

## National 4 SfW Building Services Engineering (Course Code: C278 74)

SCQF Level 4 (24 Credit Points)

### Why study SfW Building Services Engineering?

Building Services Engineers design and install heating, ventilating, air conditioning, refrigeration, plumbing and electrical services for domestic, commercial and industrial buildings.

The course includes safe working practices, energy and the science of building services engineering and also develops transferable employability skills, including:

- time-keeping, appearance, customer care
- self-evaluation skills
- positive attitude to learning
- flexible approaches to solving problems
- adaptability and positive attitude to change
- confidence to set goals, reflect and learn from experience
- skills to become effective job-seekers and employees.

### Career Pathways

To see what career areas this subject could lead to and the routes to get there, download and view these career pathways:

[Construction](#)

[Engineering](#)

### What do I need to get in?

Entry is at the discretion of the school or college, however, you would normally be expected to have attained Core Skills at SCQF Level 3 or equivalent.

### What will I study?

The course is made up of five compulsory units, including two half units.

The three compulsory units, each taking 40 hours of study are:

- Building Services Engineering: An Introduction
- Building Services Engineering: Introduction to Safe Working Practices
- Building Services Engineering: Introduction to Energy

The two compulsory half units, each taking 20 hours of study are:

- Building Services Engineering: Introduction to Science
- Building Services Engineering: Employability Skills

You will learn about:

- basic building systems, including plumbing, electrical, heating and ventilation, refrigeration and air conditioning
- health and safety requirements
- the main types of energy, energy conservation and how this applies to the building services industry
- the principles of heat, mechanical and electrical applications used within building services
- work practices and attitudes that enhance employability.

### How will I be assessed?

Assessment will be based on a range of practical workshop activities in real or simulated workplace settings. Tutors will observe and keep records of your work. Some assessment may be done online using an e-portfolio system.

### Study Materials

### What can I go on to next?

You may be able to progress to:

Employment /Training

- A Modern Apprenticeship leading to a Scottish Vocational Qualification (SVQ) at SCQF Levels 5 to 6 in building services engineering or a related area such as construction.

Further/Higher Education

- A one year full time National Progression Award (NPA), National Certificate (NC) or National Qualification (NQ) in Building Services Engineering or construction such as Bricklaying, Carpentry and Joinery, Construction Foundation Taster, Construction Skills or General Building at a local college of further education.

Further study, training or employment in:

- Construction
- Engineering