

**Training Locations: MELBOURNE, VICTORIA
BRISBANE, QUEENSLAND**

CPCPGS4022 – Service Type A Gas Appliance*

Certificate IV – Post Gas work Licence

**Contains selected units from
CPC40920 Certificate IV in Plumbing and Service*

*Required for
Gas-Fitting Practitioner Licence - TASMANIA*



WHY CHOOSE BIZMATRIX?

Lift the Standards

We have a tried and proven formulae. For the past 30+ years our mantra has been to impart our knowledge as qualified / licenced Type A / Type B Gas and Electrical trainers to create and mentor a gas fitter or plumber / gas fitter or electrician into a dual and multi trade technician who can tackle any type of appliance in their scope.

We have a 'go back to basics' process and systematic approach to work on the complete appliance, confirming that the unit is installed correctly – the correct power, gas install – before diagnoses.

Our approach is to never make assumptions, always looking to make it better and to **lift the standards**, and ensure students know the 'why' we are doing each process.

GENERAL INFORMATION

A brief overview:

At Bizmatrix, we not only train you for the CPCPGS4022 unit, which is one of the four Certificate IV units required to apply for a **Gas-Fitting Practitioner Licence (Tasmania)**, but we also equip you with superior skills to set up your career as an in-demand Gas Technician.

Our CPCPGS4022 Service Type A Gas Appliances Course happens in 2 parts:

1. **Part 1:** you start online (approx. 25 hrs) with a comprehensive refresher of Gas basics and proceed with the course work that you will need to successfully continue with the part 2 face-to-face learning. Part 1 also includes the two pre-requisites as well as theory assessments.
2. **Part 2:** 7 days (approx. 70 hours) face-to-face. 'Hands on' with the widest array of tools and test equipment with our highly skilled educators, it includes further practical and theory assessments.

The intensive schedule enables you to miss fewer days off work but come away with superior knowledge and experience compared to any other course.

COURSE REQUIREMENTS

The Units:

- **CPCPGS4022 – Service Type A Gas Appliances**
 - *CPCPCM2043 – Carry out WHS requirements – prerequisite unit*
 - *CPCPGS3053 – Disconnect & reconnect Type A gas appliances – prerequisite unit*

This course is only open to those who hold a minimum of Certificate III in gas-fitting, Certificate III in plumbing or certificate III in mechanical services. *You will be required to supply a copy of your Certificate or USI transcript upon registration for verification and to meet the minimum requirements for the course.*

How can we help?

Feeling unsure about whether this course is the perfect fit for you or if your credentials meet the requirements? Don't hesitate to get in touch with the Bizmatrix team who will be happy to assist.

Course conclusion:

At the conclusion of the course, the successful participants will receive:

A Statement of attainment in recognition and conforming to the AQTF requirements with the nationally accredited units:

- **CPCPGS4022 Service Type A Gas appliances**
 - *CPCPCM2043 Carry out WHS requirements*
 - *CPCPGS3053 Disconnect and reconnect Type A gas appliances*

A copy to download and print (*included in the fees*) of the Australian Standards

- AS/NZS 5601.Part 1- 2022 Gas installations Part 1-general installations
- AS/NZS 5601.Part 2-LP gas installs in Caravan and boats for non-propulsive purposes
- AS4575 4775:2019 Gas appliances Servicing of Type A appliances.
- Other standards in the Bizmatrix- Techstreet subscription portal

Greater skills and knowledge as a technician in Type A Gas Appliance Servicing, of gas appliances with electrical and electronic controls with forced and induced draft burners

Be able to apply a systematic approach to:

- Diagnose, fault find, disassemble – remedy -reassemble – test, verify and re-commission gas electrical appliances
- Correctly convert a Type A gas appliance from Natural to Propane and vice versa
- Identify and provide the correct documentation, completed check sheets to confirm compliance and safe operation:

Ability to use the correct test equipment for electrical and gas testing including multi-meters, micro-amp meters, gas analysers and Carbon monoxide testers, medium pressure manometers

Bizmatrix learner technical manuals provided throughout the course, check sheet guides to assist in future processes

FULL COURSE DETAILS:

The course will have a mixture of practical and theoretical training on a wide range of commercial gas equipment. The course has been designed as a comprehensive real life **interactive training system** to comply with the National Training System, from the Construction, Plumbing and Services Integrated Framework Training Package and delivered by qualified trainers. You will gain insight into a diverse range of commercial and domestic Type A gas equipment installation and service. This is a unique opportunity to improve your knowledge and networks, which you will be able to convert into business opportunities.

