

# Apprenticeship and Industry Training Act

## Instrument Technician Trade Regulation

Alberta Regulation 283/2000

Consolidated to January 31, 2011

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**ALBERTA REGULATION 283/2000**  
**as amended by Alta. Reg. 42/2004, 102/2006, 270/2006 and 1/2011**  
**Apprenticeship and Industry Training Act**  
**INSTRUMENT TECHNICIAN TRADE REGULATION**

*Table of Contents*

Definitions	1
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**General Matters Respecting the Trade**

Constitution of the trade	2
Tasks, activities and functions	3

**Apprenticeship**

Term of apprenticeship program	4
Employment of apprentices	5
Wages	6

**Transitional Provisions, Repeals, Expiry and Coming into Force**

Apprenticeship continues	7
Repeal	8
Expiry	9
Coming into force	10

- Definitions      **1** In this Regulation,
- (a) “apprentice” means a person who is an apprentice in the trade;
  - (b) “certified journeyman” means a certified journeyman as defined in the *Apprenticeship Program Regulation*;  
[Alta. Reg. 270/2006]
  - (c) “instrument” means any type of industrial, commercial or domestic instrumentation and without limiting the generality of the foregoing includes:
    - (i) temperature, pressure, flow, analytical and level indicators, recorders, controllers and sensors;
    - (ii) density indicators and sensors;

- (iii) weight indicators and sensors;
- (iv) viscosity and consistency indicators and sensors;
- (v) pH indicators and sensors;
- (vi) oxidation reduction potential indicators and sensors;
- (vii) oxygen analysis equipment;
- (viii) gas analyzers;
- (ix) turbidity and smoke density analyzers;
- (x) moisture and humidity sensing and indicating systems;
- (xi) electrical conductivity sensing and indicating systems;
- (xii) sensors and indicators for measurement of speed, position, proximity and time;
- (xiii) gas and liquid chromatographs;
- (xiv) spectrophotometer analyzers;
- (xv) spectrometers;
- (xvi) pneumatic, fluidic, robotic, fibre-optic, hydraulic and electronic transmitters;
- (xvii) pneumatic, fluidic, robotic, fibre-optic, hydraulic and electronic transducers;
- (xviii) pneumatic, fluidic, robotic, fibre-optic, hydraulic and electronic recorders;
- (xix) digital to analog and analog to digital converters;
- (xx) data acquisition, telemetric systems, supervisory control and data acquisition (SCADA) systems, programmable logic controller systems, distributed control and display systems;
- (xxi) monitoring devices and alarm systems;
- (xxii) pneumatic, fluidic, robotic, fibre-optic, hydraulic and electronic control devices and systems;
- (xxiii) valve positioners;
- (xxiv) electrical and pneumatic valve actuators;

- (xxv) control valves and final control elements;
- (xxvi) vibration sensing systems;
- (xxvii) ultra-violet and infra-red fire detection systems;
- (d) “technical training” means technical training as defined in the *Apprenticeship Program Regulation*;
- (e) “trade” means the occupation of instrument technician that is designated as an optional certification trade pursuant to the *Apprenticeship and Industry Training Act*;
- (f) “uncertified journeyman” means an uncertified journeyman as defined in the *Apprenticeship Program Regulation*.

[Alta. Reg. 270/2006]

### **General Matters Respecting the Trade**

Constitution of the trade    **2**    The following undertakings constitute the trade:

- (a) installing, calibrating, testing and maintaining instruments;
- (b) without limiting the generality of clause (a), the undertakings include the following:
  - (i) installing, calibrating, testing and maintaining process measurement sensing and indicating systems;
  - (ii) installing, calibrating, testing and maintaining analytical instrumentation;
  - (iii) installing, calibrating, testing and maintaining signal conversion and transmission devices;
  - (iv) operating, installing, testing and maintaining data acquisition and display systems;
  - (v) installing, calibrating, testing and maintaining monitoring devices and alarm systems;
  - (vi) installing, calibrating, testing and maintaining control devices and systems;
  - (vii) installing, calibrating, testing and maintaining final control elements.

