

Greater Foundations23 Teacher Resource

Aerospace:

Space as a career option in Australia

As a pioneer space SME in Australia, Gilmour Space Technology has engaged in hundreds of STEM talks and activities with schools, universities and the public in recent years. Here is a link to some replays that were made public by their partners, covering what they see happening now and for Australia's future in space [Space & STEM | Gilmour Space \(gspacetech.com\)](#)

Career Pathways

Building a future workforce: [Pathways for a career in space | Department of Industry, Science and Resources](#)

Learn about people working in Australia's space sector, including what they do and how they got there: [People in the space sector | Department of Industry, Science and Resources](#)

The Australian Space Discovery Centre and the Australian Space Agency have developed some learning resources to help inspire you further: [Learning resources | Department of Industry, Science and Resources](#)

Educational Podcasts

[Space Connect: Why movies inspire kids into space, with Dr. Hugh Mortimer](#)

[Space Nuts: All things Space – news, travel, discoveries, the mysteries, and more... with world renown and respected Astronomer at Large Professor Fred Watson and Sci-Fi Author, Broadcaster/Journalist Andrew Dunkley.](#)

[Give me space: Amazing facts from space. Presented by Henry Perraton from Melbourne, Australia.](#)

Agriculture:

Careers in Agriculture

'EXCITED 4 Careers in Agriculture' is a program funded by the Australian Government National Careers Institute and is a joint initiative between CQUniversity and Sugar Researchers Australia. This program is the first of its kind to be based on Holland's RIASEC theory of career guidance, where participants learn how their interests and strengths can translate to a career in Ag, with the goal of the program to enable teachers, careers counsellors and students the opportunity to explore a range of careers in industries of local importance.

As part of the program, we **provide schools with a free one-day incursion/excursion experience** focused on the local sugar industry (these are locked in for the week of 20th-23rd March 2023). If your school is interested in knowing more about what we do in the **Agri-tech Education and Extension team** and potential opportunities for in the future, you can contact us via the below email/links:

Email: ageducation@cqu.edu.au

Website: www.agri-techeducation.com

Facebook www.facebook.com/agritecheducationandinnovation

Further to this, we also have a **teacher professional development evening**, at Coral Cay Bar and Grill on Wednesday 22nd March from 4:30 -7:30 pm, where we aim to give teachers practical, hands-on, curriculum-aligned activities to use in the classroom. Followed by a career networking event, connecting people working in the sugar industry to educators to showcase the range of opportunities available within the sector. For more information, please use this link <https://bit.ly/EXCITED4SugarPD>. If you know anyone who would like to register for our teacher professional development and/or careers networking evening, please feel free to share this link: <https://bit.ly/EXCITEDSugar2023>.

Certificates in Agriculture

Kick start a career nurturing Australia's agriculture industry with this entry-level course focused on the fundamentals of modern farm work, including working with livestock and crops. Please see this link for more information <https://tafeqld.edu.au/course/17/17906/certificate-ii-in-agriculture>

Aquaculture:

Aquaculture Certificate

TAFE Queensland's Certificate II in Aquaculture is to be offered in early 2024 <https://tafeqld.edu.au/>.

Greater Whitsundays Aquaculture Education Partnership

In line with its workforce development needs, Tassal Group Ltd has established the Greater Whitsundays Aquaculture Education Partnership (GWAEP), a collaboration with five high schools and TAFE Queensland. The partnership will be a collaborative approach to the delivery of aquaculture education through the QLD Aquatic Practices syllabus and a transition to Certificate II in Aquaculture.

The GWAEP will be driven by industry, providing schools with access to industry experts and facilities to assist with and complement the school-based education delivery. Each five schools plus TAFE will structure their aquaculture education programs – Certificate II in Aquaculture and Aquatic Practices respectively – to model student/teacher relationship, expectations, and functional roles as would be experienced in industry.

With the expansion of its prawn farming operations leading to a doubling in production, Tassal predicts its Whitsundays workforce will grow by more than 300 new jobs. This will ensure direct employment opportunities are available for graduates from the GWAEP program.

The GWAEP model can be replicable across other primary industries, enabling schools and employers to work together and overcome the deficiencies of many VET in Schools programs as highlighted by a range of recent reports and enquiries. Such a model can add an “employment logic: to school programs and lead to improved outcomes for all.

