

# Centre of Vocational Excellence Trades and Water

**Education** Plan





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# **Executive Summary**

The TasTAFE Centre of Vocational Excellence Trades and Water (CoVETaW) is designed to be responsive to the workforce development needs of the water and trades industry. It will be future focussed with learning and teaching at its centre and partnerships with industry a key feature. The Education Plan outlines the goals and principles of the CoVETaW and establishes the direction for vocational education and training for the next ten years and beyond.

The success of the CoVETaW implementation of the Education Plan will be achieved with the support of the Executive, a clear consistent Governance model, by building strength through cross-discipline activities and the sharing of resources.

# **Centres of Vocational Excellence**

Centers of Excellence (CoE) in Vocational Education and Training (VET) offer high quality training and support for employers and learners in defined vocational areas. They are an important component of vocational education and training as they respond to both regional and national economic priorities. Key factors that underpin the success of a CoVET include strong and enduring relationships between stakeholders, being firmly aligned to regional development goals and integration of activities. CoVETs are designed to drive innovation and improvement and have a culture that encourages experimentation and innovation.

CoVETs typically are characterised by developing and implementing contemporary and innovative teaching and training methodologies to engage learners and *result in* highly skilled graduates who are ready to join a workforce that requires highly skilled workers who are ready for the changing demands of industry. Training integrates the development of foundation skills and technical skills and promotes lifelong learning. These approaches are supported by a commitment to the continuing professional development of teachers in regard to both their vocational and teaching capability. Collaborations with Higher education, VET to Higher education training pathways and applied research are also essential characteristics of a CoVET.

# TasTAFE Centres of Excellence

TasTAFE has identified principles and criteria for its Centres of Excellence which reflect the characteristics of a CoVET as outlined above. These have provided a framework for the development of the Education Plan and will form the basis for future planning, monitoring and evaluation of the plans success.

- The CoE partners with Industry, Government, University and community
- Facilities are newly refurbished and contemporary and foster shared-use with partners
- Equipment is future focused, state of the art and cutting-edge. Industry provides ongoing support for equipment. Assets portfolios, both new and superseded, are managed
- There is a positive return on investment (both capital and operating costs)
- Applied research with industry is evident and influences curriculum development
- Industry are part of the CoE and continue to be highly engaged
- CoE outputs contribute to industry though leadership





- There is a continual drive to be innovative and future focused, making an impact on industry direction, i.e. the State or nation benefit from its outputs
- There is high demand from local, national and international students: the centre has a good reputation and students want to be trained by the CoE
- High student satisfaction levels
- High level of employer satisfaction with the graduates trained through the CoE
- Engagement with industry contributes to workforce development
- Industry workforce, employers and students promote the leading nature of the Centre of Excellence through active communication
- Industry is engaged in the co-design and co-delivery of training and help design products to meet the needs of industry and other stakeholders
- Industry provide workplace learning opportunities
- Best practice delivery in assessment e.g. other TAFEs and providers seek assessment tools
- Academic scholarship informs teaching and instruction
- Technology is incorporated into teaching and learning e.g. application of new software as appropriate
- Student satisfaction is high
- Student feedback is embedded as part of continuous improvement
- There are VET to Higher education and Higher education to VET integrated learning models
- Networks share learning, enhance reputation and demonstrate national leadership
- Public profile and communication strategies promote and endorse the reputation of the CoE.

# Centre for Vocational Excellence for Water and Trades (CoVETaW)

The TasTAFE Centre of Vocational Excellence Trades and Water (CoVETaW) will deliver excellence in vocational education and training and be agile in meeting the workforce development needs of the industry into the future.

# **Excellence in Vocational Education and Training**

The CoVETaW will operate under a Vocational Education and Training Model of Excellence. This model reflects both the criteria that must continue to be met in order to be recognised as a TasTAFE Centre of Excellence and the features of an integrated education and training system that supports excellence in vocational education and training. It is constructed around four key four key areas:

Student experience, achievement and wellbeing

Teaching and Learning

Collaboration and Partnership

Governance, Funding and Leaderhsip.





# **Excellence in Vocational Education and Training Model**





# **Governance Model**

The implementation of the CoVETaW Education Plan sits within the following governance model. This structure outlines the key stakeholders and groups who will oversee its implementation and ensure that it meets and continues to meet the educational criteria and goals of the CoETaW. Alongside this is the TasTAFE Organisational Structure which has been designed to support the organisation's priorities to be student focused, deliver high quality training services, have strong links with industry, and provide vocational education and training that is responsive to Tasmanian government priorities and industry needs.





# **Stakeholders and Partnerships**

TasTAFE has very close relationships with peak bodies across the Trades and Water industry, including; Master Plumbers Australia Tasmania (MPAT), National Electrical and Communications Association (NECA) and the Air Conditioning & Mechanical Contractors' Association (AMCA). The broader Trades and Water industry includes the Aquaculture industry, irrigation industry, civil construction pipe laying sector, local Government and water storage and infrastructure. The addition of training in Hydrogen and renewable energy will significantly increase the need for new stakeholder and partners in these emerging sectors.

Working closely and collaboratively with stakeholders and having effective partnerships will be central to the success of the CoVETaW. In addition to having key roles and representation on the Steering Committee, Industry Advisory Board and working groups, industry stakeholders will be engaged for example in, co-designing training and assessment, co-delivery of training, designing new training products and providing expert advice on new technologies being adopted by industry.

Partnerships or Third Party Arrangements will be formed with employers, universities, employment services and other education and training providers to support the delivery of training, for example in emerging and specialists areas and in rural and remote locations, to undertake applied research and in relation to access to equipment or facilities.

Partnerships and collaboration with other TasTAFE delivery teams will be utilised to deliver a broad range of training options to meet the diverse skill needs of the trades and water workforce. Training will, for example be offered by teams such as Civil Construction, Electrotechnology, Metals, Automotive, Engineering, ICT and Built Environment, Agriculture and Vocational Preparation and Study Support. TasTAFE has a Memorandum of Understanding (MOU) and a strong relationship with UTAS, and with the Engineering Faculty in particular. This forms a strong basis from which to develop and offer extensive training pathways.

## **Co-location**

The Minister has indicated that there are no barriers to industry peak bodies co-locating in the Centre. This will ensure a sense of industry ownership and commitment to the notion of an ongoing CoVE. Industry trade nights and meetings will strengthen industries commitment to support the concept and provides access to our learners and staff on a regular basis.

# **Current Industry Stakeholders / Partners**

Master Plumbers Australia-Tasmania (**MPAT**) Tasmanian Building and Construction Industry Training Board (**TBCITB**) Consumer, Building & Occupational Service (**CBOS**) - regulator Air Conditioning & Mechanical Contractors' Association (**AMCA**) TasWater Hydro Tasmania Irrigation Tasmania Aquaculture Industry Australian Antarctic Division National Electrical and Communications Association (**NECA**) Gastrain University of Tasmania (**UTAS**) Australian Maritime College (**AMC**) H2H Advantage – Hydrogen training (future partner)



# Water and Trades Training

## **Plumbing and Gas Fitting**

TasTAFE is the only public vocational education provider in Tasmania currently offering training for the plumbing and gas fitting sector. The continuation of the training of apprentices and on-going skill development of tradespeople in this sector will be a centre piece of the CoVETaW. Training and career pathways will include pre-apprentice training and preparation, trade certificate qualifications (Certificate III) and post trade qualifications (Certificate IV), Diploma and UTAS articulation.

