

#### **Dual Qualifications**

#### 11078NAT Certificate IV in Marine Habitat Conservation & Restoration CRICOS 113609E

and

AHC40924 Certificate IV in Conservation & Ecosystem Management CRICOS 111630B

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# **Course Overview**

The Dual Qualifications, 11078NAT Certificate IV in Marine Habitat Conservation & Restoration and AHC40924 Certificate IV in Conservation and Ecosystem Management is a pathway to meaningful careers in environmental conservation and marine habitat restoration. These nationally recognised qualifications provide the skills and knowledge to lead projects that protect and restore ecosystems on land, coastal and in the ocean.

The vocational education program focuses on safeguarding marine biodiversity or managing coastal ecosystems. These programs equip students with the expertise to address today's pressing environmental challenges while fostering sustainable futures.

The program is carefully designed to meet the varying needs of local industry and coastal environments. The packaging rules will be made flexible to meet the essential needs. Elective units can be selected on the specific environment and skills required to support the local conservation and restoration industry, generating greater employment outcomes.

Globally, these dual certifications in Conservation & Ecosystem Management and Marine Habitat Conservation & Restoration accreditations highlights and strengthen Australia's commitment to, and support of several UN Sustainable Development Goals, namely:

- Goal 4: Ensure equal access to quality education
- Goal 8: Promote sustainable employment opportunities
- Goal 13: Take action to combat climate change and its impacts
- Goal 14: Sustainably use the oceans and marine resources



Envirotech Mentors: 15 Hours/week

Lectures: 5 Hours/week

Workplace project course work on the job industry training: 16 Hours/week



Online

Support



Blended Mode



Paid/Unpaid Workplacement 58





58 weeks 25 Units Practical Components

### **Course Structure**

To achieve this dual qualification, competency must be demonstrated in 34 units of competency consisting of:

AHC40924 Certificate IV in Conservation and Ecosystem Management

- Two (2) Core units
- Ten (10) Elective units

11078NAT Certificate IV in Marine Habitat Conservation and Restoration

- Five (5) Core units
- Twelve (12) Elective units

### **Course Units**

#### **11078NAT Certificate IV in Marine Habitat Conservation and Restoration**

NAT11078001	Assemble information about a coastal marine conservation or
	restoration project
NAT11078002	Design and monitor a marine environmental conservation project
NAT11078003	Design and execute a marine environmental restoration project
NAT11078004	Use tools to carry out tasks in marine conservation work
NAT11078005	Perform benthic marine assessment
NAT11078007	Participate in a coastal resource assessment
NAT11078008	Report and present an environmental assessment
NAT11078010	Monitor coastal and marine water quality according to standards
NAT11078013	Reduce marine pollution from a coastal source
MSS024017	Collect spatial and discrete environmental data
NAT11078021	Maintain'a mangrove nursery
NAT11078022	Implement a seagrass conservation project
CUAFIM511	Source funding for projects

#### AHC40924 Certificate IV in Conservation and Ecosystem Management

CHCCDE018	Develop and implement community programs
MSL913004	Plan and conduct laboratory/field work
AHCLPW408	Implement land and sea management practices

#### **SHARED UNITS**

AHCECR308 AHCWHS402	Conduct a site inspection for ecological restoration Maintain workplace health and safety processes
AHCBUS407	Cost a project
AHCECR401	Supervise ecological restoration works
LGACOR007	Conduct community consultations
NAT11078016	Install a coral nursery
NAT11078017	Install and maintain coral nubbins in a nursery
NAT11078018	Transplant coral nubbins from a nursery to a reef
NAT11078032	Install a shellfish reef unit

# Qualification Outcomes

This course provides students with the skills and knowledge to take on leadership and specialist roles in environmental conservation, ecosystem management, and marine habitat restoration. These combined programs prepare individuals to:

• Design and Implement Conservation Projects: Plan initiatives to restore and protect coastal and marine ecosystems, addressing critical environmental challenges.

• Conduct Habitat and Biodiversity Assessments: Evaluate the health of ecosystems using advanced tools and techniques to monitor species, water quality, and habitat conditions.

• Utilise Traditional and Modern Practices: Integrate Indigenous ecological knowledge with contemporary scientific methods to create sustainable and culturally aligned management strategies.

• Lead Teams and Supervise Work: Manage and guide conservation and restoration teams, ensuring safety, efficiency, and compliance with environmental standards.

• Mitigate Environmental Threats: Address issues like marine pollution, invasive species, and land degradation through innovative solutions.

• Support Sustainable Development: Contribute to the creation of sustainable practices that balance ecological preservation with economic and community needs.

# Skill Sets (Micro-Credentials)

Skill Sets are combinations of units of competency which link to a licence or regulatory requirement or defined industry need. This program offer specialised accredited skill sets from the program start date to advance our students quality employment options.

