

Millwright (MWA) Apprenticeship Curriculum Mapping

Program Curriculum

A collection of 13 CTS courses has been developed to align with the current Millwright Apprenticeship Course Outline. These courses, when combined, cover the First Period technical training content.

| Alberta Apprenticeship Training Profile First Period | CTS Course Alignment to Apprenticeship First Period Topics | Assessment |
|---|---|------------|
| Topic | CTS Course Number and Name | |
| SECTION ONE – SAFETY, RIGGING, CRANES AND HOISTS | | |
| Safety Legislation, Regulations and Industry Policy in the Trades | MWA3900: Apprenticeship Safety | |
| Climbing, Lifting, Rigging and Hoisting | | |
| Hazardous Materials and Fire Protection | | |
| Rigging Procedures | MWA3400: Rigging | |
| Crane and Hoists | | |
| SECTION TWO – MEASUREMENT, LAYOUT AND METALLURGY | | |
| Measuring | MWA3405: Measurement | |
| Measuring Tools | | |
| Layout | MWA3410: Layout | |
| Metallurgy | | |
| SECTION THREE – TOOLS AND FASTENERS | | |
| Hand Tools | MWA3415: Portable Tools | |
| Portable Power & Air Tools | | |
| Grinders | | |
| Power Saws | | |
| Explosive Actuated Tools | MWA3420: Fasteners | |
| Threaded Fasteners and Locking Devices | | |
| Non-Threaded Fasteners and Locking Devices | | |
| Installation and Removal of Fasteners | | |
| SECTION FOUR – MACHINING | | |
| Drilling | MWA3425: Drilling & Milling | |
| Milling | | |
| Lathe Components and Accessories | MWA3430: Lathe Introduction | |
| Lathe Operations | MWA3435: Lathe Operation | |

| Alberta Apprenticeship Training Profile First Period | CTS Course Alignment to Apprenticeship First Period Topics | Assessment |
|--|---|------------|
| Topic | CTS Course Number and Name | |
| SECTION FIVE – MACHINE INSTALLATION AND ALIGNMENT | | |
| Grouting, Levelling and Anchoring | MWA3440: Machine Installation | |
| Rim and Face Shaft Alignment | | |
| SECTION SIX – MATH AND PRINT READING | | |
| Working with Numbers | MWA3445: Numbers | |
| Fractions and Decimals | | |
| Algebra | | |
| Measurements and Conversions | MWA3450: Mathematics | |
| Ratio and Proportion, Graphs and Tables | | |
| Introduction to Triangles and Trigonometry | | |
| Sketches, Drawings and Prints | MWA3455: Print Reading | |
| Limits, Fits and Tolerances | | |
| CTS COURSES THAT ALLOW STUDENTS ADDITIONAL PRACTICAL TIME | | |
| | MWA3460: MWA Practicum A | |
| | MWA3465: MWA Practicum B | |
| | MWA3470: MWA Practicum C | |
| | MWA3475: MWA Practicum D | |