For further information contact: Steve Harrison, Training and Development Manager, Tassal Group Ltd, steve.harrison@tassal.com.au Ph. 0448 012 309

Construction:

Could a career in construction be right for your students?

A career in construction means being part of something big – one of the biggest and most exciting industries in Queensland. Nothing compares with construction for being able to earn while learning on the job (with an apprenticeship/traineeship), the option to work outside in constantly changing scenery, and dozens of career pathways, maybe even leading to owning a business one day. For more information and resources for your students, visit constructionpathways.csq.org.au, or contact constructionpathways@csq.org.au.

Manufacturing:

Mackay Manufacturing Hub

The Mackay Manufacturing Hub engages with schools to arrange workshop tours and career showcases. For more information please call **Teanna Ramsamy on 0499 757 790** or visit the Manufacturing Hub website [Regional manufacturing hubs | Department of Regional Development, Manufacturing and Water \(rdmw.qld.gov.au\)](http://Regional manufacturing hubs | Department of Regional Development, Manufacturing and Water (rdmw.qld.gov.au))

Mining:

Apprentice and trainee programs

QMEA Oresome Futures: Students understanding what it's like to work in the resources sector
<https://qmea.org.au/students-get-taste-of-oresome-futures/>.

BHP FutureFit: A program where students become a permanent employee from day one, and once trained and qualified, you will have ongoing employment at one of BHP's Australian operational sites.
<https://careers.bhp.com/job/Maintenance-Associate-Traineeships-BHP-FutureFit-Academy-Mackay/970679900/>.

Advanced Manufacturing Podcasts

Inspiring Design with Rashan Senanayake is the missing link where design and education meet. Guests share their knowledge in design, design education, design thinking, teaching techniques, industry standards as well as the study of design, connects the knowledge gaps in the design industry from a secondary, tertiary and industry standpoint. Rashan is an author, speaker, designer and a passionate enthusiast of both design and education. For more information on the host, please visit www.rashansenanayake.com.au, and the [PODCAST Link](#).

Tourism:

VETis - Certificate II in Maritime Operations

To achieve the competency standard, **Whitsunday Maritime Training Centre have partnered with Red Cat Adventures who will train students on their vessels.** For those students who wish to consider **maritime career**, this is an exciting opportunity to achieve a National Qualification to be considered for employment in a dream job with further career pathways including Tourism, Superyachts, Marine Parks, Oil & Gas and Fishing as some examples. On successful completion of the course, Red Cat Adventures will endeavour to assist you in finding employment in the maritime industry. For more information, please use the following link.... or contact **(07) 4946 4444**

VET pathway to employment:

Employment Logic

The cultural shift needed to improve VET outcomes in schools. Policy paper written for the Winston Churchill Trust and University of Queensland: <https://stories.uq.edu.au/policy-futures/2021/employment-logic-the-cultural-shift-needed-for-vet-in-schools/index.html>. Further from Steven Harrison, from Tassal, presentation at Greater Foundations23 <https://www.youtube.com/watch?v=0kNP8UOaMGU>.

It's Not Really Like School

Unpacking the soft curriculum https://www.youtube.com/watch?v=YXACp_BT36s.

Vocational Training and Career Pathways

ACER Teacher Magazine Podcast https://www.teachermagazine.com/au_en/articles/school-improvement-vocational-training-and-career-pathways.

Student Testimonials

HVTTC <https://www.youtube.com/watch?v=Dqh1M5broaE>

Senior Secondary Education, a video of VET in Maloy VGS, Norway
<https://www.youtube.com/watch?v=YDsOQiW2Jd8&t=1s>

Biomechanics:

Biomechanics Research and Innovation Program

Biomechanics Research and Innovation Program ([BRInC Program](#)) - an outreach program for Year 9 and 10 high school girls.

Currently looking for schools from Mackay, Brisbane and the Gold Coast to join this program and team up with our mentors from these locations. Calling for EOI's ([BRInC 2023 Mentor EOI \(qualtrics.com\)](#)) Biomechanics Research and Innovation Program ([BRInC Program](#)) - an outreach program for Year 9 and 10 high school girls.



Sign up now!

VETiS - Enrolment & Course Guide

Certificate II in Maritime Operations (MAR 20321 - Coxswain Grade 1 Near Coastal) cont...