Upon the new release of the CPC Training Package 6.0, there will be an opportunity to design training and assessment strategies for a suite of plumbing qualifications, ensuring that they align with both current and future skills development priorities. Products will be developed for full qualifications, skills sets and micro-credentialing. In addition to these, accredited and non-accredited training options will be identified and offered to those who are required to maintain their skills through on-going Continuous Professional Development (CPD).

### Air-conditioning and Refrigeration

The CoVETaW will continue training apprentices and offering skills sets for this sector. Short courses in hydrocarbon and restricted electrical licencing will also continue to be offered. Opportunities and options to extend training and skill development in this area will be explored in collaboration with the air-conditioning and refrigeration industry sector. Where applicable, the TasTAFE Eletrotechnology team will have a place in the co-deign and co-delivery of training products in this space.

### Hydrogen and Renewable Energy

The State Government launched a <u>Tasmanian Renewable Hydrogen Action Plan</u> and a <u>Renewable Energy Action</u> <u>Plan</u> in 2020. They both recognise that Tasmania is uniquely placed to develop a large-scale renewable hydrogen industry. To support this emerging and growing sector there is a need to build Tasmania's capability in areas of priority skills needed to support the Battery of the Nation initiative and more broadly the renewable energy and related sectors (including the emerging hydrogen industry). TasTAFE CoVETaW will be well placed to provide targeted training to support the development of the Hydrogen and renewable energies sector. A partnership with a training provider(s) with expertise and capability in Hydrogen training will be sought to deliver training and/or co-deliver training and to assist in building the skills and the capability of TasTAFE teachers.

There are a number of training packages and products on TasTAFE's scope of registration to support some training in this area (refer to List of Products). In collaboration with the industry other products will be identified, added to scope where applicable, and new products designed. The emerging Hydrogen industry will provide opportunities to work collaboratively with other TasTAFE teams, in particular Automotive and Metals.

## Water Operations

The water industry includes water engineering, operations, water and wastewater plant construction, equipment supply and specialist water treatment chemicals, among others.

Large employers such as TasWater and Hydro Tasmania have a number of apprentices undertaking WP30219 Certificate III in Water Operations through Registered Training Organisations based outside of Tasmania. TasTAFE will extend its scope of registration to include qualifications for this sector. The CoVETaW will work with TasWater and the Hydro Tasmania to develop a training strategy for this cohort of apprentices and will work with the broader industry to develop pathways to higher qualifications.



### Waste Water Management

There are opportunities for the CoVETaW to offer training in this area, not just to meet the training needs of Tasmanians but also extending out to South Eastern Australia. Tasmania's building and consumer regulator Consumer, Building and Occupational Services (CBOS) have identified a need for training in waste water management to be customised so that workers have skill sets applicable to managing waste water systems in the climactic conditions that are specific to this region. There is currently no training provider delivering such training in South Eastern Australia. The CoVETaW is well placed to work with the industry to offer such training.

### **Polymer Processing**

The Tasmania Aquaculture and Irrigation industries are rapidly expanding and their reliance on polymer infrastructure and water quality management offer unique opportunities for TasTAFE to expand its training in these sectors. The CoVETaW will continue to deliver the Certificate III in Polymer Process Manufacturing to ensure that skills and knowledge acquired through this qualification will have application within areas such as; aquaculture, water and irrigation. Examples may include production of components for fish pens, water tanks, and associated water delivery and wastewater systems. This will provide opportunities to work with the Agriculture team to develop targeted training.

### **Pipe-laying**

Utilising the expertise of the Civil Construction team the CoVETaW will be able to assist workers employed by TasWater, Hydro and Irrigation Tasmania to develop pipe laying skills for application in the context of building irrigation and drainage systems, constructing dams and developing sub-divisions. Such training, offered for example through short courses, will provide opportunities for workers to build upon and extend their repertoire of skills.

## Medical Gas Pipeline Installation

This course is designed for existing registered and/or licensed plumbers wanting or requiring skills for safe and compliant installation of medical gas systems. As accurate and safe installation of these pipelines is critical to patient safety and to prevent life threatening situations this training has a licenced outcome. Currently training in this area is not available in Tasmania, plumbers must travel to the mainland. The CoVETaW will develop a training product to deliver skills training in this area.

## Other

The CoVETaW will aim to offer an extensive suite of training products that either address a specialists skills needs and CPD requirements and/or which may be undertaken by workers across the trades and water industry. Characterised mostly by skill sets, short courses and micro-credentialing the list of products will be reviewed regularly in collaboration with stakeholders to ensure that the CoVETaW continues to offer relevant and responsive skills training.

A list of training products that will be deliver by the CoVETaW is available in Appendix 2 - List of Products.



# Workforce Needs

Consultation with industry, evaluation of the skills needs within the sector, analysis of data and workforce development reports and the work of the CoVETaW for Trades and Water steering committee, have identified a number of key considerations that must be taken into account when designing and delivering training to meet the workforce skill development needs of the trades and water industry into the future.

**Technology**: New technology in the trades and water industry is a major trend affecting the workforce. The digitalisation of operations to improve services delivered corresponds with a need to increase the digital skills of the workforce. The incorporation of drone technology, system operations, and other digital innovations for example, has altered the methods used to oversee water assets; thereby having an impact on risk management policies. The incorporation of skills training for these new technologies will be a key feature of training offered by the CoVETaW.

**Automation**: The rapid onset of automation in the trades and water industry is anticipated to have a significant impact on the industry and skilling requirements of the current and future workforce. These new systems and remote operations require highly specialised skills to monitor, diagnose, and interpret large volumes of data to determine faults and identify areas for investigation. Addressing this emerging skills deficit within the VET skills framework is considered a critical industry priority. This will have a priority focus both when developing curriculum and delivering training.

**Skill sets and micro-credentials**: The water sector is moving towards micro learning to improve knowledge gaps. A common theme from stakeholders is the need for shorter training and skills sets that can offer a worker the opportunity to move between different sectors of the water industry or to other worksites that use different technology to perform the same skill. Skills sets, short courses and in-time short courses will be offered across all AQF levels with a specific focus on offering high level skill sets. These will include accredited and non-accredited products and those which are not currently represented in existing skill set or qualification.

## Higher level vocational education qualifications

Diploma and Advanced Diploma qualifications will be offered across the following areas: Renewable Energy Engineering, Renewable Energy Engineering Technology, Water Industry Operations and Plumbing Services. Both the design and delivery of higher level products/qualifications will be undertaken in partnership with UTAS and CoVETaW working groups.

