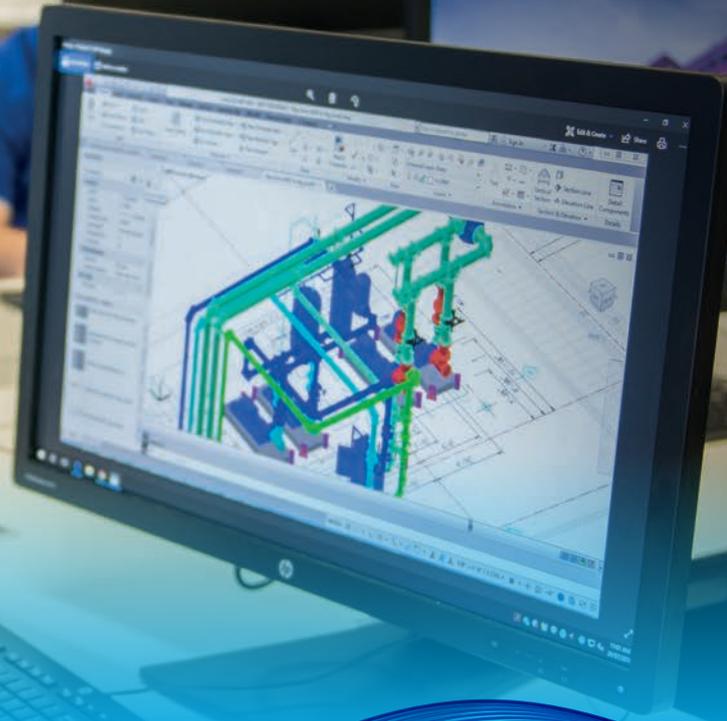




holmesglen



# HVAC CENTRE OF EXCELLENCE

CAREER AND STUDY OPTIONS IN  
THE HEATING, VENTILATION AND  
AIR CONDITIONING (HVAC) INDUSTRY



# HVAC - A CAREER IN DEMAND

With almost all buildings today having climate control systems, HVAC professionals are in high demand now, more than ever. There is growing expectation for increased sustainability, energy efficiency and occupant satisfaction to be provided in new and existing buildings. Climate control systems are becoming more sophisticated, technologically advanced and environmentally efficient, requiring skilled workers to design, install, repair and maintain them. It is essential that the industry attracts, educates and retains appropriately skilled tradespeople.

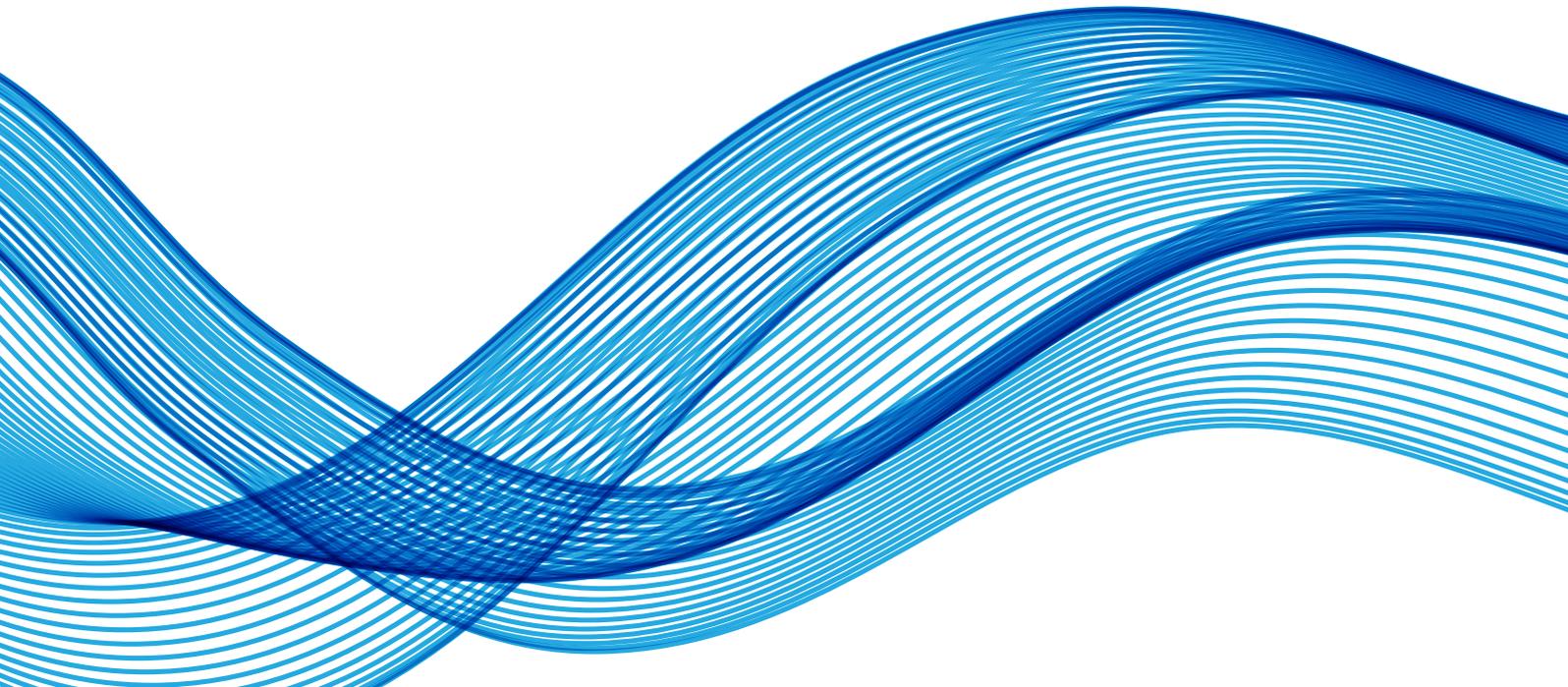
The HVAC Centre of Excellence is responding to these needs and future-proofing the industry through its innovative approach to teaching and learning through the application of best practice, excellence, quality, delivery, implementation and management.

