

# PLUMBER



## SALARY

Trainee plumber ★★★★★  
Experienced plumber ★★★★★

## INDUSTRY PROFILE

Numerous employment opportunities, including growth in renewable energy systems • Self-employment common • Skilled plumbers in demand in many countries worldwide

## JOB DESCRIPTION

Plumbers install and repair heating systems, boilers, water pipes, drainage systems, air-conditioning units, and domestic equipment such as washing machines. They work in homes, offices, or at industrial locations, and may be self-employed or an employee of a larger firm or business. The work involves using a wide range of equipment, from power tools to welding gear, often in wet and cramped conditions.



## RELATED CAREERS

- ▶ **BUILDING-SERVICES ENGINEER** Designs and builds a wide range of systems within buildings, from lighting, heating, and power to internal features such as elevators and escalators. They work on large- and small-scale construction projects.
- ▶ **DOMESTIC APPLIANCE ENGINEER** Installs and repairs appliances, such as washing machines and refrigerators, in people's homes.
- ▶ **ENERGY ENGINEER** Develops new ways of producing energy, such as electricity, from a range of technologies, such as wind turbines.
- ▶ **KITCHEN FITTER** Installs and fits kitchen worktops, cupboards, and decorative trims. Kitchen fitters follow detailed plans to achieve the layout and look required by the customer.
- ▶ **REFRIGERATION AND VENTILATION ENGINEER** Designs, installs, and commissions air conditioning systems in people's homes, offices, schools, and other premises.

## AT A GLANCE



**YOUR INTERESTS** Engineering • Mathematics • Physics • Design technology • Information Technology (IT) • English



**ENTRY QUALIFICATIONS** There are no formal entry requirements. To work with oil and gas appliances, plumbers need to be certified.



**LIFESTYLE** Working hours are fairly regular although plumbers may need to work evenings or weekends, or remain on call in case of emergency repairs.



**LOCATION** Travel between customers is required—plumbers work in a variety of locations, such as customers' offices, homes, factories, and stores.



**THE REALITIES** Being self-employed requires hard work and determination. Some work is carried out at late or early hours, or in wet or cold conditions.

## CAREER PATHS

Gaining qualifications and membership of a professional body are useful for working as a plumber, and are essential for gas installation. Domestic plumbing is the most common area of work, but there are several options for specialization.

### APPRENTICE

You can enter plumbing straight from high school as an apprentice, training on the job and learning from colleagues.



### GRADUATE

Although a degree isn't required, finishing technical school or college programs may make it easier for you to secure an apprenticeship.



**PLUMBER** As a plumber, you will stay up to date with safety standards and technological advances throughout your career. Once you have built a good reputation, you can set up and run your own business for domestic customers.



## SKILLS GUIDE



The ability to communicate effectively with both customers and colleagues.



Good interpretative and analytical skills for following technical drawings and building plans.



Confidence in using hand-held tools, including power tools and monitoring devices.



Physical stamina and the ability to work in confined spaces, such as attics and ventilation shafts.



Attention to detail, especially when working with gas and oil due to fire risks.

### HEATING ENGINEER

Specializes in the design, installation, and commissioning of a wide variety of heating systems, such as oil, gas, or electrical systems.



**GAS SERVICE TECHNICIAN** Installs, repairs, and services gas appliances and systems such as stoves, water-heaters, and gas fireplaces.



**INDUSTRIAL PLUMBER** Works on major plumbing projects at factories, hospitals, and offices to ensure heating, water, and drainage systems are running efficiently.



**PLUMBING ESTIMATOR** Assesses the scope of new plumbing projects and estimates the cost of labor and fittings. This is usually a senior role within a large plumbing firm.



**RENEWABLE ENERGY ENGINEER** Designs, installs, and maintains eco-friendly domestic and industrial systems, such as solar panels or biomass heating systems, which use organic fuels rather than gas, oil, or electricity.