When can I get my qualification?

Your Training program consists of a mix of theory (at school) and practical (on the water)

START DATE: Term 1, 2023

DURATION: School Year

LOCATIONS: School for theory lessons and Mackay City Marina / Coral Sea Marina with Red Cat Adventures. Whitsunday Maritime Training Centre for practical assessments.

Units of competency

HLTAID011 Provide first aid

SHIPBOARD SAFETY SKILL SET

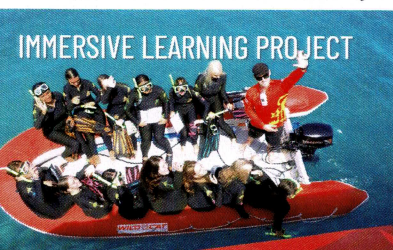
- MARF027 Apply basic survival skills in the event of vessel abandonment
- MARF028 Follow procedures to minimise and fight fires on board a vessel
- MARF029 Meet work health and safety requirements
- MARF030 Survive at sea using survival craft

COXSWAIN GRADE 1

- MARB027 Perform basic servicing and maintenance of main propulsion unit and auxiliary systems
- MARC037 Operate inboard and outboard motors
- MARC038 Operate main propulsion unit and auxiliary systems
- MARH013 Plan and navigate a passage for a vessel up to 12 metres
- MARIO03 Comply with regulations to ensure safe operation of a vessel up to 12 metres
- MARJ006 Follow environmental work practices
- MARK007 Handle a vessel up to 12 metres
- MARN008 Apply seamanship skills aboard a vessel up to 12 metres

Your theory and practical assessments for Certificate II in Maritime Operations are fully funded by the Queensland Government under the VETiS program (\$3,300). Additional fees to obtain the AMSA licence are as follows:

- AMSA Coxswain Grade 1 Task Book \$25.00
- AMSA licence fee for Coxswains \$163.00
- MARC043 Long Range Radio Certificate of Proficiency is not part of the qualification or subsidy, however it is a requirement of AMSA if you want your licence \$240.00 (includes training costs and AMSA licence fee of \$89.00).
- Practical Training and Task Book sign off (on water) with Red Cat Adventures \$800.00 (includes 2 days per term out of either the Coral Sea Marina or Mackay City Marina).



RED CAT
ADVENTURES



VETiS - Enrolment & Course Guide

Certificate II in Maritime Operations (MAR 20321 - Coxswain Grade 1 Near Coastal)

This course sets you on the path to a Coxswain Grade 1 Near Coastal licence issued by the Australian Maritime Safety Authority.

With this qualification you will be able to command a commercial vessel less than <12m long in inshore waters (within 15 nautical miles of land), for an inboard engine up to <500kW and unlimited for an outboard engine.

To achieve the competency standard, WHITSUNDAY MARITIME TRAINING CENTRE have partnered with RED CAT ADVENTURES who will train you on their vessels. For those of you who wish to consider a maritime career this is an exciting opportunity to achieve a National Qualification to be considered for employment in a dream job with further career pathways including Tourism, Superyachts, Marine Parks, Oil & Gas and Fishing as some examples.

On successful completion of the course, Red Cat Adventures will endeavour to assist you in finding employment in the maritime industry.

What do I need to gain my qualification?

AMSA's Maritime 505 Guidance Notice will give you all the licence requirements you need including Evidence of Medical Fitness and Evidence of Eyesight Test. You will also need to meet the competency standards of the qualification which cover all aspects of workplace performance and involve:

- **Performing** individual tasks
- **Managing** a range of different tasks
- **Responding** to contingencies or breakdowns
- **Dealing** with responsibilities of the workplace, including working with others.

Workplace competency is the ability to apply relevant skills and knowledge consistently over time and in the required workplace situations and environments. Competency standards are determined to meet industry skill needs and focus on what is expected of a competent individual in the workplace.

While working in a deck or deck/engineering capacity, you must have at least 30 days on commercial vessels >5m long and have completed an approved Task Book. There will be opportunity to gain sea time with Red Cat Adventures / Wildcat Mackay on weekends or school holidays and your Task Book will be completed on board with Red Cat Adventures / Wildcat Mackay.

IMMERSIVE LEARNING PROJECT



WILDCAT MACKAY



THUNDERCAT



TONGARRA SAILING VESSEL