## HVAC CAREER OUTLOOK

- A billion-dollar industry in Australia, currently contributing 1.7% of GDP
- Currently employing 173,000 people across Australia
- Highly paid tradespeople at the high end of the construction industry
- Strong demand – one of the fastest growing industries in Australia.  
There is a current shortage of appropriately skilled workers
- A rewarding career offering great variety and career progression opportunities

### WHAT DOES A HVAC PROFESSIONAL DO?

- ➔ Manages indoor environments – designs, builds, installs, services, maintains, troubleshoots and repairs indoor comfort and cooling systems year-round
- ➔ Provides solutions to many important environmental issues such as indoor air quality and protecting the environment through efficient systems
- ➔ Uses their diverse knowledge of electrical components, motors, controls, airflow, piping design, thermodynamics and refrigeration systems to troubleshoot and repair equipment and systems
- ➔ Assesses customers' needs to design, supply and install appropriate systems for their environment. They work across all different environments, including sporting grounds, shopping centres, theatres, commercial and residential buildings, private homes, hospitals, factories and industrial plants
- ➔ Manages indoor air quality – tests, evaluates and corrects situations to keep occupants safe



### **YOUR EDUCATIONAL PARTNER THROUGHOUT YOUR CAREER**

Holmesglen supports you throughout your entire career journey. Beginning with the AMCA (Air Conditioning and Mechanical Contractors' Association)-supported pre-apprenticeships and apprenticeships for entry into the industry, through post-trade and specialty courses to management and leadership courses and degrees in building, we appropriately train and upskill HVAC professionals throughout their entire career.

