

Industrial Mechanic (Millwright)

The Industrial Mechanic (Millwright) program offers the training required to become a mechanic for stationary industrial machinery. Duties on a typical job may include: read diagrams and schematic drawings and service manuals to determine work procedures; operate rigging equipment and dollies to move heavy machinery and parts; fit bearings, align gears and shafts, attach motors and connect couplings and belts to precise tolerances; align and test equipment and make the necessary adjustments; perform predictive and operational maintenance using procedures such as vibration analysis, and repair or replace defective parts when necessary; service and repair hydraulic, pneumatic and programmable logic controls; tack k welding. You need to be in good physical shape, have good coordination and manual dexterity, have the ability to visualize a layout by looking at plans and blueprints, and the ability to trouble-shoot mechanical systems. Your work environment is usually indoors and may be noisy at times.

OUTCOMES

1. Demonstrate safe work practices and personal protection.
2. Maintain tools and equipment.
3. Perform measurement and layout.
4. Use cutting and welding equipment.
5. Service shafts, bearings, seals, couplings, clutches, chain and belt driven systems, gears, compressors, pumps and conveying systems.
6. Prepare for installation and maintenance of components and systems.

ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

1. High School

High School Graduation

2. Comprehensive Arts and Science (CAS) Transition

Comprehensive Arts and Science(Transition) Certificate

3. Adult Basic Education

Adult Basic Education (Level III) Graduation with General College Profile (or Business Related College Profile or Degree and Technical Profile). It is strongly recommended that courses include the following:

- i. Mathematics MA3107A, MA3107B, MA3107C
- ii. Science 3101, 3102, 3103

4. Mature Student Status

Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

EMPLOYMENT OPPORTUNITIES

You may find employment in a variety of occupational settings including: industrial, mining, pulp and paper, oil refining, private companies, breweries, bakeries, bottling plants, construction, and fabrication and with various provincial and federal government agencies or departments.

CERTIFICATE

- Red Seal Certification
- One year
- September start
- Baie Verte, Corner Brook, Happy Valley-Goose Bay, Labrador West, and Placentia Campuses

COURSES

CODE	TITLE	Hrs
Block 1	Entry Level	
TS1510	Occupational Health and Safety	6
TS1520	WHMIS	6
TS1530	Standard First Aid	14
MS1230	Hand Tools	20
MW1240	Portable Power Tools	20
MW1251	Blueprint Reading and Sketching	15
MW1261	Equipment Assembly Blueprints	15
MW1270	Mechanical Installation Blueprints	15
MW1281	Schematics Advanced	15
MW1291	Rigging	30
WD1330	Oxy-Fuel Welding	30
MW1360	Shafts and Shaft Alignment	20
MW1450	Drills, Taps and Reamers	30
MW1460	Measuring and Layout	60
MW1470	Piping Components	30
MW1511	Power Metal Saws	15
MW1521	Pedestal Grinders	15
MW1530	Bearings	40
MW1541	Fasteners	9
MW1550	Metallurgy	30
MW1580	Static and Dynamic Seals	30
MW1591	Couplings and Clutches	20
MW1610	Belt and Chain Drive Systems	45
MW1640	Gear Drive Systems	50
MW1650	Lubrication Practices	20
MW1670	Non-positive Displacement Pumps	40
MW1690	Positive Displacement Pumps	50
MW1730	Electrical Fundamentals	30
MW2150	Hydraulics I	30
AP1100	Introduction to Apprenticeship	15
OT1250	Workplace Exposure	90
MA1060	Basic Math	60
CM2150	Workplace Communications	45
MR1220	Customer Service	30
SP2330	Quality Assurance/Quality Control	30
MC1050	Introduction to Computers	30
SD1700	Workplace Skills	30
SD1710	Job Search Techniques	15
SD1720	Entrepreneurial Awareness	15
Block 2	Advanced Level	
MW1560	Coupling Alignment	45
MW1660	Material Handling Systems	60
MW2160	Hydraulics II	35
MW2170	Pneumatics	40
WD1380	Electric Arc Welding	60
Block 3	Advanced Level	
MW1620	Metal Lathes	100
MW1630	Milling Machines	40
MW2190	Machinery Installation and Alignment	60
MW2180	Compressors	40
Block 4	Advanced Level	
MW1480	Tanks, Fans and Blowers	30
MW1680	Dynamic Balancing	45
MW1740	Preventive and Predictive Maintenance	35
MW2210	Prime Movers I	45
MW2220	Prime Movers II	45
MW2230	Vibration Analysis	40