## Work readiness

The Water and Trades industry needs workers who are work ready, with literacy skills, numeracy skills and digital literacy and technology skills to meet the demands of the workplace. These needs are reflected in statistics that indicate:

- 48% of Tasmanians do not the literacy and numeracy skills the need for life in a technologically rich world and are still struggling with basic reading and writing, and more have poor numeracy and digital skills.
- Many Tasmanians cannot find a job because they do not have the right skills or they are working in jobs that do not match their talents.
- At the same time, many employers cannot find people with the right skills to fill their vacancies, and too few people have the preparation, mind-sets and competences to set up their own businesses or look for new opportunities.





In response to such needs the CoVETaW will identify and support the literacy and numeracy needs of learners. This will include offering targeted skills training in workplace maths and trade maths, basic reading and writing for work, digital technology and computer skills. Foundation skills, Work-readiness skills and LLN skills will be embedded in all training via learning and teaching strategies that build learning, communication, teamwork and problem solving skills and promote initiative and enterprise, planning and organising and self-management.

The Water and Trades industry has expectations that training service providers will build on and enhance education outcomes and consistently reflect best-practice in curriculum development, delivery of training and assessment. It needs training to be tailored for learners and to meet individual/industry needs. It wants training providers to support students through key transition points in their training and career development and allow opportunities for students to specialise. Most of all it needs access to a broad range of training products and pathways that support the industry into the future. The teachers delivering training and assessment within the CoVETaW will be equipped with skills in curriculum development, best practice in training and assessment and supporting learners with varying abilities needs and goals. This is supported by a comprehensive and strong Education Capability Framework.

To fulfil the goals and vision of the TasTAFE Centre of Vocational Excellence Trades and Water (CoVETaW) will deliver excellence in vocational education and training and be agile in meeting the workforce development needs of the industry into the future, the following implementation strategies will be put into place.

## Create, support and maintain an internal culture of excellence for all

Existing areas of excellence will be identified as the basis from which to build a culture of excellence.

Collaborative and inclusive approaches will be used to develop a sense of belonging, ownership and value among all staff. Staff will be included in activities such as:

- planning
- design and development
- problem solving
- monitoring and measuring success.

Meetings will be held for all CoVETaW staff prior to the CoVETaW opening with the aim of:

- developing a shared understanding of excellence in the context of the CoVETaW (training and education, learning environment, relationships with stakeholders, products).
- developing a shared understanding of its vision and the criteria by which achievement of the vision will be measured.
- defining expectations, roles and responsibilities of those working toward excellence.
- defining the traits of workers/staff that reflect a commitment to a culture of excellence.

An 'Induction to the CoVETaW' will be designed and all new staff joining the CoVETaW will patriciate in this to ensure a shared understanding of excellence in the context of the CoVETaW.

#### Measures

Participation of all staff in the CoVETaW Induction.





Staff have a sense of pride in the quality of the work undertaken, the products delivered and the achievements of the CoVE. This is expressed in how they talk about the CoVETaW and active engagement in CoVETaW activities.

### Increase student participation and engagement

The student experience will be at the centre of aspects of work undertaken by the CoVETaW, including for example; marketing, enrolment, support and progression, design and delivery of training and assessment.

To increase participation and engagement in learning the CoVETaW will deliver training that is relevant, meets needs, help learners achieve their goals, recognises their life experiences and knowledge, and is responsive, inclusive and flexible.

Quality training will be delivered across the state and South Eastern Australia through a range of contemporary and innovative delivery methods.

The CoVETaW will work with the Industry Advisory Board and the TBCITB to design and develop a Rural and Remote Training Hub that will support learners based in remote and rural locations.

Products will be delivered that meet the specific workforce skill needs of rural and remote workers, businesses and communities e.g. farm plumbing (sludge ponds, dams and irrigation, drainage (milking sheds), hygienic plumbing, bores, waste water treatment and targeted courses to meet the needs of communities such as King and Flinders Islands.

There will be opportunities for tradespeople supervising apprentices to build on the job coaching and training skills. What and how this may be achieved will be identified in consultation with industry.

Measures

Student enrolments and completions. Student and employer satisfaction levels.

#### Increase participation and engagement of rural and remote students

The design of training and assessment will be based on delivery models, curriculum and andragogy that enhance participation and engagement of all learners, including those based in rural and remote locations, and those undertaking online and distance learning.

Delivery of face to face training at onsite locations in rural and remote centres will be built into the CoVETaW suite of programs. Sites may include TAFE campuses, Trade Training Centres (TTC), schools and workplaces. Training activities will be specific and offered under the CoVETaW brand.

Mobile training units will be available for onsite training and assessment of specific skills training in rural and remote locations.

Measure

Increase in engagement of rural and remote learners in training.

## Inclusion and Student Support



Processes that enable early identification of students needs will be embedded into all training. This will include using recognised tools to identify LLN abilities and needs (BKSB) and identifying learners who are risk of disengagement. This information will be used to develop and put in place supports for at risk learners.

An industry specific tradesman with LLN teaching skills will be imbedded in the team to support those with low LLN skills. This will ensure that LLN support aligns with industry specific LLN requirements and workforce needs.

A range of student supports and services will be available through the CoVETaW both directly and remotely. These will include; access to all TasTAFE support services, literacy and numeracy support.

All students undertaking a qualification will be supported by a Portfolio Manager (an assigned teacher), who will monitor their participation and progress and be a point of contact and support should issues arise.

CoVETaW teachers will be supported and encouraged to develop or further develop skills for designing and delivering inclusive and engaging training and for supporting students at risk of disengagement.

Student representation and feedback on matters relating to various aspects the CoVETaW and its activities will be sought. This could include for example; a CoVETaW student reference group and the student cohort represented on an advisory group.

Participation of students from Aboriginal and Torres Strait Islands (ATSI) and diverse backgrounds will be encouraged to enrol through marketing strategies. Engagement of people from diverse groups will be strengthened through inclusive teaching practices, use of accessible technologies and a learning environment that is accessible to all.

Training and career pathways in the trades and water industry will be promoted by the CoVETaW to women and diverse groups.

The diversity of products offered by the CoVETaW will allow learners the opportunity to enrol in training that aligns with their learning/academic skill level, diverse interests and work and life experiences.

All students will have regular contact with teachers, regardless of the mode of delivery.

The Student Course Participation and Progress Policy and Procedure will guide the approach teachers and teams take in order to support students to successfully achieve in their chosen course, the early detection of any barriers to study and the implementation of supports and intervention actions.

Where Learning Management System (LMS) systems are utilised for delivery of online and distance learning. They will be developed with a strong student engagement focus with regular touch points for student – teacher contact.

Workplace visits will support engagement in learning. Guidelines will be reviewed to ensure consistent approaches e.g. when and how often visits occur, what teachers do on workplace visits.

#### Measures

Student enrolments and completions. Student and employer satisfaction levels.

## Build teacher capability to support innovation and excellence in learning:

#### **Vocational Education and Training**

Pathways for teaching staff to gain, maintain and expand their knowledge and skills vocational training and assessments will be developed under the TasTAFE Educator Capability Framework. (Appendix 3 – Educator Capability Framework).



