenance Mechanic/Millwright Apprenticeship
2. Technical Studies - Journeyworker

### Additional details regarding apprenticeship:

- Obtain further information about apprenticeship programs by visiting the State's Department of Workforce Development website: <https://dwd.wisconsin.gov/apprenticeship> (<https://dwd.wisconsin.gov/apprenticeship/>)
- Secure employment as a State of Wisconsin Indentured Apprentice.
- WCTC will send the schedule to the student; application to WCTC is not necessary by the student.

## Learning Outcomes Program Outcomes

1. Demonstrate proper rigging techniques.
2. Select an appropriate power transmission system for a given application.
3. Identify suitable pumps for given applications.
4. Recommend bearings for given applications.
5. Plan for fabricating parts and assemblies according to specifications.
6. Apply operational and troubleshooting principles to fluid power systems.

7. Layout an equipment installation plan.
8. Plan maintenance schedule for a given system.

## Critical Life Skills

To help our students prepare for success in a workplace and society that is **increasingly global, multi-cultural, and collaborative**, all students are given opportunities to develop and demonstrate Critical Life Skills, both in and out of the classroom. The following Critical Life Skills are learning outcomes for WCTC students.

- **Communication:** Demonstrate appropriate communication.
- **Critical Thinking/Problem Solving:** Demonstrate critical thinking skills to analyze situations and solve problems.
- **Relationships:** Demonstrate effective interpersonal skills.
- **Self-management:** Demonstrate responsible and respectful behavior.

## Required Courses

Code	Title	Credits
<b>Core Courses</b>		
414-500	Electricity-Apprentices	1
419-501	Apprentice Hydraulics	1
Approved Substitute: 612-310		
419-502	Pneumatics for Apprentices	1
Approved Substitutes: 612-315 OR 419-104		
423-503	Industrial Safety Apprentices	1
Approved Substitutes: 462-104 OR 462-304		
423-502	Apprentice Maintenance Fund	1
423-504	Blueprint for Apprentices	1
423-506	Apprentice Metals Technology	1
423-507	Apprentice Machining	1
423-508	Apprentice Machine Repair	1
423-513	Equipment Install Apprentices	1
423-514	Apprentice Pump Piping Systems	1
423-520	Maint Mill IV	2
442-505	Welding for Apprentices	1
<b>General Studies</b>		
804-504	Industrial Math I	1
Approved Substitutes: 804-304 OR 804-107 OR 804-113 OR 804-114 OR 804-115		
804-505	Industrial Math II	1
Approved Substitute: 804-305 OR 804-107 OR 804-113 OR 804-114 OR 804-115		
<b>Total Credits</b>		<b>16</b>

## Full-time Plan

First Year		Credits
<b>Fall Term 1</b>		
423-503	Industrial Safety Apprentices	1
423-504	Blueprint for Apprentices	1
442-505	Welding for Apprentices	1
804-504	Industrial Math I	1
<b>Credits</b>		<b>4</b>
<b>Spring Term 1</b>		
414-500	Electricity-Apprentices	1

423-506	Apprentice Metals Technology	1
423-507	Apprentice Machining	1
804-505	Industrial Math II	1
<b>Credits</b>		<b>4</b>
<b>Second Year</b>		
<b>Fall Term 1</b>		
419-502	Pneumatics for Apprentices	1
423-502	Apprentice Maintenance Fund	1
423-513	Equipment Install Apprentices	1
423-514	Apprentice Pump Piping Systems	1
<b>Credits</b>		<b>4</b>
<b>Spring Term 1</b>		
419-501	Apprentice Hydraulics	1
423-520	Maint Mill IV	2
423-508	Apprentice Machine Repair	1
<b>Credits</b>		<b>4</b>
<b>Total Credits</b>		<b>16</b>