# REFRIGERATION AND AIR CONDITIONING MECHANIC







This 25-week (750 hours) program is designed to take a student with little or no previous experience in the heating, air conditioning and refrigeration industry and supply the student with the necessary skills to seek employment in that industry as an apprentice. It also provides a solid foundation in the fundamentals of installing, servicing, and troubleshooting all aspects of heating, ventilating and air conditioning/refrigeration equipment.

# **Career Opportunities**

Appliance Dealerships; Gas and Electric Utility
Companies; owners of Rented Commercial Appliance
Service Companies; Department Stores; and, Appliance
Manufacturer's own Service Departments; and, some
choose to run their own businesses. For more information
on Refrigeration and Air Conditioning employment
opportunities:

WorkBC - www.workbc.ca STBC - www.skilledtradesbc.ca

# Admission Requirements

Grade 12 student with good attendance and academic standing on a Dogwood graduation plan. English 10 with a minimum 50%, Math 11 with a minimum 50%.

## **Program Outline**

Completion of all courses in the program with a minimum grade of 70% in each.

RACM 100 Application of Trades Math for the Refrigeration Mechanic Trade

**RACM 101 Safety Techniques** 

**RACM 102 Welding and Brazing Techniques** 

**RACM 103 Basic Work Skills** 

**RACM 104 Application of Drafting Skills** 

RACM 105 Use of Tools

**RACM 106 Application of Computers** 

**RACM 107 Basic Electrical Concepts** 

**RACM 108 Electrical Wiring Schematics** 

RACM 109 Single-Phase Motor Theory

**RACM 110 Piping Practices** 

**RACM 111 Fundamentals of Refrigeration** 

**RACM 112 Refrigeration Systems Cycles** 

RACM 113 Refrigeration System Components

RACM 114 Final Exam

## **Tuition**

SD23 Pays:

• Tuition: \$4,079.41

#### Student Pays:

- Mandatory Fees: \$1,136.22 includes:
   Activity fee, Health & Dental, Student Association fee, Education Technology fee, Developmental fee
- Textbooks: \$1,330.00 + Supplies

\*All program costs are approximate and subject to change without notice.

## Credentials Received

Graduates of this program may receive credit for Level 1 apprenticeship technical training and may also be granted practical credit from Skilled Trades BC. In order to complete the apprenticeship and become a journeyperson, graduates would return to school to complete Level 2 (six weeks), Level 3 (eight weeks) and Level 4 (eight weeks)

Secondary school students will earn 32 elective credits (8 Grade 12 courses) towards graduation.



#### Location

Okanagan College - Penticton or Vernon 583 Duncan Ave. West, Penticton, BC



# Student for a Day

Arrange your Student for a Day experience by contacting your school Career Coordinator.

# **Physical Requirements**

- Lift and carry tools, equipment, supplies and materials weighing up to approximately 30 lbs
- Lift, carry, hold and operate hand, air and power tools from below grade to above shoulders
- Stand on concrete, dirt, rock, asphalt, wood, etc. for extended periods of time
- Bend, stoop, kneel, crawl to perform tasks
- Work in open trenches and other confining environments
- Work in both indoor and outdoor venues, through all seasonal challenges
- Push/pull and carry pipe, tubing and construction materials
- Climb extension ladders, and work on scaffolding at heights

## **Recommendations for Success**

- · Good general health and respiratory condition
- Capable of doing physical work
- Physical strength and stamina compatible with the handling of heavy equipment and materials
- Ability to tolerate loud noise and vibration from riveting tools
- · Good manual dexterity
- Balance and coordination to walk on uneven ground for up to 8 hours per day
- Good hand-eye coordination
- Satisfactory eyesight, line, form and depth perception

# Sponsorship Requirements for SD23 Students

- Attend "Student for a Day"
- Complete the School District application package and hand it into your Career Programs Coordinator
- Be on track to graduate with a Dogwood diploma
- Meet with Career Coordinator to review program and school district exemptions
- Okanagan College course requirements / admission requirements met for program
- · Application approved and accepted by School District
- An interview may be required for potential applicants

# Focus on Safety

Okanagan College is committed to providing a safe learning environment for students. All students are responsible for:

- Knowing safe work procedures in classroom, shop and work areas
- Following the safety standards as taught by the instructor.
   These standards meet or exceed the regulatory requirements of the WorkSafe BC Occupational Health and Safety Regulation.

Failure to do so may result in suspension from the program. Each student is expected to report any unsafe condition or unsafe behavior to their instructor.

Applications are available at your school Career Centre or go to www.dualcredit23.sd23.bc.ca



## **CONTACTS:**

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