# Plumbing, Gasfitting and Drainlaying Just the Job: Information Sheet

## Job title/s

Plumbing apprentice, gasfitting apprentice, plumbing & gasfitting apprentice and drainlaying apprentice.

## Job description

All apprenticeships are competency based and usually take 18 months to 2 years (drainlaying) and around three and a half to four and a half years (plumbing & gasfitting) to complete. Successful completion within this time requires apprentices to complete their distance learning assignments to the period indicated in their training plan.

## Drainlayers

- Drainlayers lay and repair sewage and storm water drains, and install and repair wastewater treatment systems.
- Drainlaying may be on a big job, such as working for the local council on new and old subdivisions or smaller jobs such as working on commercial or residential properties. These jobs will test your skills, and you will gain experience by working with different trades people.
- Consult with clients and other trades people about where the drains or waste water treatment systems are to be laid or repaired this is especially important in regards to underground gas pipes.
- Excavate and dig trenches along areas marked on the plans.
- Protect the trenches from collapse.
- Measure and cut the pipes.
- Seal all water joints on the pipes.
- Backfill trenches after they have been tested by local council inspectors using recommended fill such as gravel.
- Install manholes.

### Plumbers & Gasfitters

- Assemble, install and repair the pipes, fixtures and fittings used to supply water and gas or remove wastes.
- Study building plans and specifications.
- Discuss the client's requirements.
- Cut holes in walls for new pipes.
- Measure, cut and shape pipes.
- Test joins for leaks.
- Install fixtures such as gas stoves, toilets, septic tanks and air-conditioning.
- Install bathrooms.
- Install and maintain hot water and heating systems, such as fuel installations, central heating, gas heaters, heat pumps.
- Install and repair roofing pipes and spouting.
- Run their own business.

# **Qualifications required**

P&G: The training programme covers a range of skills including welding; interpreting drawings, plans and specifications; structures; fluids forces; knowledge of and understanding of physics, mathematics and chemistry. It is recommended that apprentices have:

NCEA Level 1

• C grade or better in any three School Certificate subjects, preference being given to: English, Mathematics, Science, Technical Drawing, and Engineering shop work, or one of:

- Successful performance in 5th Form Certificate or NCEA Level One.
- Successful completion of an approved pre-trade training programme in plumbing and gasfitting run by any accredited training provider.

# **Training costs**

The cost of training varies depending on the apprenticeship. For all apprenticeships the majority of training (80% or more) takes place on-job, consisting of distance leaning assignments, block courses (plumbing & gasfitting) and a practical assessment course (drainlaying).

Contact the ITO for more information on 0800 277 736 or visit www.ito.co.nz.

## Location of job

Drainlaying tends to be outdoors although it can be inside if it is a huge construction site, such as a hospital. Plumbing and gasfitting is usually inside but can also be outside.

The work can be very creative with problem solving on site to make pipes fit in with a design. There is also planning and administrative work as well as making sure that the supplies bought are right for the job.

# **Career path**

It is possible to do a pre trade apprenticeship at a number of Polytechnics. An apprenticeship can then follow. Achievement of a National Certificate is a pre-requisite to becoming a registered drainlayer, plumber or gasfitter. The Plumbers, Gasfitters and Drainlayers Board administers registration exams. If successful in this apprentices become registered. After more study they can sit the craftsman exam after which they where they can then run their own business.

The ITO is looking to work with the Gateway programme so that students gain work experience and get credits whilst at school in their chosen field.

## Salary range

P&G apprentices can earn \$100,000 or more over their apprenticeship.

### How to increase your chances of successfully entering this industry:

- Visit one or two local companies in these sectors and talk with hem about industry and the apprenticeship system.
- Some companies may offer you work experience so you can find out if the industry is for you.
- Find out of your local polytechnic offers pre-apprenticeship courses in plumbing & gasfitting.
- If you are under 20 talk with a Modern Apprenticeship Co-ordinator in your area. The ITO can give you their contact details.
- Talk with the Plumbing, Gasfitting & Drainlaying ITO on 0800 277 736.

### Other places to source information about this job:

- <u>www.ito.co.nz</u> or call 0800 277 736
- <u>http://www.kiwicareers.co.nz</u> careers service
- <u>http://www.tstnz.com</u> = Tomorrow Schools today Website
- Polytechnics where ITO runs courses eg: Southern Institute of Technology
- Careers advisors at school.

