

**SHOWCASE OF VOCATIONAL CAREERS IN THE PRAIRIES**

**Did you know that more than 66% of new jobs created in Canada by 2022 will require at least some college, or vocational training?\***

Are you in a job with limited growth opportunities? Are you considering a career transition or do you want to upgrade your skills? Consider taking a vocational training program to upgrade your skills, boost your earning potential and launch a career in the area of your interest.

This edition of the Digital Al-Akhbar will feature **3 Vocational Training Program options** with good future prospects in Alberta:

1. **WEB DESIGNERS AND DEVELOPERS** (NOC 2175)
2. **MEDICAL TECHNOLOGISTS AND TECHNICIANS (EXCEPT DENTAL HEALTH)** (NOC 3219)
3. **PLUMBERS** (NOC 7251)

**WEB DESIGNERS AND DEVELOPERS**

**What will you do?**

Web Designers and Developers research, design, develop and produce Internet and Intranet sites. They may also do some of the following:

* Consult with clients to develop and document website requirements
* Prepare mock-ups and storyboards
* Develop website architecture and determine hardware and software requirements
* Source, select and organize information for inclusion and design the appearance, layout and flow of the website
* Create and optimize content for the website using a variety of graphics, database, animation and other software
* Plan, design, write, modify, integrate and test website related code
* Conduct tests and perform security and quality controls
* May lead and co-ordinate multidisciplinary teams to develop website graphics, content, capacity and interactivity
* May research and evaluate a variety of interactive media software products.

**Where can you work?**

Web Designers and Developers are employed across a variety of industries, but mainly in computer software development firms, information technology consulting firms, information technology units throughout the private and public sectors, or advertising agencies.

**What will you earn?**

* Average Entry-Level Salary: $19.72 per hour
* Medium Range: $30.00 per hour
* Higher Range: $46.67 per hour

Wages depend on job requirements and work conditions. They also vary between regions for reasons such as location, labour agreements, and availability of workers.

**Check current job** [**opportunities**](https://www.jobbank.gc.ca/home-eng.do?lang=eng).

**Where can you take this program?**

* [Mount Royal University (Calgary): Web Designer Extension Certificate](http://www.mtroyal.ca/ProgramsCourses/ContinuingEducation/computers/WebDesigner/index.htm)
* [SAIT (Calgary): Web Developer](http://www.sait.ca/programs-and-courses/full-time-studies/certificates/web-developer-fast-track)
* [NAIT (Edmonton): Web Design and Development](http://www.nait.ca/98730.htm) ; [Web Design Certificate](http://www.nait.ca/program_home_16289.htm)
* [MacEwan University (Edmonton): Web Design and Development](https://www.macewan.ca/wcm/SchoolsFaculties/SchoolofContinuingEducation/Programs/SCE_00000000274)
* [University of Alberta (Edmonton): Web Design](https://www.ualberta.ca/technology-training/courses/other/web-design)

**How long is the program?**

The length of the program varies with different institutions and programs.

**What do you need to enroll in this program?**

*As each institution differs in their pre-requisites, it is recommended that you review the links provided above*.

* Most Web Design and Development Programs in Alberta require, at minimum, a High School Diploma or equivalency (GED), with a grade 12 English credit.
* A grade 12 mathematics credit will be required or recommended in most circumstances.
* Computer and information science and business technology credits will also be seen as beneficial. Note: If you choose a continuing education certificate program, be sure to check admission requirements closely to ensure you qualify.