### Marine Environmental Assessment

1. Assemble and deliver information towards a marine environmental assessment according to specifications.

2. Participate in a coastal resource assessment

3. Report and present an environmental assessment.



#### Marine and Coastal Environmental Monitoring

1. Perform fish monitoring.

2. Monitor coastal and marine water quality according to standards.

3. Measure and monitor physical parameters of a coastal area.

4. Use a drone under supervision for coastal monitoring.

### Ecosystem Management

1. Conduct a site inspection for ecological restoration.

2. Supervise ecological restoration works.

3. Implement land and sea management practice.





# Marine Pollution

1. Reduce marine pollution from a coastal source.

2. Develop marine waste and sewage pollution management practices.

3. Reduce impact of and clean up localised solid marine pollution.

## Coral Specialised Skills

1. Install a coral nursery.

2. Install and maintain coral nubbins in a nursery.

3. Transplant coral nubbins from a nursery to a reef.







### Mangrove Specialised Skills

1. Implement a mangrove conservation project.

2. Implement a mangrove restoration project.

3. Maintain a mangrove nursery.

## Seagrass Specialised Skills

1. Implement a seagrass conservation project.

2. Implement a seagrass restoration project.







### Coastal Dunes Specialised Skills

1. Implement a coastal dunes conservation project.

2. Implement a coastal dunes restoration project.

3. Establish and maintain a nursery for coastal plants and transplant seedlings produced.

### Kelp Forest & Seaweeds Specialised Skills

1. Implement a kelp forest conservation project.

2. Implement a kelp forest restoration project.

3. Install a kelp nursery and ocean farm using marine permaculture principles.







### Shellfish Specialised Skills

1. Implement a shellfish conservation project.

2. Implement a shellfish seeding project.

3. Install a shellfish reef unit.

4. Implement a pearl oyster seeding restoration project.

#### Marine Animal Rehabilitation Specialised Skills

1. Participate in breeding and propagation of marine animals.

2. Operate a sea turtle hatchery.

3. Implement and maintain a pearl oyster hatchery and grow out.



### Stranding & Rehabilitation Specialised Skills

1. Respond to a marine mammal stranding event and rehabilitation.

2. Respond to a non-mammal marine animal stranding event and rehabilitation.

3. Respond to marine wildlife stranding.

### Skills and Knowledge Development

Upon completion of the course participants will develop expertise in:

• Marine Conservation Practices: Understanding ecological principles and the dynamics of marine habitats, including coral reefs, seagrass, mangroves, and kelp forests.

• Habitat Restoration Techniques: Establishing and maintaining nurseries for corals, mangroves, and other marine vegetation, and implementing sustainable restoration strategies.

• Marine Biodiversity Monitoring: Conducting assessments to evaluate the health of marine ecosystems, identifying species, and tracking environmental changes.

• Responding to Marine Animal Strandings: Learning rescue techniques and rehabilitation strategies for stranded marine animals.

• Water Quality Analysis: Measuring and analysing factors affecting marine environments, such as pollution and sedimentation.

 Integration of Indigenous Knowledge: Applying traditional ecological knowledge in tandem with scientific methodologies for sustainable marine management.

• Ecological Restoration: Planning and implementing revegetation projects, conducting site inspections, and supervising biodiversity monitoring.

• Cultural and Environmental Heritage Management: Protecting culturally significant sites and integrating Indigenous knowledge into land management practices.

• Land and Sea Management Practices: Applying sustainable practices to conserve and manage natural resources effectively.

• Pest and Biosecurity Control: Monitoring and controlling invasive species and developing pest management plans.

• Leadership and Supervision: Managing teams and workplace health and safety processes in conservation projects.

• Conservation Technology: Utilizing mapping technologies and conservation earthworks to improve ecosystem health and sustainability.

# **Career Outcomes**

- Marine Conservation Team Leader
- Costal Ecosystem Restoration Specialist
- Marine Pollution Response Coordinator
- Environmental Monitoring Technicians
- Marine Animal Rehabilitation Officer
- Project Team Leader for Marine Restoration Projects
- Community Engagement Coordinator
- Marine Research Assistant
- Employment in NGOs on marine conservation
- Roles in government agencies environmental and marine parks
- Engagement in academic and research institutions
- Involvement in eco-tourism ventures promoting sustainable interactions with marine environment



# Vocational Industry Placement (VIP)

Mandatory Vocational Placement program designed to enrich students' educational experience through practical, real-world engagement.

• 40 weeks and requiring a commitment of 16 hours per week (Face-to-Face or online or combination of both)

• This program pairs students with an Industry Vocational Placement Host providing an invaluable opportunity to apply theoretical knowledge in a professional setting.

• Students have the flexibility to bring their own Vocational Placement Host (possible employers), allowing for a personalised experience that aligns with their career aspirations and interests.

The primary objectives of this placement are skills development, networking, and enhanced employability. Through hands-on experience, students will refine their professional skills, build meaningful industry connections, and significantly boost their job readiness, giving them a competitive edge in the job market.



#### About Envirotech

Envirotech Education is an award-winning Australian Registered Training organization (RTO) endorsed by the Australian Skill Quality Authority (ASQA) for delivery of Vocational Education and Training (VET).