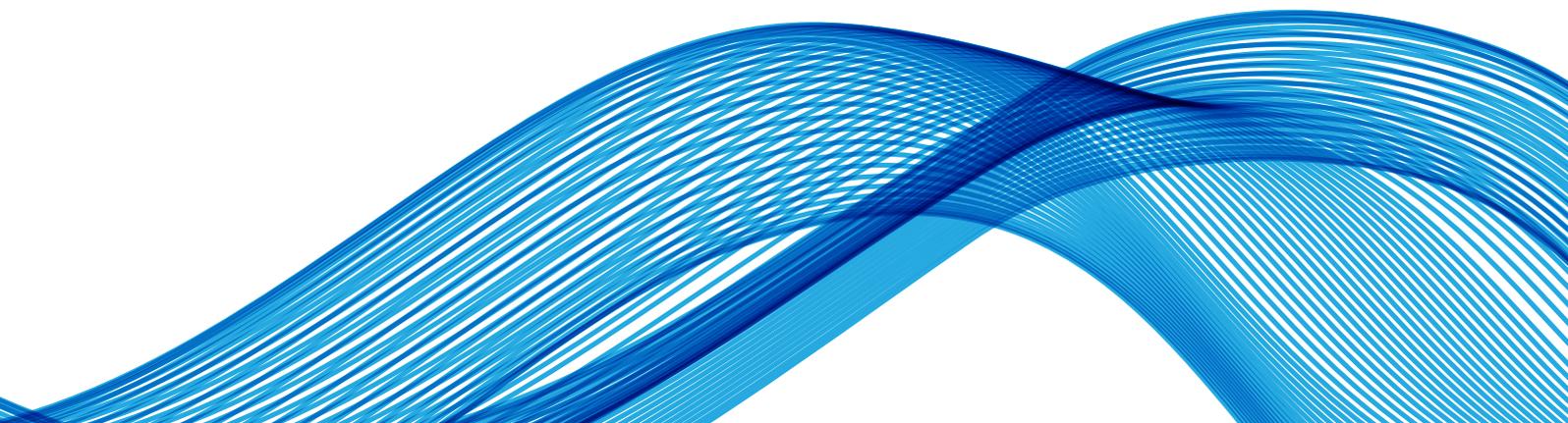
The HVAC industry offers much potential for career growth and diversification to suit your interest and career aspirations. There is potential for specialisation in niche areas, establishing your own business or entering leadership or management positions with established organisations. The HVAC Centre of Excellence offers the most up-to-date training to support HVAC professionals as their career develops and grows.

### **BENEFITS OF STUDYING MECHANICAL SERVICES PLUMBING AT HOLMESGLEN**

- Learning in a simulated environment with the latest technology and equipment
- Industry placement or on-the-job training is incorporated into most courses
- Industry collaboration and input into curriculum development ensures currency of teaching
- A strong focus on OH&S work practices to keep workers safe in the workplace
- Job matching – Holmesglen's employment service helps to match the right student with the right employer
- Knowledgeable and professional teachers with years of plumbing experience
- Hundreds of course options to cater for students throughout their entire career - in specialisations, management roles and establishing their own businesses, or a new industry altogether

**"A PLUMBING PRE-APPRENTICESHIP PROGRAM ESTABLISHED THROUGH AMCA'S PARTNERSHIP WITH HOLMESGLEN HAS CONTRIBUTED TO A 90% PASS RATE FOR THE JOURNEYMAN TEST FOR THOSE WHO CONTINUED ON TO COMPLETE THEIR CERTIFICATE III IN PLUMBING, COMPARED WITH A 50% INDUSTRY AVERAGE PASS RATE".**

**VICTORIAN SKILLS COMMISSIONER, REBALANCE AND RELAUNCH,  
OCTOBER 2017**



## CASE STUDY: JESSICA MALOUF



Jessica is smashing through gender stereotypes, excelling in her plumbing career. Her foray into the industry came when she completed a pre-apprenticeship at Box Hill TAFE. She was such a dedicated and competent student that she was awarded Box Hill's Vocational Student of the Year award. Jessica says, "My advice to other students is to get involved in a pre-apprenticeship.

It really helped me to decide what I wanted to do and it is probably the best decision I have made."

She secured an apprenticeship with A.G. Coombs and completed a Certificate III in Plumbing at Holmesglen. She is enjoying her career, working on some big projects such as a hospital and Rod Laver Arena refurbishment. "I love it. It's the best thing I've ever decided to do. It's a really great industry to be involved in...in 30 years time you can tell your kids you worked on Rod Laver Arena and that's pretty exciting."

"I've been a mechanical plumbing apprentice for three years now and people are still surprised that I'm a girl. One guy at the gym asked me why I was wearing a plumbing shirt, and I said: 'Because I'm a mechanical plumber.' They think I'm joking. I don't mind though. I like that I'm breaking the stereotype."

Jessica has been able to combine her plumbing career with her esteemed sporting career. Ranked #2 Elite Victoria Featherweight boxer, she has trained five nights a week after her plumbing workday. She has ambitions to secure a spot on the Australian women's world championships. Additionally, she has been signed with Williamstown in the VFLW, and has her sights set on being drafted to the AFLW.