The Educator Capability Framework consists of six capability domains; Student Experience, Design & Facilitation, Assessment, Digital Literacy, Industry & Community Collaboration and Leadership & Learning Pathways. The framework also identifies three levels of teaching practice; Beginner, Proficient and Advanced. This will be used to assist in identifying development needs and goals and to benchmark teaching, learning and assessment practices.

The CoVETaW will aim to have a maximum number of teachers practicing at an advanced facilitation and assessment level.

Teaching staff will have access to whole of organisation Educator Development activities. There will also be an ongoing and targeted development program specifically for the Centre of Vocational Excellence teachers.

Each teacher will have an Individual Educator Development Plan with goals and activities targeted at building on their existing VET knowledge and skills and level of practice.

All Beginner teachers, defined as those new to vocational training and/or have only recently acquired a Certificate IV in TAE, will participate in a Teacher Induction and will be supported by a mentor for the first year of teaching. Mentors may be from across TasTAFE industry areas to promote variety and exposure to a healthy range of teaching and assessing methodologies and practices.

A broad range of capability development activities will be supported, these will include learning on the job (e.g. co-teaching within or across areas), part or full qualifications, skill sets, micro-credentialing or other skill-specific training, non-accredited training (e.g. VDC, Velg) Communities of Practice, individual or group reflective practice activities and project work.

A training program will be developed specifically to support teachers develop or further develop their skills and knowledge for the design and delivery of innovative learning. This will include for example; skills for design and delivery of learning in the digital or virtual environment, problem or project based learning, strengths based learning, collaborative learning, flipped learning, experiential learning and game based learning.

Technology is transforming education changing how, when and where students learn, and empowering them at every stage of their learning journey. Teachers will be given the opportunity to acquire the skills and knowledge required to develop and deliver programs that utilise new technologies in teaching and learning, for example virtual modelling, tablets, drones, pro-wise boards and learning management systems.

The program will also include opportunities for teachers to develop, or further develop skills to support learners in areas such as: digital literacy, LLN, learning difficulties or disabilities and those at risk of disengagement.

Higher education qualifications will be encouraged as the base level qualification for teaching at Certificate IV and above. These would include for example: Diploma of Training and Education, Diploma of Vocational Education and Training, Bachelor of Adult and Vocational Education, Diploma or higher level qualification in adult education.

The following frameworks will be utilised to support educator capability of teaching staff; MyPlan, Learning Partnership Program, Teacher Competency and Currency Record (TCCR), Teaching Under Supervision Agreement and mentoring agreements.

#### Measures

Participation of teachers in educator development activities - recorded on TCCRs (VET currency page). The number of new teachers with mentors in their first year.

Participation of teachers in CoVETaW specific educator training activities.

Number of teachers with a TAE Diploma or above.

Number of ASTIs and teachers with a Higher Education qualification with and adult learning focus or benchmarked to be operating at an Advanced level.





## Vocational

Under the Return to Industry program (RTI) teachers will be given opportunities to ensure currency and further develop their vocational skills and knowledge. RTI Agreements will aim to address the goals and needs of both teachers and the CoVETaW.

Teaching staff will be encouraged to participate in a range of activities that provide opportunities for them to maintain currency and build on their vocational skills and knowledge. These may include for example: working collaborative with industry when planning and designing training and assessment programs and resources, conducting validation activities with industry involvement, membership of an industry peak body and/or association, attending industry/enterprise meetings, expos and conferences, participating in industry - related tours.

Staff who undertake Continuing Professional Develop (CPD) in order to meet regulatory requirements will have access to a range of industry professional develop activities.

Recognised industry-related skill-sets or qualifications that may be undertaken where skill gaps exist, for example in relation to new products being offered by the CoVETaW.

The following frameworks will be utilised to support educator capability of teaching staff; MyPlan, Return to Industry, TCCR, CPD (Licencing requirements).

#### Measures

Number of teachers completing a RTI. Participation of teachers in CPD activities offered by industry. Teacher participation in Vocational training e.g. CPD - TCCR (currency page).

## A quality cycle for monitoring and measuring success and continuous improvement

The TasTAFE Quality Management System will form the framework for the CoVETaW. It includes:

- Support and stakeholder feedback systems.
- Scope management systems which include the design and development of products.
- Quality Assessment systems, incorporating validation cycles.
- Administrative compliance.
- Student feedback.
- Risk management.
- Internal and external audit processes.
- Team quality profiling.
- Teaching and assessment compliance.
- Continuous improvement planning.

The TasTAFE Quality and Academic Services unit will support the above systems and processes.

The governance model for the CoVETaW provides a framework for reporting against quality criteria at various times and levels, including to the CoVETaW Steering Committee, CoVETaW Industry advisory Board, CoVE Working groups, TasTAFE Academic Committee, Industry Reference Groups.

The CoVETaW Vocational Excellence Model provides a framework for monitoring and evaluating the CoVETaW Education Plan and its implementation and outcomes. All quality monitoring will be undertaken within the context of the areas noted in this model.

A CoVETaW Quality Cycle will be developed and will include points at which monitoring and evaluation activities will occur, what will be measured, what evidence will be gathered for this purpose. The Quality Cycle





process will encourage the identification of areas for improvement. A CoVETaW Education Continuous Improvement Action Plan will ensure that these are recorded, actioned and monitored.

#### Measure

Positive Team Quality Profiling reports.

### Work collaboratively with stakeholders and partners

The identification, design and development of products will occur in collaboration with industry, stakeholders, and partners, including UTAS.

Stakeholders represented on the Industry Advisory Board will have a role in identifying opportunities for future training. The Industry Reference Groups will provide targeted advice on the training needs for specific sectors within the industry.

Stakeholders and partners will be invited to participate in the co-design of training products and resources. This may occur in a number of ways and at different stages of the process.

Subject matter experts from industry will be invited to participate in the co-delivery of training activities where possible and practical, for example to demonstrate the use of new machinery and equipment being use in the workplace.

CoVETaW staff will have representation in industry based activities such as; research projects being undertaken by industry, membership of industry peak bodies and associations, attending industry/enterprise meetings.

#### Measures

Industry representation on working groups, planning and validation meetings. Industry actively engaged in co-design and co-delivery. Number of product offered in partnership with UTAS. CoVETaW staff representation on peak bodies and associations.

#### Contemporary approaches to curriculum

All product design will be informed by contemporary approaches to adult learning and vocational learning and teaching. This will be supported by an educator capability program that ensures teaching staff have an understanding of the current theories and best practices relating to andragogy and curriculum development.

When products are being designed there will be a focus on identifying teaching and learning methodologies that are fit for purpose, link learning with the real world, accommodate varied learning styles, support engagement and participation and match advances in digital technology in teaching and learning.

In the CoVETaW the following evidence-based teaching and learning methods will be considered when designing face to face or online learning:

- applied learning in simulated and/or real work environments
- collaborative learning
- project based learning





- problem based learning
- applied research
- explicit teaching
- enquiry based learning
- virtual learning
- games based learning
- communities of practice
- reflective practice

#### Measure

Participation of CoVETaW teachers in training related to adult learning curriculum design and teaching and learning theory and methodologies.

Training completion rates.

High student and employer satisfaction levels.

