

# Insulator (Heat and Frost)

As an insulator, you would apply, remove and repair thermal and acoustical insulation on all types of Industrial equipment. Duties vary from one position to another but in general, you would perform the following duties: read and interpret drawings and specification to determine insulation requirements, select the amount and type of insulation to be installed and a method of securing the insulation, measure and cut insulating material and coverings to the required shape and dimension, fit insulation around obstructions or shape Insulation materials and protective coverings, remove or seal off old asbestos insulation. This work may be indoors or outdoors, sometimes in an uncomfortable or potentially hazardous area. The work schedule is usually a 40 hour, five day week with overtime during the busy season. You should have good manual dexterity and be able to work in; cramped spaces, heights or hot and cold environments.

## OUTCOMES

1. Demonstrate safe work practices and personal protection
2. Maintain tools and equipment
3. Install insulation for tanks, vessels and equipment and protective cladding,
4. Insulates for soundproofing, marine applications, plumbing systems, mechanical piping, mechanical ducting
5. Performs asbestos abatement
6. Installs fireproofing

## ENTRANCE REQUIREMENTS

Eligibility for admission requires the applicant to meet one of the following academic criteria:

### 1. High School

High School Graduation

### 2. Comprehensive Arts and Science (CAS) Transition

Comprehensive Arts and Science (Transition) Certificate

### 3. Adult Basic Education

Adult Basic Education (Level III) Graduation with General College Profile (or Business Related College Profile or Degree and Technical Profile). It is strongly recommended that courses include the following:

- i. Mathematics MA3107A, MA3107B, MA3107C
- ii. Science 3101, 3102, 3103

### 4. Mature Student Status

Applicants who do not meet the educational prerequisites, are 19 years of age or older and have been out of school for at least one year, may be considered on an individual basis under the Mature Student Clause.

## EMPLOYMENT OPPORTUNITIES

You may find employment with construction companies, Insulation contractors and industrial plants.

## CERTIFICATE

- Red Seal Certification
- One year
- September start
- Bonavista Campus

## COURSES

CODE	TITLE	Hrs
<b>Block 1 Entry Level</b>		
TS1510	Occupational Health and Safety	6
TS1520	WHMIS	6
TS1530	Standard First Aid	14
HF 1101	Hand and Power Tools	6
HF1110	Shop Tools and Equipment	15
HF1150	Insulation Principles	10
HF1200	Insulation Materials	10
HF1201	Insulation Practices	10
HF1220	Introduction to Pipe and Piping Systems	10
HF 1310	Blanket Insulation	15
HF 1320	Fibrous Board Insulation	15
HF 1230	Installing Pipe Insulation	75
HF1240	Hot work Practices	20
HF 1250	Introduction to Asbestos	24
HF 1260	Asbestos Removal Procedures	24
HF 1550	Firestopping	25
HF 1270	Blueprint Reading - Part 1	30
AP1100	Introduction to Apprenticeship	15
MA1060	Basic Math	60
CM2150	Workplace Correspondence	45
MR1220	Customer Service	30
SP2330	Quality Assurance/Quality Control	30
MC1050	Introduction to Computers	30
SD1700	Workplace Skills	30
SD1710	Job Search Techniques	15
SD1720	Entrepreneurial Awareness	15
<b>Block 2 Advanced Level</b>		
HF 1280	Introduction to Foam Insulation	10
HF 1290	Installation of Flexible Foam Insulation	30
HF 1300	Air Handling System Components	10
HF 1380	Insulate Underground Pipe	25
HF 1400	Parallel Line Development	20
HF 1410	Radial Line Development	20
HF 1500	Tees, Valves and Elbows	35
HF 1510	Flanges and End Caps	30
<b>Block 3 Advanced Level</b>		
HF 1330	Insulating, Breeching, Flues and Precipitators	10
HF 1340	Insulating Methods (Cylinders and Heads)	30
HF 1350	Finishing Methods	15
HF 1360	Introduction to Cryogenic Work	10
HF 1370	Insulating Cryogenic Systems	25
HF 2270	Blueprint Reading - Part II	35
HF 1420	Triangulation	15
HF 1520	Cones, Bevels and Transitions	25
HF 1540	Tank Heads	15