She also has ambitions for a big career in plumbing, and has completed several post-trade courses to propel her career, including estimate and cost work, work-based risk control processes, advanced mechanical, manual handling awareness and asbestos awareness.

"Initially my five-year plan was to become the best tradesperson I can be, however after recently being in the factory I have found a passion for welding. So after completing my fourth year, I hope to complete my welding ticket and continue learning and progressing on the tools. I also hope to work my way into a role with more responsibility. Ultimately one day to become a project manager."

Her career excellence was recently acknowledged when she won the 2018 AMCA's Training Achievement Awards, the organisation's highest training accolade.

## CASE STUDY: MITCHELL STEVENS



Mitchell entered the industry by completing a Plumbing pre-apprenticeship at Holmesglen. Enjoying the varied and interesting course, he went on to secure a plumbing apprenticeship with A.G. Coombs in 2013 and completed his Certificate III and Certificate IV in Plumbing at Holmesglen.

During his apprenticeship, Mitchell worked on a number of high profile

and complex projects including; the new Monash Children's Hospital, New Bendigo Hospital, CSL Behring AlbuRx facility, and the large Post Entry Quarantine Facility at Craigieburn.

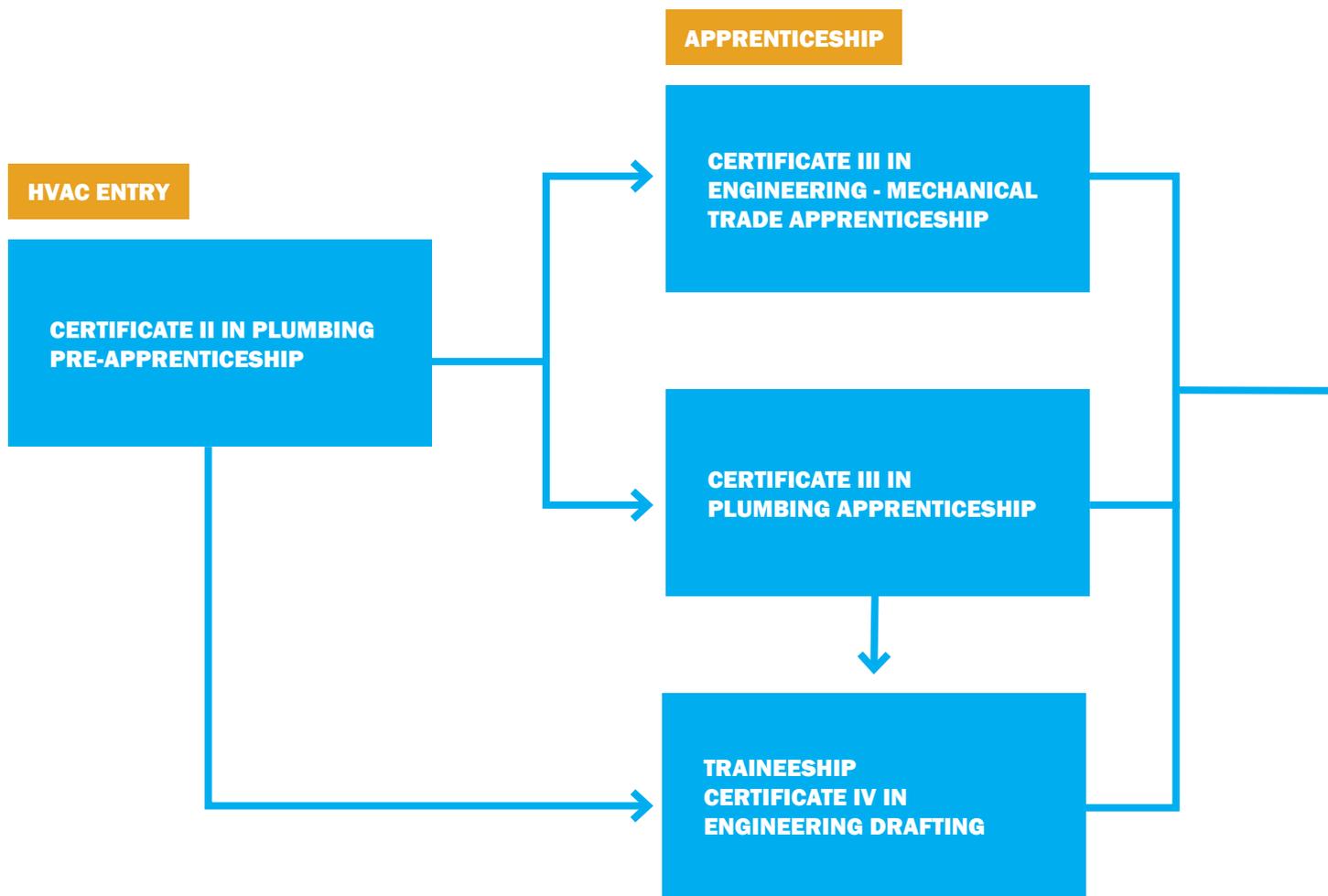
Mitchell has excelled in his career and has proven himself to be a valuable member of the A.G. Coombs team. Mitchell's supervisor at A.G. Coombs, Kyle Paten says, "Mitch has a strong drive to learn all aspects of the mechanical plumbing