### Provide opportunities and training pathways for learners

The CoVETaW will offer a broad range of products to support training pathways and life-long learning. (Appendix 2 - Product list). These include non-accredited training and skill sets that could lead to, Certificate II, III or IV qualification and Diploma and Advanced Diplomas as a pathway to university qualifications.

Measure

Repeat enrolments.

## Applied Research

In partnership with stakeholders, UTAS and other universities opportunities will be sought to undertake applied research that is grounded in real industry contexts, problems and challenges. Opportunities might focus for example on emerging industries and technologies such as relate to hydrogen and renewable energies.

Applied research will be used to improve teaching and learning practices. This will include for example, teachers undertaking applied research to inform teaching and learning and/or applying initiatives in teaching and learning that have been verified as effective through research.

Opportunities to engage learners in applied research projects or activities as part of their learning experience will be considered and actioned where possible.

#### Measure

Applied research activities undertaken in relation to VET. Industry based applied research activities that staff and/or students are engaged in. Number of applied research activities undertaken in partnership with UTAS and industry.

## Spaces for contemporary learning

Learning spaces will be designed to be fit for purpose, enable contemporary and innovative training and be flexible enough to support changing needs.



Contemporary learning spaces will be designed to create spaces that empower learners, to engage in various types of learning and respond to a range of demands, such as being able to work collaboratively, be creative and critical learners and be adaptive and resilient. Learning spaces will allow for multiple learning modes (e.g. face to face, online), support collaboration and teamwork, enable project and problem based learning and support development of skills for using new technologies and equipment.

#### Measure

Student satisfaction and engagement with the learning spaces.

### Create a positive environment for learning

A positive environment will be created and maintained by ensuring that student experience is at the centre of all activities. The CoVETaW will do this by:

Designing and delivering training that is both engaging and relevant to students.

Encourage student feedback and suggestions are actively sought and acted upon. Promote a safe environment through preventative strategies, discussing issues when they arise and encouraging students to ask for help.

Providing safe and engaging learning spaces where students feel comfortable and free to learn, along with spaces where students can connect, interact and relax when not engaged in learning activities.

#### Measures

Student satisfaction rates. Increase in completion rates against benchmarks across TasTAFE.

## Promote and market products

A public profile and communication strategy will be developed that will incorporate an integrated Centre of Trades and Water Centre of Excellence Communication and Stakeholder Engagement Strategy. Key stakeholders and the project steering committee, Tasmanian Building and Construction Industry Training Board (TBICITB), Master Plumbers Association, the Air-conditioning and Mechanical Contractors Association (ACMA) and TasWater to publicly endorse TasTAFE's Trades and Water Centre of Excellence will be engaged to endorsed the reputation of the CoVETaW via media release/s, case study/quotes, or video grabs that can be made available on the public website.

The leading nature of the CoVETaW will be promulgated to members of the workforce, employers and students through:

- quarterly Eletronic Direct Mail (EDM) schedule providing updates to industry on student progress, industry innovation, and engagement with apprentices and their employers;
- increased Social Media presence on all social media sites increase stories on CoVETaW;
- Media Releases providing details on the CoVETaW initiatives, good news and progress to increase public interest;



- a dedicated Information Flyer promoting the CoVETaW that can be handed out to future employers, stakeholders and industry.

Existing networks will be built upon and utlitsed to share learning, enhance reputation and demonstrate national leadership through:

- Stakeholder Event: a yearly 'thank you' to stakeholders held onsite, where students demonstrate learnings, an update from CEO and Director Education Industry Alignment is given and there is opportunity to engage in networking;
- Forums: 2 held per year to engage with stakeholders, employers and industry on CoVETaW initiatives and progress;
- Alumni videos: develop digital content of past students who have succeeded in the area of trades and water for sharing online and via social media channels;
- TasTAFE Website: develop a section on the TasTAFE Employers page on the website around CoVETaW
   latest news on Trades and Water.

### Measures

Number of new and repeat enquires. Positive media stories.

## Funding

Industry and Government funding will continue to be sought to support sustainability in designing and delivering innovative training and to ensure access to up to date equipment and resources.

## Measure

Funding levels are maintained, new grants and in-kind donations.

# Supporting the Implementation Strategy

To support the implementation of the implementation strategy the following will be developed:

- Trades and Water Centre of Excellence Communication and Stakeholder Engagement Strategy
- Guidelines for designing and developing products
- Educator Capability Plan for CoVEaW staff
- Matrix of products
- Quality cycle checklist
- Continuous Improvement Plan
- Industry Reference Group terms of reference
- Industry Advisory Board terms of reference
- CoVETaW student Reference Group





- Communities of Practice
- Strategy for identifying opportunities for International students.

# Conclusion

The Centre of Vocational Excellence for Trades and Water will provide TasTAFE with a unique opportunity to significantly increase training activity in the sector and to attract new clients to undertake workforce development at the Centre. It will also provide an opportunity to partner with industry, other training providers and the University of Tasmania to provide effective pathways for lifelong learning.

Industry involvement will be essential in maintaining the ongoing viability of the Centre of Vocational Excellence Trades and Water in relation to sector utilisation of the centre and ensuring technologies and equipment are up to date and cutting edge.

Innovative products and the capability of staff will also be a crucial factors in ensuring the success of the centre.

The Education Plan outlines the strategies that will ensure that TasTAFE creates a digitally literate, resilient and effective industry workforce for the future, to sustain the sector and the broader Tasmanian economy.

# Appendices

### I. Employment Snapshot and Growth Trends

Review of data from the Australian Industry and Skills Committee Industry Reports reflects a unique opportunity for TasTAFE to grow our market share in the southern States of Australia and provides the impetus for the development of the Centre of Excellence for Trades and Water located at the Clarence Campus.

## Water Industry

The Water Supply, Sewerage and Drainage Services industry sector employment level reached a peak of 44,200 during 2012 before declining until 2016. The employment level increased the following three years to 37,000 in 2019 and is projected to increase to around 38,200 by the year 2024.

Nationally there were 1,880 training product enrolments during 2018 and more than 650 completions. Enrolments have steadily decreased since 2015 with completions also declining between 2015 and 2017 before slightly increasing in 2018. Subject only enrolments in this sector have almost doubled the level seen in 2015 and 2017.

The majority of enrolments during 2018 were in certificate III level qualifications. Qualifications were in the area of Water Industry Operations and Water Industry Treatment. The intended occupation for most of the enrolments was Waste Water or Water Plant Operator.







# Employment level and projection

2000 to 2019 employment level and 2024 employment projection for the Water Supply, Sewerage

## **Plumbing and Refrigeration Industry**

Employment in the Building Installation Services sector rose steadily between 2000 and 2019, with a slight trough in 2014. Further growth is projected between 2019 and 2024, with the employment level predicted to reach around 274,000 in 2024. Employment levels are also expected to rise for a number of VET-related occupations represented in this sector. The most common VET-related occupation in the Building Installation Services sector, Electrician, is expected to grow by 5% between 2019 and 2024. Other VET-related occupations including Plumbers, and Air Conditioning and Refrigeration Mechanics are also projected to experience employment growth over the same period (10% and 4% respectively).

