

TEMPORARY FOREIGN WORKER PROGRAM
OCCUPATIONAL PROFILE FOR EXPEDITED LABOUR MARKET OPINIONS
ELECTRICAL AND ELECTRONICS ENGINEERS

Section A: Occupational Profile

JOB DESCRIPTION:

Electrical and electronics engineers design, plan, research, evaluate and test electrical and electronic equipment and systems. They are employed by electrical utilities, communications companies, manufacturers of electrical and electronic equipment, consulting firms, and by a wide range of manufacturing, processing and transportation industries and government.

MAIN DUTIES:

Electrical and electronics engineers perform some or all of the following duties:

- Conduct research into the feasibility, design, operation and performance of electrical generation and distribution networks, electrical machinery and components and electronic communications, instrumentation and control systems, equipment, and components
- Prepare material cost and timing estimates, reports and design specifications for electrical and electronic systems and equipment
- Design electrical and electronic circuits, components, systems and equipment
- Supervise and inspect the installation, modification, testing and operation of electrical and electronic systems and equipment
- Develop maintenance and operating standards for electrical and electronic systems and equipment
- Investigate electrical or electronic failures
- Prepare contract documents and evaluate tenders for construction or maintenance
- Supervise technicians, technologists, programmers, analysts and other engineers.

EMPLOYMENT REQUIREMENTS:

- A bachelor's degree in electrical or electronics engineering or in an appropriate related engineering discipline is required.

- A master's or doctoral degree 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

Geographic Area	Wage (per hour)
Calgary/Banff/Drumheller	\$38.57
Edmonton	\$38.57
Fort-McMurray	\$38.57
St. Paul/Lloydminster	\$38.57
Grande Prairie/Slave Lake/Jasper	\$38.57
Lethbridge/Medicine Hat/Crowsnest Pass	\$38.57
Red Deer/Camrose/Wetaskiwin/Rocky/Olds	\$38.57

BRITISH COLUMBIA

Geographic Area	Wage (per hour)
Lower Mainland Southwest	\$41.50
Northern British Columbia	\$41.50
Thompson Okanagan Kootenay	\$41.50
Vancouver Island	\$41.50

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.