trade, which he has shown me throughout his mechanical plumbing apprenticeship. Mitchell puts in 100% to all his tasks at hand designated to him. Mitch is a real pleasure to work with on site and a valuable asset to the AG Coombs Group."

Mitchell's dedication and excellence was recognised when he was awarded the 2017 AMCA Training Achievement Award. He aims to continue to make a valuable contribution to the industry, saying "My goal is to achieve some type of leadership role, to guide and assist others. To this end it is my intention to seek out the opportunity to reach a foreman type role within the next five years."

In order to progress his career, Mitchell has completed several post-trade courses in operating a forklift truck, providing basic emergency life support, operating an elevating work platform and asbestos awareness.

# CAREER PROGRESSION

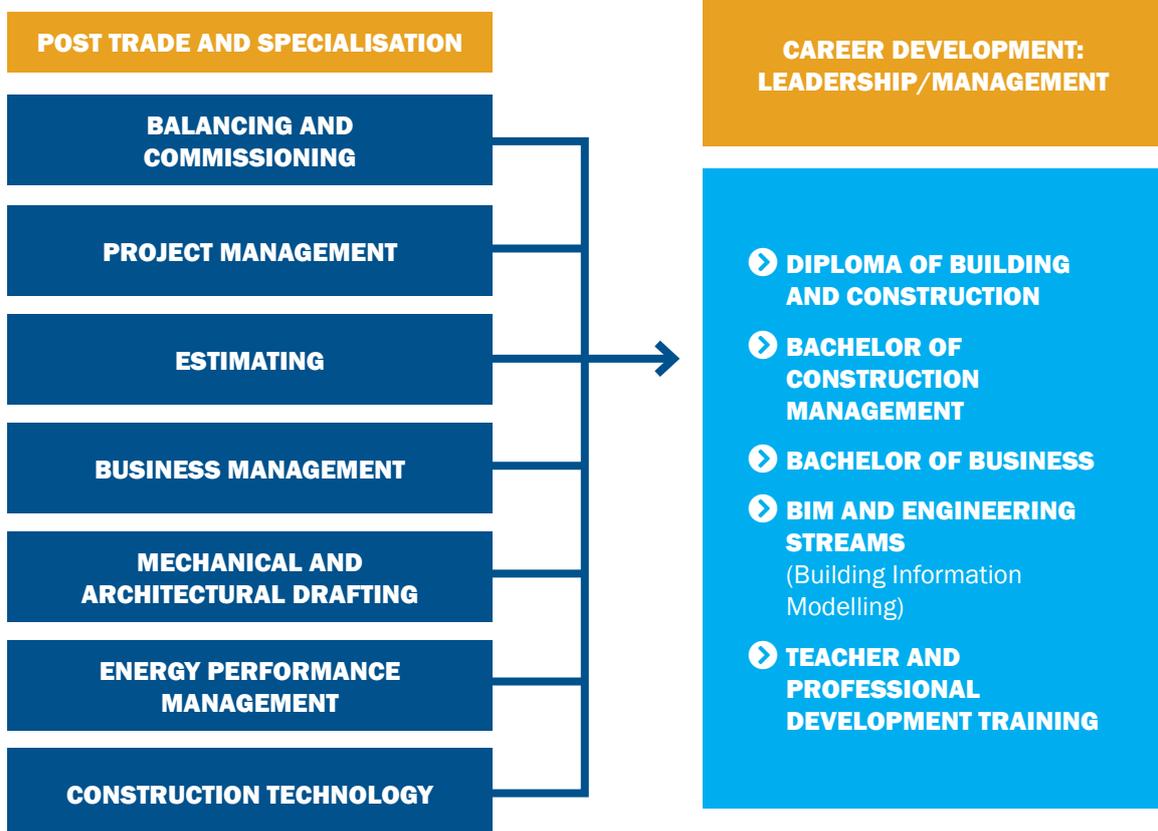


A career in HVAC can take you into installation and commissioning of equipment or into its service and maintenance. The type of work that is available is highly skilled and variable. The entry-level occupations are:

