

**TEMPORARY FOREIGN WORKER PROGRAM**  
**OCCUPATIONAL PROFILE FOR EXPEDITED LABOUR MARKET OPINIONS**  
**MECHANICAL ENGINEERS**

**Section A: Occupational Profile**

**JOB DESCRIPTION:**

Mechanical engineers research, design and develop machinery and systems for heating, ventilating and air conditioning, power generation, transportation, processing and manufacturing. They also perform duties related to the evaluation, installation, operation and maintenance of mechanical systems. Mechanical engineers are employed by consulting firms, by power-generating utilities and in a wide range of manufacturing, processing and transportation industries.

**MAIN DUTIES:**

Mechanical engineers perform some or all of the following duties:

- Conduct research into the feasibility, design, operation and performance of mechanisms, components and systems
- Plan and manage projects, and prepare material, cost and timing estimates, reports and design specifications for machinery and systems
- Design power plants, machines, components, tools, fixtures and equipment
- Analyze dynamics and vibrations of mechanical systems and structures
- Supervise and inspect the installation, modification and commissioning of mechanical systems at construction sites or in industrial facilities
- Develop maintenance standards, schedules and programs and provide guidance to industrial maintenance crews
- Investigate mechanical failures or unexpected maintenance problems
- Prepare contract documents and evaluate tenders for industrial construction or maintenance
- Supervise technicians, technologists and other engineers and review and approve designs, calculations and cost estimates.

## EMPLOYMENT REQUIREMENTS:

- A bachelor's degree in mechanical engineering or in a related engineering discipline is required.
- A master's degree or doctorate in a related engineering discipline may be required.
- Licensing by a provincial or territorial association of professional engineers is required to approve engineering drawings and reports and to practise as a Professional Engineer (P.Eng.).
- Engineers are eligible for registration following graduation from an accredited educational program, and after three or four years of supervised work experience in engineering and passing a professional practice examination.

## PREVAILING WAGE RATES BY SUB-REGION:

### ALBERTA

<b>Geographic Area</b>	<b>Wage (per hour)</b>
Calgary/Banff/Drumheller	\$39.97
Edmonton	\$39.97
Fort-McMurray	\$39.97
St. Paul/Lloydminster	\$39.97
Grande Prairie/Slave Lake/Jasper	\$39.97
Lethbridge/Medicine Hat/Crowsnest Pass	\$39.97
Red Deer/Camrose/Wetaskiwin/Rocky/Olds	\$39.97

### BRITISH COLUMBIA

<b>Geographic Area</b>	<b>Wage (per hour)</b>
Lower Mainland Southwest	\$36.39
Northern British Columbia	\$36.39
Thompson Okanagan Kootenay	\$36.39
Vancouver Island	\$36.39

## PROVINCIAL LABOUR STANDARDS:

In **Alberta** refer to: [Alberta Employment, Immigration and Industry, Employment Standards Programs](#)

In **British Columbia** refer to: [Ministry of Labour and Citizen's Service, Employment Standards Branch](#)

## **PROVINCIAL CERTIFICATION REQUIREMENTS:**

In **Alberta** refer to:

- [Association of Professional Engineers, Geologists and Geophysicists of Alberta](#)

In **British Columbia** refer to:

- [Association of Professional Engineers and Geoscientists of British Columbia](#)

## **LABOUR MARKET OPINION FACTORS:**

Refer to the [Temporary Foreign Worker Program](#) website to obtain the Labour Market Opinion factors used to assess an employer's request to hire a temporary foreign worker.