

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	

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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 FIVE – AIR BRAKES		
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	