- Mechanical services plumber
- Refrigeration and air conditioning mechanic
- Draftsperson
- Engineer

Once in the industry there are other specialist and unique jobs available which earn high salaries. Jobs in the commercial and industrial sector are different to working in residential buildings. The technology, scale of work and type of companies you work for are vastly different.

Each year, in excess of \$4 billion is spent on installing new commercial air conditioning systems in Australia. Working in the highly complex HVAC industry provides a rewarding and secure job with great career prospects.





## CASE STUDY: ADAM LANGFORD



Adam began his career in mechanical services as an apprentice plumber at D&E Air Conditioning in 1999, and completed his apprenticeship training through Holmesglen.

During his apprenticeship Adam worked on many different buildings and systems and gathered a good understanding of the different aspects that make up the mechanical services industry. After several years Adam moved into an estimating role with the organisation where he spent almost four years working on a broad range of tenders including hospitals, shopping centres, sports arenas, office developments and apartments.

Adam moved his way up in the company, and in 2007 was employed into Project Management for Major Construction, working on a range of new projects such as laboratories, hotels, apartments and offices. One of the more notable projects he delivered in this role was the mechanical services installation for AAMI Park Stadium.

In 2011 Adam bought into an existing business, Ellis Air Conditioning, along with two other colleges. Adam moved

into the role of General Manager at Ellis Air Conditioning and helped grow the business from a turnover of \$5m and 13 staff in 2011 to approximately \$180m and 400 staff in 2018 (between two states). During this time he has been part of many prominent projects including Prima Tower, Collins Square Towers 4 & 5, 447 Collins St (Pantscraper Building), 80 Collins St, Australia 108 and West Side Place.

Adam says, "During the past 15 years working in the office environment, I have taken a keen interest in how different systems work and spent a lot of time pestering the engineers with different ideas and options." Adam's knowledge and contribution to the mechanical services industry was recognised when he was accepted as a Chartered Engineer in 2016 after applying through a skills recognition program with Engineers Australia.

Adam says, "My pathway shows that the mechanical services industry offers a diverse range of opportunities for those willing to work hard and continue to develop themselves. There are many career pathways including Site Manager, Project Manager, Estimating, Contracts Administration, Construction Manager or even General Manager for those willing to work hard enough to achieve their goals."

## CASE STUDY: CHAD KOPACZ



Chad entered the industry in the late 90s as a mechanical services apprentice with A.G.Coombs and completed his apprenticeship studies through Holmesglen. During his apprenticeship Chad honed his skills working on some of Melbourne's most iconic projects at the time including the Melbourne Central Redevelopment, ANZ Headquarters and the Herald

and Weekly Times. On completing his apprenticeship Chad was promoted to a site supervision role before taking on the challenge of an office-based role as an estimator.

His time as an estimator opened up further opportunities, and after 12 months Chad was again promoted, into a Project Management position. This allowed him to grow his management skills with both job-based training as well as off-

site training including the AMCA Leadership Program. After successfully completing further studies and being charged with managing projects in excess of \$10 million, Chad seized the opportunity to move into an operations and delivery role in the Telecommunications and Data Centre Space managing delivery of many complex projects. During this time Chad also completed his Masters of Business Administration with the University of New South Wales Business School, further enhancing his unique set of skills.

Today Chad is the Managing Director of Mulgrave Insulation Pty Ltd and Mulgrave Insulation NSW who are the leading Thermal Insulation, Acoustic and Fire Rating business in the Australian Commercial Construction Industry employing over 30 people and working on some of Australia's largest and most complex projects.