Nationally enrolments in Building Installation Services-related qualifications have increased overall between 2015 and 2018 from 22,500 to just over 23,640 in 2018. Program completions declined overall in the same period from 4,250 in 2015 to around 3,880 in 2018. The majority of enrolments in 2018 were in qualifications at the certificate III level (over 18,970) and certificate IV level (over 4,430). In 2018, most enrolments in Building Installation Services were in the area of Plumbing and Hydraulic Services Design (90%). The most common intended occupation for training in this sector is Plumber (General) (93%).

During 2018, most of the training in the Building Installation Services-related qualifications was delivered by TAFE institutes (76%), with private training providers delivering 13% and universities the remaining 11%. Over 93% of subjects for Building Structure Services-related qualifications were Commonwealth and state funded in 2018 and most of the remainder were funded by domestic fee for service arrangements (6%).





# Employment level and projection

2000 to 2019 employment level and 2024 employment projection for Building Installation Services



Plumbing Services provides general plumbing or drainage services, including installing and repairing water supply, sewer lines, septic tanks, drainage and gas systems, however it does not construct large-scale sewerage or storm water drainage systems. The Plumbing sector alone generates over \$14 billion in revenue and is expected to have an annual growth rate of 2% in the next five years.

The employment levels in the Aquaculture, Fishing and Seafood Processing industries fluctuated between 2000 and 2019. In 2019 there were around 5,400 workers employed in the Aquaculture industry nationally, which is projected to decrease to 5,200 by 2024. There were around 6,900 workers employed in the Fishing industry in 2019, which is projected to decrease to 6,000 by 2024. There were around 1,400 workers in the Seafood Processing industry in 2019, which is projected to increase to 2,100 by 2024.

In the Aquaculture industry, the occupation with the largest proportion of employment is Aquaculture Farmers (33%) followed by Aquaculture Workers (11%). A small decrease in employment is projected for Aquaculture Farmers (1%), Aquaculture Workers (2%) and Agricultural Technicians (5%) by 2024.

National enrolments in Aquaculture and Wild Catch-related qualifications have slowly declined each year between 2015 and 2018. Program enrolments peaked in 2015 at around 1,420 and fell to a low of about 1,070 in 2018. Program completions rose slightly each year between 2015 and 2017, and then declined between 2017 and 2018. Program completions peaked in 2017 at almost 600 and fell to less than 360 in 2018. Subject-only enrolments declined between 2015 and 2016 and then rose between 2016 and 2018.

Certificate III level qualifications were the most common in 2018 with more than 520 enrolments, followed by certificate II level qualifications with just under 430 enrolments. There were just less than 50 enrolments in certificate IV level qualifications. Almost three-quarters of enrolments were in aquaculture qualifications. The majority of students have an intended occupation of Aquaculture Worker.



Private training providers delivered approximately half of all national training and TAFE institutions delivered 43%. Approximately 81% of subjects were Commonwealth and state funded. Tasmania has the highest proportion of student enrolments with 30% of national training undertaken.

# Employment level and projection

2000 to 2019 employment level and 2024 employment projection for the Aquaculture and Fishing industries



#### **Industry Insights on Skills Needs**

According to the Construction, Plumbing and Services IRC's 2019 Skills Forecast the top generic skills required for the Building Installation Services sector are:

- Language, Literacy and Numeracy (LLN)
- Learning agility / Information literacy / Intellectual autonomy and self management
- Design mindset / Thinking critically / System thinking / Solving problems
- Communication / Virtual collaboration / Social intelligence
- Technology.

The Construction, Plumbing and Services IRC's 2019 Skills Forecast also reports employers have difficulty recruiting for plumbers.

The top generic skills listed in the Water IRC's 2019 Skills Forecast in order of importance to the industry are:





- Technology
- Language, literacy and numeracy (LLN)
- Managerial/Leadership
- Learning agility/Information literacy/Intellectual autonomy and self-management
- Science, technology, engineering, mathematics (STEM) skills.





# 2. List of Products

Title	Notes
Plumbing and Gas Fitting	
22304VIC Certificate II in Plumbing (Pre- Apprenticeship) *current	Current Victorian state accredited course. No equivalent to be offered in new CPC offerings below. • Proposed ongoing Current accreditation expires 31st Dec 2020.
CPC50620 Diploma of Hydraulic Services Design	New TP release. No current equivalent on scope.
*proposed	No staff with equivalent qual. No Diploma currently delivered anywhere in Australia. Process required to commence upskill training of current CIV staff and training of external SME's as soon as possible.
CPC40920 Certificate IV in Plumbing and Services *to replace current	New TP release. To replace CPC40912 late '20 or early '21. COT option for employers but most students self-enrolled.
	2 Stream Options:
	<ul> <li>Operations – general plumbers (must hold CIII Plumb)</li> <li>Hydraulic Services - Designers</li> <li>Staff hold vocational competency but do not hold current qualification. Require staff upgrade process. Deemed NOT Equivalent.</li> </ul>
CPC32420 Certificate III in Plumbing *to replace current	New TP release. To replace CPC32413 late '20 or early '21. Apprenticeship pathway. Entirely NEW structure unrelated to current models! Requires Licensing Regulator engagement and significant pre-implementation planning. Deemed NOT Equivalent.
CPC32513 Certificate III in Plumbing (Mechanical Services) *current - to be phased out	<ul> <li>Current Apprenticeship pathway. No equivalent in new TP. Mechanical Services to be an internal Model option within CPC32420 above.</li> <li>Entirely NEW structure unrelated to current model! Requires Licensing Regulator engagement and significant pre-implementation planning. Deemed NOT Equivalent.</li> </ul>
CPC32620 Certificate III in Roof Plumbing	New TP release. To replace CPC32612 late '20
*to replace current	or early '21. Apprenticeship pathway. New Units and possible integration of CIV Sizing





	unit. Requires Licensing Regulator engagement. Deemed Equivalent.
CPC32720 Certificate III in Gas Fitting *to replace current	New TP release. To replace CPC32713 late '20 or early '21. Apprenticeship pathway. New Units and content changes to current units. Requires Licensing Regulator engagement. Deemed Equivalent.
Air Conditioning – Refrigeration	
UEE32211 Certificate III in Air Conditioning – Refrigeration (Apprentice)	
*current	
UEE20111 Certificate II in Split System Air conditioning	
*current	
Hydrocarbon Skill Set	UEENEEJ174A
*current	UEENEEJ175A
UEENEE150A Develop enter and verify discrete control programs for programmable controllers	<ul> <li>Previously known as INNOTECH</li> </ul>
*proposed	
REL – see below	
Skill Sets – informal to be submitted to Skills Tas	
Plumbing Surveyor's Plumbing Design Skill Set *proposed	<ul> <li>Has been proposed by Licensing Regulator (CBOS)</li> <li>Selected units from Diploma and CIV Plumbing to meet minimum knowledge requirements of plumbing surveyors. Units may include:         <ul> <li>CPCPPS5015 Inspect plumbing and drainage systems</li> <li>CPCCBC4012 Read and interpret plans and spec's</li> <li>CPCPDR4011 Design and size sanitary drainage systems</li> <li>CPCPDR4012 Design and size stormwater drainage systems</li> <li>CPCPDR4011 Design and size sanitary plumbing systems</li> <li>CPCPDR4011 Design and size heated and cold water services and systems</li> <li>CPCPCM4013 Produce 2D architectural drawings using design software</li> <li>CPCPPS5033 Design vacuum sewerage systems</li> <li>CPCPMS4011 Design and size and layout heating and cooling systems</li> <li>CPCPM54011 Design and size nof drainage</li> </ul> </li> </ul>