**MEDICAL TECHNOLOGISTS AND TECHNICIANS (EXCEPT DENTAL HEALTH)**

**What will you do?**

The following is a summary of the main duties for some occupations in this unit group:

* Dietary Technicians assist dietitians or nutritionists to plan and supervise food service operations; plan menus and diet for individuals or groups under the direction of a dietitian or nutritionist; assist in the supervision of personnel who prepare and serve food; help patients select menu items; and assist dietitians with research in food, nutrition and food service systems.
* Ocularists design, fabricate and fit ocular prostheses and conformers, and may design and fabricate implants; paint the iris and pupil of artificial eyes; clean and restore ocular prostheses; advise patients concerning the loss of depth perception and the care and use of ocular prostheses; repair and maintain fabrication and laboratory equipment; and consult with ophthalmologists concerning insertion of ocular prostheses.
* Prosthetists and Orthotists design, fabricate and fit prosthetic and orthotic appliances such as artificial limbs, braces or supports; interpret physicians' specifications and examine and measure patients to develop working sketches of appliances; make and modify plaster casts of areas to receive prostheses or orthoses; fit, adjust and repair appliances; advise patients in the use and care of prostheses and orthoses; and supervise and direct the activities of prosthetic and orthotic technicians.
* Prosthetic and Orthotic Technicians assemble or build prosthetic and orthotic appliances according to drawings, measurements and plaster casts using a variety of materials such as metals, plastics and leathers; repair, rebuild and modify prosthetic and orthotic appliances or orthopedic footwear; and may take the body or limb measurements of patients.

**Where can you work?**

This unit group includes Medical Technologists and Technicians such as Dietary Technicians, Ocularists, Prosthetists, Orthotists, Prosthetic Technicians and Orthotic Technicians. These Medical Technologists are mostly employed in Health Organizations such as Hospitals, Medical Clinics and Laboratories.

Dietary Technicians are employed in health care and commercial food service establishments such as hospitals, extended care facilities, nursing homes, schools, cafeterias and fast food outlets.

Ocularists are employed in custom ocular prosthetic laboratories, or they may be self-employed.

Prosthetic and Orthotic Technicians are employed in hospitals, clinics, laboratories, and prosthetic device manufacturing companies, or they may be self-employed.

**What will you earn?**

* Average Entry-Level Salary: $15.00 per hour
* Medium Range: $21.75 per hour
* Higher Range: $44.00 per hour

Wages depend on job requirements and work conditions. They also vary between regions for reasons such as location, labour agreements, and the availability of workers.

**Check current job** [**opportunities**](https://www.jobbank.gc.ca/home-eng.do?lang=eng).

**Where can you take this program?**

* [Bow Valley College (Calgary): Nutrition Manager Certification (Dietary Technician)](https://bowvalleycollege.ca/programs-courses/health-and-wellness/nutrition-manager)
* [University of Calgary: Prosthetist/Orthotic Assistant – Alberta Orthotic and Prosthetic Centre](https://www.ucalgary.ca/knes/practicum/knes441-5/workexperience/ProsthetistAsst-AALB)
* [University of Manitoba (Winnipeg): Prosthetist, Orthotist, and Ocularist](http://www.umanitoba.ca/counselling/spotlights/prosthet.html)

For Additional Program Information: [Explore Colleges and Universities in Alberta](http://ww8.albertacolleges.ca/).

**How long is the program?**

The length of the program varies with different institutions and programs.

**What do you need to enroll in this program?**

*As each institution differs in their pre-requisites, it is recommended that you review the links provided above.*

* All applicants must demonstrate [English Language Proficiency](http://www.sait.ca/admissions/admission-and-selection/english-proficiency) prior to admission, including students educated in Canada.
* Some institutions require prospective students to possess a High School Diploma or equivalency (GED).

**PLUMBERS**

**What will you do?**

Plumbers install, repair and maintain pipes, fixtures and other plumbing equipment used for water distribution and wastewater disposal in residential, commercial and industrial buildings.

Plumbers perform some or all of the following duties:

* Read blueprints, drawings and specifications to determine layout of plumbing system, water supply network and waste and drainage systems
* Install, repair and maintain domestic, commercial or industrial plumbing fixtures and systems
* Locate and mark positions for pipe connections, passage holes and fixtures in walls and floors
* Cut opening in walls and floors to accommodate pipe and pipe fittings
* Measure, cut, bend and thread pipes using hand and power tools or machines
* Join pipes using couplings, clamps, screws, bolts, cement or soldering, brazing and welding equipment
* Test pipes for leaks using air and water pressure gauges

**Where can you work?**

Plumbers are employed in maintenance departments of factories, plants and similar establishments, by plumbing contractors, or they may be self-employed.