# STUDYING AT HOLMESGLEN

- 8/10 TAFE graduates are employed after completing their training\*
- On average, TAFE graduates earn more than University graduates\*\*
- Over 530 courses to choose from
- 23,000 students annually
- Six campuses – Chadstone, Moorabbin, Waverley, City, North Melbourne and Eildon
- Award-winning education provider

\*National Centre for Vocational Education Research, 2016, Total VET graduate outcomes  
\*\* Graduate Careers Australia, 2015, GradStats Employment and Salary Outcomes of Recent Higher Education Graduates



## A WORLD-FIRST TRAINING CENTRE

As the first ever HVAC training centre to offer applied learning, the HVAC Centre of Excellence will feature the latest equipment and technology and deliver world's best practice. Established through a collaborative partnership between Holmesglen and the AMCA, the Centre is a brand new 300m<sup>2</sup> purpose-fit facility at the Chadstone campus to upskill existing climate control technicians and train tomorrow's mechanical services professionals both in Australia and internationally.

With a focus on the cutting-edge technologies used in HVAC that are found in all commercial and many residential buildings, the HVAC Centre of Excellence features a modern mechanical services laboratory and a building information modelling laboratory, reflective of contemporary industry practices.

The Centre embraces technologically enhanced learning tools, such as augmented reality whereby students can hold their devices over a piece of equipment to play a video explaining its usage, its installation date and the last date serviced. This futuristic learning environment will maximise learning outcomes.

The Centre operates with strong industry connections and input and has procured the very latest equipment and technologies to ensure students are receiving the best and most up-to-date training. The collaboration between industry and Holmesglen encourages an effective exchange of ideas and industry intelligence to inform the teaching and learning. The Centre will provide leadership across the vocational education and training sector and drive mechanical services training and innovation in Victoria.

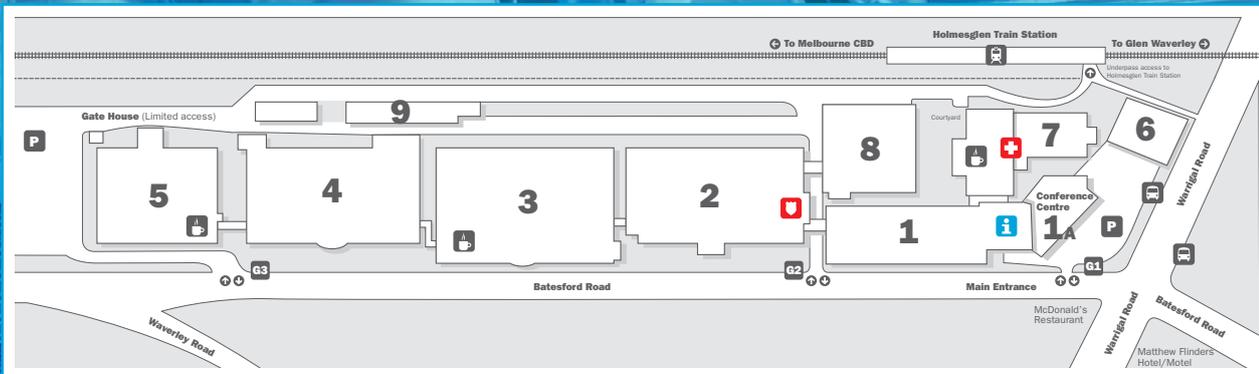
## THE AMCA AND HOLMESGLEN PARTNERSHIP

An educational partnership between the two organisations has existed for the past decade. This new initiative has allowed the partnership to flourish and evolve to address the future growth of this essential sector.

Holmesglen is Victoria's leading multi-purpose TAFE and prides itself on its ability to deliver a broad range of vocational and educational services. Holmesglen has worked with a wide range of industry partners since its establishment in 1982. Most notably our partnership with Healthscope at the Holmesglen Private Hospital is a striking example of Holmesglen's attitude and commitment to working with industry on large scale projects.

The AMCA is the pre-eminent industry association representing commercial air conditioning and mechanical services contractors.





### HVAC Centre of Excellence

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Phone: 03 9564 2760  
Web: [holmesglen.edu.au/hvac](http://holmesglen.edu.au/hvac)

#### Chadstone campus

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Chadstone,  
Victoria 3148

#### City campus

332 St Kilda Road  
Southbank,  
Victoria 3006

#### Moorabbin campus

488 South Road  
Moorabbin,  
Victoria 3189

#### Moorabbin-Bulli Street campus

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#### Waverley campus

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