	<ul> <li>CPCPWT4022 Commission and maintain</li> </ul>
	<ul> <li>CPCPWT4022 Commission and maintain backflow prevention devices</li> <li>CPCPWT4023 Test commission and maintain hot and heated water temperature</li> </ul>
	control devices
	Unit selection subject to CBOS and     Plumbing Surveyor's Association input
Building Designer's Plumbing Design Skill Set	Has been proposed by Licensing
*proposed	Regulator (CBOS)
FF	<ul> <li>Selected units from CIV Plumbing to</li> </ul>
	meet minimum knowledge
	requirements of Building
	Designers/Building
	Surveyors/Architects. Units may
	include:
	<ul> <li>CPCPDR4011 Design and size sanitary</li> </ul>
	<ul> <li>OCPCPDR4012 Design and size stormwater</li> </ul>
	drainage systems
	<ul> <li>CPCPSN4011 Design and size sanitary</li> </ul>
	<ul> <li>c CPCPWT4011 Design and size heated and</li> </ul>
	cold water services and systems
	<ul> <li>CPCPRF4011 Design and size roof drainage</li> </ul>
	<ul> <li>Unit selection subject to CBOS and</li> </ul>
	Building Designer industry input
Environmental Health Officer's (EHO) Plumbing	<ul> <li>Selected units from CIV Plumbing to</li> </ul>
Design Skill Set	Selected units if off CTV Fluitbing to
	requirements of Local Authority EHO's
*proposed	enabling assessment of Domestic
	Wastewater Treatment System and
	stormwater disposal requirements
	l Inits may include:
	<ul> <li>CPCPDR4011 Design and size sanitary</li> </ul>
	drainage systems
	<ul> <li>CPCPDR4012 Design and size stormwater drainage systems</li> </ul>
	<ul> <li>CPCPDR4013 Design and size domestic</li> </ul>
	treatment plant disposal systems
	• Unit selection subject to CROS LITAS
	and Local Authority EHO input
CAD for Plumbing Designers Skill Set	It is proposed that 2D CAD
	(CPCPCM4013 Produce 2-D
*proposed and currently under development	architectural drawings using design
	software) be offered during
	apprenticeship in preparation for CIV -
	Licensing Regulator support to be
	sought
	<ul> <li>Once 2D CAD completed students</li> </ul>
	would move onto 3D CAD during CIV
	Proposed collaboration with Built
	Environment Team





Onsite Domestic Wastewater System Maintenance Skill Set *proposed Irrigator's Polymer Pipe Skill Set *proposed	<ul> <li>Has been proposed by Licensing Regulator (CBOS)</li> <li>Awaiting outcome of new CPC Training package:         <ul> <li>May require Non-Accredited course development to meet CBOS requirements</li> </ul> </li> <li>ACH, PMB and CPC units</li> <li>Subject to Irrigation industry input</li> <li>PMB welding units to form core of skill set (see below)</li> </ul>
Marine craft Gas Fitting Skill Set *current	<ul> <li>Required under current Licensing Determinations</li> <li>Requires formalisation as Skill Set         <ul> <li>MSAPMPER200C - Work in accordance with an issued permit</li> <li>MSAMPER202A - Observe permit work</li> <li>MSAMPER205C - Enter confined space</li> <li>MSAPMOHS217A - Gas test atmospheres</li> <li>MSMWHS216 - Operate breathing apparatus;</li> <li>RIIRIS201B - Conduct local risk control from MSA20107 - Certificate II in Process Manufacturing within Training Package MSA07; and</li> <li>MSAPMPPER300C from MSA30107 - Certificate III in Process Manufacturing within Training Package MSA07</li> </ul> </li> </ul>
Hydrogen and renewable energies (proposed/potential)	5
UEE32011- Certificate III in Renewable Energy - ELV	
UEE41911- Certificate IV in Electrical - Renewable Energy	
UEE41611- Certificate IV in Renewable Energy	
UEE50711 Diploma of Renewal Energy Engineering	
UEE62011 Advanced Diploma of Engineering Technology – Renewable energy UEE60911	





Advanced Diploma of Renewable Energy Engineering	
52764WA - Graduate Certificate in Renewable Energy Technologies	
GRE02- Small Hydro and Other Renewable Energy Technologies Small Hydro and Other Renewable Energy Technologies	
GRE03- Solar-Based Systems Solar-Based Systems	
GRE04- Wind Power Generation Wind Power Generation	
Water Industry – all *proposed	
NWP50118 Diploma of Water Industry Operations	<ul> <li>Subject to TasWater advice         <ul> <li>No current scope</li> </ul> </li> </ul>
NWP40515 Certificate IV in Water Industry Operations	<ul> <li>Subject to TasWater advice         <ul> <li>No current scope</li> </ul> </li> </ul>
NWP40615 Certificate IV in Water Industry Operations	<ul> <li>Subject to TasWater advice         <ul> <li>No current scope</li> </ul> </li> </ul>
NWP30219 Certificate III in Water Industry Operations	<ul> <li>Subject to TasWater advice         <ul> <li>No current scope</li> </ul> </li> </ul>
NWP20119 Certificate II in Water Industry Operations	<ul> <li>Subject to TasWater advice         <ul> <li>No current scope</li> </ul> </li> </ul>
Polymer Processing	
MSM30116 Certificate III in Process Manufacturing	Aquaculture focus Advice required on full qual use.
*current	
PMBWELD301 Butt weld polyethylene pipelines	Both 301 and 302 are current offerings used (and potentially used) across the following
*current	areas: • Gas Fitting
PMBWELD302 Electrofusion weld polyethylene pipelines	<ul> <li>Irrigation – link to AHC TP</li> <li>Water</li> </ul>
*current	<ul><li>Aquaculture</li><li>Antarctic Division</li></ul>
Pine leving	
ripe laying	
RII30919 Certificate III in Civil Construction –	Subject to TasWater advice
RII30919 Certificate III in Civil Construction – Stream 3 Pipe Laying	<ul> <li>Subject to TasWater advice</li> <li>Qual on scope</li> <li>Stream 3 to be checked for scope</li> </ul>
RII30919 Certificate III in Civil Construction – Stream 3 Pipe Laying *proposed	<ul> <li>Subject to TasWater advice</li> <li>Qual on scope         <ul> <li>Stream 3 to be checked for scope</li> <li>General plumbing not suitable for most</li> </ul> </li> </ul>
RII30919 Certificate III in Civil Construction – Stream 3 Pipe Laying *proposed	<ul> <li>Subject to TasWater advice</li> <li>Qual on scope         <ul> <li>Stream 3 to be checked for scope</li> </ul> </li> <li>General plumbing not suitable for most TasWater employees. RII Possible         <ul> <li>aswater employees. RII possible</li> </ul> </li> </ul>





