

Trainee Hydraulic Drafter/Designer: Information Pack

Information pack for students, parents and career advisers. Please read this alongside our Trainee Hydraulic Drafter/Designer job posting.

💧 What is hydraulic design?

Every building needs water in and waste out. Hydraulic designers plan the systems that make that happen: cold and hot water, sewer and stormwater drainage, gas, rainwater harvesting and fire services.

You won't be on the tools. You'll work in an office using design and drafting software, turning architects' plans into the drawings and specifications that plumbers, builders and councils rely on.

It suits people who like:

- Problem solving and seeing how things fit together
- Computers, drawing and 3D modelling
- Maths and physics in a practical, real-world setting
- Seeing their work built: hospitals, apartments, schools and community buildings

You earn a wage from day one, gain a nationally recognised qualification, and finish with no student debt.

🏢 About PDD

Plumbing Design & Drafting (PDD) is a hydraulic and fire protection design consultancy based in Warana on the Sunshine Coast. Since 2005 we have designed the water, drainage and fire systems for residential, commercial, healthcare and infrastructure projects right across Queensland.

PDD was founded by Mark Laverick, who brought more than 40 years of plumbing and hydraulic experience to the business. When Mark retired in June 2025, Director Harry Sweeney took the lead. You'd join a close-knit team of designers, a BIM manager and office support who share what they know and keep upskilling together.

> ***Experienced. Innovative. Connected.*** *We use the latest design technology, from AutoCAD 2D drawings to fully coordinated Revit 3D models, and we work closely with architects, engineers and builders on every project.*

What we design:

- Sewer, stormwater and subsoil drainage, including pumped systems
- Cold and hot water supply, including solar and heat pump systems
- Rainwater harvesting and reuse
- Trade waste systems for kitchens, shops and industry
- Purified (reverse osmosis) water systems for healthcare
- Wet-fire systems: fire hydrants, hose reels and sprinklers

We also help on site during construction, check and upgrade plumbing in existing buildings, and advise clients in the early planning stages of a project.

🛠️ Your role as a trainee

As a Trainee Hydraulic Drafter/Designer, you'll work alongside our experienced designers from your first week. Your work will cover every part of a hydraulic project, with more responsibility as your skills grow:

Area	What you'll do
Drafting and 3D modelling	Draw plans in AutoCAD and build 3D models in Revit, and update them as designs change
Design and calculations	Size pipes and calculate water demand and drainage flows, checked by a senior designer
Wet-fire systems	Lay out fire hydrants, hose reels and sprinkler systems
Site inspections	Visit sites with senior designers to inspect existing services and check installations
Coordination	Work with architects, engineers and builders, join design meetings and check drawings for clashes
Approvals and documentation	Prepare drawing packages and applications for councils and water authorities
Specifications and reports	Help write the specifications and technical notes that go with our drawings
Upgrades to existing buildings	Help audit existing plumbing and drainage, and design fixes and upgrades

You'll start with drafting and modelling, then take on design, site work and coordination. In time, you'll lead your own projects from first sketch to construction.

📐 Projects our team has worked on

Our trainees learn on real buildings from day one. Here are some recent PDD projects:











More projects we've designed:

Project	Location	Type
Seanna Apartments	Bokarina	63 apartments over eight levels, with pool podium, dining and retail
Rockpool Aged Care	Pelican Waters	Aged care
White's SUPA IGA	Baringa	Supermarket
St Benedict's Catholic School	Townsville	Education
St Patrick's College	Townsville	Education
Imbil Camping Retreat	Imbil	Tourism and accommodation
Blackall Cultural Precinct	Blackall, Central West Queensland	Community and cultural, including rainwater harvesting and hot Great Artesian Basin bore water

Other PDD projects include The Corso and Foundation Place in Maroochydore, The Wharf in Mooloolaba and Jewel on Birtinya Island.

🚀 Your career pathway

You start straight from Year 12 with no trade or prior qualification needed. Each step builds on the last, and you are paid throughout.



Stage	Qualification or milestone	Typical timeframe	What it means for you
1. Start at PDD	Trainee Hydraulic Drafter/Designer	Day one	Paid full-time role, learning on real projects
2. Certificate IV	CPC40920 Certificate IV in Plumbing and Services (Hydraulic services design)	Up to 2 years part-time	Design and size water, sanitary, drainage, stormwater and gas systems
3. Diploma	CPC50620 Diploma of Hydraulic Services Design	After the Certificate IV	Design complex systems: pumps, rainwater reuse, trade waste, large buildings
4. QBCC licence	Hydraulic services design licence	After 2 years' relevant experience plus the required qualification	Recognised as a licensed hydraulic designer in Queensland

The Certificate IV hydraulic design stream has no entry requirements under the national training package, so a school leaver can start immediately. The Certificate IV is the entry requirement for the Diploma.

🎁 What PDD provides

We invest in you from day one.

- **A paid, full-time job** with a wage from your first week
- **Course fees paid** by PDD for your Certificate IV, and for further study as you progress
- **Paid study time** during work hours to attend classes and complete coursework
- **One-on-one mentoring** from experienced designers and support staff
- **Real projects** across residential, healthcare, commercial and civil work, not just practice exercises
- **Industry software and equipment** supplied

👨‍👩‍👧 For parents and career advisers

This is a structured, employer-funded pathway into a regulated, professional field.

- **Nationally recognised training:** the Certificate IV and Diploma are qualifications under the national Construction, Plumbing and Services Training Package.
- **No upfront cost to the student:** PDD pays course fees and provides paid study time.
- **Regulated career:** hydraulic design in Queensland is licensed by the Queensland Building and Construction Commission (QBCC), giving graduates a clear professional standard to work towards.
- **Office-based role:** design and documentation work, with occasional supervised site visits.
- **Room to grow:** the pathway leads to licensed hydraulic designer roles and, with experience, senior and project-lead positions.

Subjects that help: Mathematics (General or Methods), Physics, Engineering, Design or Graphics. None are compulsory; aptitude and willingness to learn matter most.

💪 Who we're looking for and how to apply

We want a curious, reliable Year 12 leaver who enjoys solving problems and is keen to learn a professional skill.

- Completing or recently completed Year 12
- Comfortable with maths and computers
- Attention to detail and pride in accurate work
- Good communicator who asks questions
- Able to travel to our Sunshine Coast office

To apply: send a short cover letter, your resume and your most recent school report to mail@pdd.net.au.

Questions? Call us on (07) 5437 7660 or email mail@pdd.net.au.

🔗 Further information

- TAFE Queensland: Certificate IV in Plumbing and Services (Hydraulic services design)
- training.gov.au: CPC40920 Certificate IV in Plumbing and Services, Release 4
- training.gov.au: CPC50620 Diploma of Hydraulic Services Design, Release 2
- QBCC: Hydraulic services design licence

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