# Millwright/Industrial Mechanic: Citation (Foundation)

Faculty of Trades and Technology	kpu.ca/trades
Millwright	kpu.ca/trades/millwright
Implementation Date	01-Sep-2011
Start Date(s)	Varies
Intake Type	Limited intake
Instructional Cycle	Fixed-term
Program Type	Vocational
Credential Granted	Citation
Offered At	Cloverdale
Format	Full-time
How to Apply	www.kpu.ca/admission

### DESCRIPTION

This 24 week program prepares students for employment as an Industrial Mechanic (Millwright) apprentice. To support career success, students learn trade attributes and employability skills, critical core knowledge, academic components and essential skills. Students are provided ongoing opportunities to apply the practical skills taught throughout the program in hand, power and machine tool use, and perform various shop projects in stationary industrial machinery and mechanical equipment maintenance, troubleshooting, overhauling and installation.

At the end of the Foundation program students will write the Industrial Mechanic (Millwright) Level 1 exam. Students who successfully complete the Foundation program and exam are eligible for ITA credit in Industrial Mechanic (Millwright) Level 1 apprenticeship and 425 work-based hours.

Taking a foundation program can build the skills that employers are looking for. To progress as an apprentice you will need to find an employer who will sponsor your apprenticeship and register with the Industry Training Authority (ITA). When you are ready for career advancement; KPU delivers Millwright/Industrial Mechanic Apprentice in-school technical training levels 2, 3 and 4.

Details on program dates are available on Kwantlen Course Search.

### STUDENT PROFILE

This program is suited for individuals that have an aptitude and interest in mechanics and math, and enjoy investigation, analysis and problem solving. Physical demand can vary, there is a considerable amount of lifting, bending and manual dexterity. Additional information is available at: kpu.ca/trades/ millwright.

## CAREER OPPORTUNITIES

Industrial mechanics (Millwrights) are employed in manufacturing plants, utilities and other industrial establishments. Progression to supervisory positions is possible with additional training and experience.

## ADMISSION REQUIREMENTS

In addition to KPU's General university admission requirements, including the vocational-level English Proficiency Requirement, the following program admission requirements apply.

- English:
  - English 12 with a minimum grade of 'C' (or equivalent), or
  - Completion of KPU's Trades reading test with a minimum score of 80%
- Mathematics:
  - Apprenticeship and Workplace Mathematics 11 with a minimum grade of 'C' (or equivalent), or
  - Foundations of Mathematics 11 with a minimum grade of 'C' (or equivalent), or
  - Pre-calculus 11 with a minimum grade of 'C' (or equivalent), or
  - KPU's Trades Mathematics test with a minimum threshold percentage of 63%

#### Notes:

- Group information sessions are regularly scheduled at the Cloverdale campus, and participation is highly recommended. Please see kpu.ca/trades for schedule information.
- Completion of high school shop courses is an asset.
- International student Application for Admission requires approval of the Dean.

Satisfactory physical health is also recommended. Prior to applying, prospective students with mental or physical impairments, who may require program accommodations, should contact the Office of the Dean of Trades and Technology to discuss required skills and competencies, and a Disability Advisor at 604.599.3233 to ensure appropriate accommodations can be arranged.

## CURRICULAR REQUIREMENTS

Hands-on shop experience is the basis on which skills are developed. Various forms of classroom and shop instruction including lectures, labs, shop assignments, team assignments, practical demonstrations, hands-on training, structured projects, individual demonstration of technical skills, and group lectures will be utilized. Also, independent study modules and directed studies modules supplemented with a wide selection of audiovisual material are available where necessary. The program focuses on direct contact between students and faculty. In addition, the expertise of other departments will be utilized to deliver specialized courses.

Speaking the language of the trade is necessary for the graduate in dealing with other trades and service people, distributors and manufacturers. Students will be required to gain proficiency in trade terminology and interpersonal and employability skills.

The student will develop the safe work habits, knowledge and ability required in industry today.

#### **Required Courses:**

ENGT 1015	Communication Skills for Trades 1	1.5 credits
MATT 1015	Mathematics/Science for Manufacturing and Mechanical Trades 1	3 credits
MWIN 1101	Millwright Trade Safety	2 credits

In the event of a discrepency between this document and the official KPU 2015-16 Calendar (available at www.kpu.ca/calendar/2015-16), the official calendar shall be deemed correct.

MWIN 1105	Print Reading and Sketching	2 credits
MWIN 1111	Measuring and Layout Tools	2 credits
MWIN 1121	Hand Tools and Bench Work	1 credit
MWIN 1131	Power Hand Tools	1 credit
MWIN 1140	Machine Tool Basics	4 credits
MWIN 1150	Machine Tools	2 credits
MWIN 1160	Fasteners and Fittings	1 credit
MWIN 1170	Metallurgy	1.5 credits
MWIN 1180	Level 1 Welding for Millwrights	2.5 credits

**Note:** Students must achieve 70% (B-) or better in practical exams and assignments.

#### **OTHER INFORMATION**

#### **Special Equipment**

Students are required to supply the appropriate personal safety equipment steel-toed safety boots, safety glasses and coveralls.

#### **CREDENTIAL AWARDED**

Upon successful completion of this program, students are eligible to receive a **Citation in Millwright/Industrial Mechanic**.

KPU will report your in-school technical training completion information to the Industry Training Authority (ITA) in order for the ITA to determine credit towards your designated apprenticeship.

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