The learning journey for Type A gas appliance servicing experience

We start with the theory online, to refresh and build your knowledge then focus on the practical during the 7 days face to face.

Starting with the basics simulators and work through to variety of appliances with the forced and induced draft burners with ignition systems that are parallel across the range, from basic thermocouple / thermopile atmospheric burners to forced draft / inducted draft woks, ovens, ducted heaters, wall furnaces and water heaters.

Using check sheets, the manuals, and specifications to work through the complete process of diagnosing, checking electrical gas safety, calibrating, working through gas circuits, confirming the appliances operate correctly as designed and are compliant and safe / efficient.

Course Content, Tools and Equipment:

The Bizmatrix Service Type A gas appliance course is designed from our years of experience with domestic, commercial, and industrial Type A and Type B gas appliances, along with certification processes.

Commercial/Domestic Type A gas appliance training includes the following:

- Gas fryers, woks, ranges, ducted space heaters, combi ovens intro
- Gas conveyor ovens, domestic gas appliances, hot water systems, CO/CO₂ combustion checks
- Spillage and combustion tests
- Complex electrical/electronic gas fired appliances
- Correct, testing, setup, disconnection, and reconnection techniques

The right tools and test equipment

Each student has access to their individual toolbox with tools and test equipment needed for the duration of the course. The test equipment includes:

- Multi Meters for checking circuits, Clamp amp meters to check for stray current
- Micro amp meters for checking flame current
- IR testers for earth continuity and insulation resistance megger testing
- Two manometers – U-tube and digital for checking gas pressure, leak testing and setting the correct burner pressure.
- Electronic Gas leak detector – Pumpy pumpy for leak testing
- Room Co meters and Combustion analysers
- Specific specialist tools

Tuning burners and testing correct combustion

We will teach you how to:

- Utilise the combustion triangle to confirm the correct balance and how to do combustion analysing, and Carbon monoxide measurement with an analyser
- Confirm the gas appliance is working safe, efficiently as designed and complies
- How to save the client to reduce their fuel usage (less CO fumes and dollars) by understanding the why and how to use the correct test equipment and processes to achieve the goal of less wasted energy, by calibrating the appliance checking the flue gases

Gas basics to the next level Gas with controls

Following a systematic approach and our designed check sheets, that are in line with the standards and industry – we keep you on track to work through how to diagnose fault find control circuits, transformers, pressure switches and how to set a pressure switch:

- 240 Vac Forced and induced draft combustion fans
- Checking heat exchange units and how to stop cracking
- Flame failure how to measure and diagnose issue with flame rods and ignition probes
- Ignition packs. Burner control
- Multi bloc gas valves
- Gas solenoid valves and fault-finding operation

- Thermocouples and thermopiles. Thermostatic controls, HI limit and control circuits
- Electrical safety: checking polarity, why there is stray current how to work safely
- Checking earth continuity
- Ohms law and PIV and VIR are your friends
- Converting the appliance - Natural to Propane vice versa
- Air Pressure switches- checking / setting
- Spillage, CO and combustion checks
- VBA and ESV compliance information and processes
- Gas rates, injectors and aeration

PRICING, COURSE DATES, CONTACT INFO AND LOCATION:

Price information:

Course Name: CPCPGS4022 Service Type A gas appliances

Unit code	Title
CPCPGS4022	Service Type A gas appliances
<i>Includes Pre-requisite units – CPCPCM2043 and CPCPGS3053</i>	
Blended delivery: Online elearning then 7 days of face to face on site training	
Locations available: Melbourne VIC or Brisbane QLD	
Price	\$3,350 GST Free

Course Dates:

Can be found on our website <https://bizmatrix.com.au> or by contacting the office.

Contact details:

To register or need further information, contact:

Phone: 07 3732 6500 or

email: info@bizmatrix.com.au

Delivery Location:

BIZMATRIX TRAINING CENTRE

Carnegie Campus
2-4 Emily Street
CARNEGIE
Victoria 3163

Course Start Time: 7:30am until 4:00pm



Delivery Location:

BIZMATRIX TRAINING CENTRE

Unit 67
193-203 South Pine Road
Brendale
BRISBANE
QLD 4500

Course Start Time: 7:30am until 4:00pm

Bizmatrix

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