Tasks,  
activities and  
functions

- 3** When practising or otherwise carrying out work in the trade, the following tasks, activities and functions come within the trade:
- (a) using hand tools, hand power tools, testing equipment and specialty tools required by the trade;
  - (b) knowledge and understanding of operating processes and their interrelationship with instrumentation;
  - (c) installing, inspecting, testing, servicing and removing instruments;
  - (d) installing and removing pneumatic tubing, process tubing and piping;
  - (e) installing, inspecting, testing, disconnecting and connecting electrical wiring to instrument installations;
  - (f) maintaining, installing and testing air distribution systems;
  - (g) incorporating modifications to systems and components;
  - (h) installing, servicing, calibrating and maintaining equipment for calibration, reference or comparison standards.

### **Apprenticeship**

Term of the  
apprenticeship  
program

- 4** (1) Subject to credit for previous training or experience being granted pursuant to an order of the Board, the term of an apprenticeship program for the trade is 4 periods of not less than 12 months each.
- (2) In the first period of the apprenticeship program an apprentice must acquire not less than 1500 hours of on the job training and successfully complete the technical training that is required or approved by the Board.
- (3) In the 2nd period of the apprenticeship program an apprentice must acquire not less than 1500 hours of on the job training and successfully complete the technical training that is required or approved by the Board
- (4) In the 3rd period of the apprenticeship program an apprentice must acquire not less than 1425 hours of on the job training and successfully complete the technical training that is required or approved by the Board.
- (5) In the 4th period of the apprenticeship program an apprentice must acquire not less than 1425 hours of on the job training and successfully complete the technical training that is required or approved by the Board

Employment  
of apprentices

- 5** (1) Where a person employs an apprentice, that employment must be carried out in accordance with this section.

- (2) Subject to subsection (3), a person who is a certified journeyman or an uncertified journeyman in the trade or employs a certified journeyman or an uncertified journeyman in the trade may employ 2 apprentices and 2 additional apprentices for each additional certified journeyman or uncertified journeyman in the trade that is employed by that person.

[Alta. Reg. 1/2011]

- (3) Subsection (2) does not apply to an apprentice who is engaged in an apprenticeship program in the trade and has completed all the requirements required or approved by the Board for advancement into the 4<sup>th</sup> period of that apprenticeship program.

[Alta. Reg. 102/2006, 270/2006]

]Wages

- 6** (1) Subject to the *Apprenticeship Program Regulation*; a person shall not pay wages to an apprentice that are less than those provided for under subsection (2).
- (2) Subject to the *Employment Standards Code*, a person employing an apprentice must pay wages to the apprentice that are at least equal to the following percentages of the wages paid to employees who are certified journeymen or uncertified journeymen in the trade:

[Alta. Reg. 270/2006]

- (a) 55% in the first period of the apprenticeship program;
- (b) 65% in the 2nd period of the apprenticeship program;
- (c) 75% in the 3rd period of the apprenticeship program;
- (d) 85% in the 4th period of the apprenticeship program.

### **Transitional Provisions, Repeals, Expiry and Coming into Force**

Apprenticeship continues **7** A person who immediately prior to January 1, 2001 was an apprentice in an apprenticeship program under the *Instrument Technician Trade Regulation* (AR 200/94) continues as an apprentice in that apprenticeship program under this Regulation.

Repeal **8** The *Instrument Technician Trade Regulation* (AR 200/94) is repealed.

Expiry **9** For the purpose of ensuring that this Regulation is reviewed for ongoing relevancy and necessity, with the option that it may be repassed in its present or an amended form following a review, this Regulation expires on August 31, 2012.

[Alta. Reg. 42/2004]

Coming into force **10** This Regulation comes into force on January 1, 2001.