Antarctic Division	
Plumbing Refrigeration *current	<ul> <li>Multiple non-accredited and accredited modules for expeditioners prior to embarkation to Antarctica</li> <li>Approximately 6 weeks per year from August to November</li> </ul>
REL	9
Restricted Electrical Licensing	Refrigeration
*current	<ul> <li>UTENES208 – Disconnect - reconnect fixed wired equipment up to 1000 volts ac/1500 volts dc; or</li> <li>UEENEEP001 – Disconnect - reconnect fixed wired electrical equipment to a low voltage supply</li> <li>Plumbing/Gas</li> </ul>
	<ul> <li>UTENES208 – Disconnect - reconnect fixed wired equipment up to 1000 volts ac/1500 volts dc; or</li> <li>UEENEEP001 – Disconnect - reconnect fixed wired electrical equipment to a low voltage supply</li> <li>Gas Appliances</li> </ul>
	<ul> <li>UTENES208 – Disconnect - reconnect fixed wired equipment up to 1000 volts ac/1500 volts dc; or</li> <li>UEENEEP001 – Disconnect - reconnect fixed wired electrical equipment to a low voltage supply</li> <li>Motors</li> </ul>
	<ul> <li>UTENES208 – Disconnect/reconnect fixed wired equipment up to 1000 volts ac/1500 volts dc; or</li> <li>UEENEEP001 – Disconnect/reconnect fixed wired electrical equipment to a low voltage supply</li> </ul>





Miscellaneous	
Trench Shoring	Stand-alone unit on demand for TasGas
CPCPCM3025 Install trench support	Networks, TasvVater etc.
*current	
Trench Rescue	TasTAFE currently provide access to Tas Fire
*current	to conduct Rescue training from deep sand pit
	<ul> <li>I as I AFE do not deliver the training but provide the shoring equipment and our sandpit. The sandpit is the only one deep enough in the state to allow the training to happen</li> <li>Approx. once every 2 years</li> </ul>
Confined Spaces Rescue	TasTAFE currently provide access to
*current	enable Tas Fire to undertake rescue operations
	<ul> <li>TasTAFE do not deliver the training but provide the facility. The enclosure is the only one with appropriate design and partitions in the state to allow the training to happen</li> <li>Approx. once every 2 years</li> </ul>
Medical Gas Pipeline Installation	Mandatory license endorsement course as
CPCPMS3034A Install medical gas pipeline	required by Licensing Regulator. For installation
systems	hospitals and health clinics
*current – about to implement	
Hydrogen	New Hydrogen energy projects requiring training solutions
*proposed	<ul> <li>TasTAFE already informed by CBOS that training discussions about to be commenced</li> </ul>
Type B Gas Fitting	Industrial Gas Fitting license outcome as
CPCPGS4023 Install, commission and service Type B gas appliances	required by License Regulator
*current	
Fire Hydrant Testing	Requested by TasFire
CPCPFS3038 Test and maintain fire hydrant and hose reel installations	<ul> <li>Subject to License Regulator input may be offered as stand-alone license endorsement course</li> </ul>
*proposed	
External License Examinations	• On the behalf of the License Regulator
*current	CBOS, TasTAFE currently write and





	<ul> <li>supervise the following License Exams on a fee for service basis:         <ul> <li>Plumbing License Renewal Exam</li> <li>NG/LPG License Renewal Exam</li> <li>Caravan and Marine Craft LPG License Renewal Exam</li> </ul> </li> <li>It is also proposed by CBOS that a Capstone Assessment be implemented at the Cert IV Certifier License level in order to screen out applicants who have sourced their qualifications from RTO's online for payment (no evidence).</li> </ul>
Solid Fuel Appliance Installation Course	Subject to License Regulator requirements
CPCPMS3041 Install domestic solid fuel burning appliances	
*proposed	
	All courses allocated CPD points – mandatory
Short courses	for plumbing license renewal
Backflow Device and TMV refresher	
Gas appliance servicing	
Gas system tightness testing >30L	
Gas ventilation	
Gas hot water	
Hot water basics	
AAV sizing and locations	
PVC Expansion	
Stormwater – intro to sizing	
Sanitary stack systems	
Elevated pipework	
Drainage refresher	
Box gutter – Rainhead sizing	
Box gutter – Side overflow	
Box gutter – high capacity overflow	
Eaves gutter – General Method sizing	
Eaves gutter – ACP 3.5.3 sizing	





	All courses allocated CPD points – mandatory
Short courses	for plumbing license renewal
Water tanks	
2D CAD	
Plumbing Legislation and Training Requirements	
Solar water heater installation	
Work Read and Foundation Skills Training	
Enhance Your Maths Skills	
Workplace Maths	
Trade Maths	
Business, Digital and Computer Skills	
<ul> <li>Business computing skill set</li> </ul>	
Customer Service	
• IT – Get started!	
<ul> <li>Develop your digital skills</li> </ul>	
Get job ready!	
Writing job applications	
Employability skills	
Career planning	
Basic Reading and Writing for Work	

# Educator Capability **Framework**

#### Leadership and pathways

Participates in continuous professional learning and leadership skill development

- Teacher Development Program
- Educational leadership skill development
- Diploma of Vocational Education and Training
- Higher education gualifications
- Access to the University MOU and research projects
- Mentoring program
- Reflective practice
- Industry and national networks

#### Industry currency and community collaboration

Maintains up to date industry skills and links with community

- Return to industry
- Vocational competence
- Vocational currency
- Stakeholder engagement
- Product development

## **Student experience**

Knows the students and how they learn, and creates an inclusive learning environment

- Learner engagement
- Behaviour management
- Mental health awareness.
- Disability awareness
- Diversity and inclusion
- Data analysis

#### Design and facilitation

Provide effective and accessible learning experiences for students

- Learning program design
- Developing innovative resources
- Engaging facilitation
- Blended learning approaches
- · Provide effective and accessible learning experiences for students
- Collaboration
- Product design and development

## Assessment

Provides quality assessment practices to enhance the student experience and meet compliance requirements

- Design and developing assessment packages
- Conducting assessment
- Validation
- Workplace assessment
- Recognition of prior learning
- Continuous improvement
- Technology based assessment
- Collaboration
- Feedback employers and students



# **Digital literacy**

Uses digital technologies to enhance teaching and learning practice and the student experience through

- Professional digital behaviours, practices and identity
- Digital communication and collaboration
- Information and media literacy skills
- Organisational software, digital tools and applications
- Student Management System
- Learning Management System

Advanced

- Advanced facilitation and assessment practice
- Educational team and program leadership skills
- Critical reflective practitioner
- Mentoring

# **Proficient**

- Specialised theoretical knowledge and practical experience in training and assessment
- Critical thinking and reflection skills
- Provide guidance and support to colleagues

# Beginner

- Broad theoretical knowledge and practical experience of training and assessment
- Developed communication and facilitation skills
- Feedback and reflective practice skills