Plumbers can work both indoors and outdoors, and may also be required to work at heights or in confined spaces and lift heavy objects.

Plumbers typically work a 40 hour work week; however they may be required to work overtime to complete projects on time. Additionally, plumbers performing maintenance related work may be required to work on short notice.

**What will you earn?**

* Average Entry-Level Salary: $18.00 per hour
* Medium Range: $30.00 per hour
* Higher Range: $39.00 per hour

Wages depend on job requirements and work conditions. They also vary between regions for reasons such as location, labour agreements, and the availability of workers.

**Check current** [**job opportunities**](http://www.jobbank.gc.ca/)**.**

**Where can you take this program?**

* [SAIT (Calgary): Pre-employment Plumbing](http://www.sait.ca/programs-and-courses/apprenticeships-and-trades/pre-employment-programs/pre-employment-plumbing) ; [Plumber Apprentice](http://www.sait.ca/programs-and-courses/apprenticeships-and-trades/apprenticeship-programs/apprenticeship-plumber-apprentice)
* [Momentum (Calgary): Trades Training](http://www.momentum.org/trades-training)
* [NAIT (Edmonton): Plumber](http://www.nait.ca/program_home_81197.htm)
* [Alberta Pipe Trades College (Edmonton): Plumber-Gasfitter](http://albertapipetrades.ca/programs/apprenticeship-training/)
* [Red Deer College: Plumber Apprentice](http://rdc.ab.ca/programs/plumber-apprenticeship)
* [Medicine Hat College: Plumber](https://www.mhc.ab.ca/ProgramsandCourses/Academic-Programs/Programs-of-Study/Plumber)

Most regulatory bodies and apprenticeship authorities have their own websites that provide licensing information, eligibility requirements, and foreign credential recognition and registration fees.

Contact information for the relevant regulatory body can be found at:

Alberta Apprenticeship and Industry Training Authority  
Willow Park Centre, Suite 200, Floor 2  
10325 Bonaventure Drive SE  
Calgary, ABT2J 7E4

(403) 476-9757, or toll free: 1-800-248-4823

https://tradesecrets.alberta.ca/

**How long is the program?**

Refer to above links for various training institutions for program details and length of programs

**What do you need to enroll in this program?**

**For the Pre-apprentice or Apprentice Program:**

* All applicants must demonstrate [English Language Proficiency](http://www.sait.ca/admissions/admission-and-selection/english-proficiency) prior to admission, including students educated in Canada.
* Some institutions require prospective students to possess a High School Diploma or equivalency (GED).
* Please contact specific institutions for clarity on pre-requisites as each institution differs in their requirements.

**To become a Journeyman:**

* Completion of a four- to five-year apprenticeship program   
  or  
  A combination of over five years of work experience in the trade and some high school, college or industry courses in plumbing is usually required to be eligible for trade certification.
* Trade certification is compulsory in Nova Scotia, Prince Edward Island, New Brunswick, Quebec, Ontario, Saskatchewan and Alberta and available, but voluntary, in Newfoundland and Labrador, Manitoba, British Columbia, the Yukon, the Northwest Territories and Nunavut.
* Red Seal endorsement is also available to qualified plumbers upon successful completion of the interprovincial Red Seal examination.

*Please note that the prospects for these careers are subject to fluctuations in the market.*

***To Learn More About These Careers Visit the*** [***Job Bank***](https://www.jobbank.gc.ca/explorecareers.do?selectExploreCareerBy=ec-occupation) ***or*** [www.workingincanada.gc.ca](http://www.workingincanada.gc.ca)

For Additional Information Contact the Skills and Employment Program Counselor in the Prairies:

Tel: 403-215-6200 Ext. 7104 or [Email](mailto:cfp.sep@iicanada.org)