Envirotech VET accreditations are offered to: domestic, indigenous, international, and high school students.

The college has in-house expert trainers, mentors, and business developers, who are dedicated to connecting students to an industry journey and will facilitate engagement in real business initiatives and sustainable projects.

#### **Our Marine Team**



Melinda De Luna Co-CEO, Marine & Sustainability Trainer & Assessor



Cherry Jalover-Par Marine & Sustainability Assessor & Content Developer



Dr. Steven Andrews Lead Trainer & Assessor



Noeme Fabiosa Marine Trainer & Assessor & **Content Developer** 



Prof. Nadav Shashar Professor & Marine Expert



Marine &

Sustainability

Trainer & Assessor



Maricar Daquioag Marine Academic Support & **Content Support** 

Dr. Maria Fontes, PhD.

Marine &

Sustainability Trainer & Assessor



Iain Watt

Academic

Roberto Lampayan Marine Academic Support & **Content Developer** 



Ryan Goldhawk

Cassia Duarte Marine & Sustainability Trainer & Assessor



Glenda Cadigal Marine Expert Trainer & Assessor



Paul Vincent Petalcorin Marine Academic Support & Content Developer



Francia Marie Jose Marine Academic Support & **Content Developer** 









### 2025 CALENDAR

Courses Intake Dates

#### JANUARY

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MARCH

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1 - New Year's Day, 27 - Australia Day

APRIL

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18 - Good Friday 19 - Easter Saturday 20 - Easter Sunday 21 - Easter Monday 25 - Anzac Day

JULY

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#### AUGUST <u>SM</u>TWTF 1 2 / E

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5 - Labour Day (OLD)

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13 - Royal Queensland Show (QLD)								

9 - King's Birthday (National Except QLD & WA)

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**SEPTEMBER** 

#### **OCTOBER**

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06 - King's Birthday (QLD) & Labour Day (NSW)

#### **NOVEMBER**

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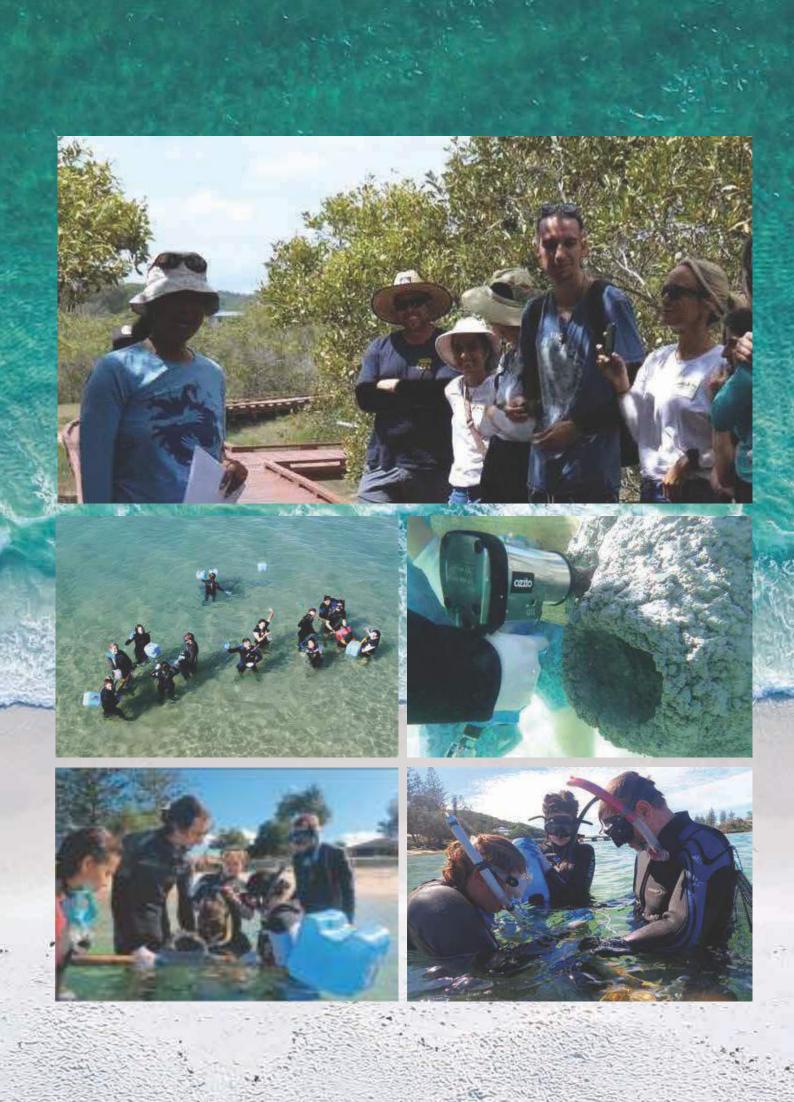
#### DECEMBER



25 - Christmas Day 26 - Boxing Day









# ENVIROTECH E D U C A T I O N

#### **ENVIROTECH EDUCATION PTY LTD**

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