



REEF

RESEARCH AND EDUCATION FOR
ENVIRONMENTAL FOUNDATION

*Advancing Coastal Resilience through
Research, Innovation and Community Action*



BLUE CARBON
Building a climate
resilient future



RESEARCH
Science-based
solutions



INNOVATION
Technology for
sustainability



**GIS, DRONE &
REMOTE SENSING**
Smart monitoring
for better decisions



**COMMUNITY
EMPOWERMENT**
Strengthening
communities &
livelihoods



**GLOBAL
COLLABORATION**



CONSERVE
Protecting
Ecosystems &



RESEARCH
Science-based
Solutions for a



EMPOWER
Strengthening
Communities &



EDUCATE
Building Capacity
& Inspiring Future



INNOVATE
Technology &
Innovation for



COLLABORATE
Partnerships for
Global Impact

ABOUT REEF



VISION

To emerge as a pioneering centre of excellence in coastal and marine conservation that harmoniously integrates scientific research, community empowerment, and environmental education for the sustainable protection of fragile ecosystems and the resilience of coastal communities.



MISSION

To promote coastal and marine conservation through research, education, community participation, and sustainable development.



OBJECTIVES

- Mangrove Plantation
- Sustainable Seafood Production
- Sea Turtle Conservation
- Ecotourism
- Marine Biodiversity Monitoring
- Animal Welfare
- Skill Development & Entrepreneurship
- Education & Research



INTERNSHIP PROGRAMS

LOW-CARBON OCEANS & BLUE ECONOMY

...

Shape the Future of a Sustainable Ocean Economy

Climate • Conservation • Innovation

Programme Snapshot

Explore the evolving Blue Economy and Low-Carbon Ocean Future through marine resources, sustainable livelihoods, conservation, climate action and emerging ocean industries. Connect marine science with economy, communities and conservation through experiential learning.



Key Learning Domains

- Blue Economy & Ocean Governance
- Marine Low-Carbon Solutions & Climate Action
- Sustainable Fisheries & Aquaculture
- Marine Resources & Bioeconomy
- Blue Carbon & Coastal Ecosystems
- Sea Turtle & Dugong Conservation
- Marine Tourism & Recreation
- Marine Spatial Planning
- Ocean Renewable Energy
- Circular & Sustainable Ocean Solutions
- Coastal Livelihoods & Community Resilience
- SDGs, Policy & Ocean Innovation

Experiential Learning

Coastal Exposure | Case Studies | Resource Assessment | Community Interaction | Blue-Economy Project

Career Horizon

Marine Science | Blue Economy | fisheries | Sustainability | Coastal Management | ESG | Ocean Entrepreneurship

You Will Learn To

- Analyse emerging ocean-based industries
- Assess sustainable marine-resource use
- Connect ecology, economy and communities
- Develop innovative blue-economy solutions

AQUAPHONICS & MARICULTURE INTERNSHIP PROGRAM

Grow Knowledge. Restore Oceans. Build Sustainable Futures.

Integrated Aquaculture • Marine Biology • Sustainable Food Systems



PROGRAMME OVERVIEW

Explore the connection between aquaponics and mariculture through practical, research-led learning. Understand how aquatic organisms, water quality, circular resource use and coastal ecosystems can support sustainable livelihoods and marine conservation.



WHAT YOU WILL EXPLORE

- Aquaponics systems and circular water use
- Mariculture principles and marine organism production
- Aquatic ecosystems, biodiversity and habitat care
- Sustainable aquaculture practices and environmental safeguards
- Links between food security, livelihoods and ocean health
- Research teams, teamwork and practical problem-solving



LEARNING COMPONENTS

1. Foundations of aquaponics and mariculture
2. Guided system and ecosystem observation
3. Water-quality and environmental monitoring basics
4. Biodiversity and sustainable production a:
5. Team-based challenges and reflection
6. Research-led project or output

MEDICAL CODING INTERNSHIP

Decode Healthcare. Build Your Professional Edge.

Healthcare Information • Coding • Career Readiness

Programme Snapshot

Build practical foundations in medical coding and healthcare information management. Learn how clinical documentation is translated into standardised codes supporting healthcare administration, insurance claims and health-information systems.



Key Learning Domains

- Medical Terminology
- Anatomy & Physiology
- Healthcare Documentation
- ICD-10-CM
- CPT Coding
- HCPCS Coding
- Diagnosis & Procedure Coding
- E&M Coding Concepts
- Medical Billing
- Insurance & Claims
- Health Information Management
- Coding Compliance
- Data Privacy & Confidentiality

Experiential Learning

Case-Based Coding | Medical Records | ICD Practice | CPT Exercises | Claims & Documentation Review

You Will Learn To

- ✓ Interpret clinical documentation
- ✓ Apply fundamental coding principles
- ✓ Understand healthcare billing workflows
- ✓ Identify coding and documentation errors

Research Themes

Real-World Case Studies | Professional Coding Workflows | Expert Interaction | Career Guidance

Career Horizon

Medical Coder | Medical Billing | Health Information Management | Coding Quality | Healthcare Operations

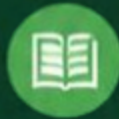
FUN-FILLED ECO TOURISM PROGRAM

Explore • Learn • Play • Protect

A One-Day Educational Eco-Experience at Pulicat



Nature
Exploration



Interactive
Learning



Community
Connection



Environmental
Stewardship



Sustainable
Impact



DISCOVER PULICAT

Experience the fascinating world of Pulicat Lake, one of India's largest brackish-water lagoons. This one-day nature learning programme combines fun, exploration and environmental education through engaging outdoor activities.

WHAT STUDENTS WILL EXPERIENCE

Bird Watching
Nature Science Walk
Ice-Breaker Games
Eco Treasure Hunt
Beach Exploration & Fun
Eco Quiz & Challenges
Village & Community Visit
Guided Nature Walk



LEARN • EXPLORE • CONNECT

Students will develop:

-  Environmental Awareness
-  Biodiversity Appreciation
-  Curiosity About Nature
-  Teamwork & Collaboration
-  Ecological Understanding
-  Sustainable Thinking



PULICAT LAKE, TAMIL NADU

Wetlands • Migratory Birds • Coastal Ecosystems • Local Communities

A hands-on learning experience that takes students beyond the classroom and into nature.



WHO CAN JOIN?

Schools can organise educational group visits through CELST • REEF.



PROGRAM FEE

₹500 / STUDENT

Including Food



LIMITED SEATS

Register Early & Reserve Your
School's Eco-Learning Experience!



GIS, REMOTE SENSING & DRONE TECHNOLOGY

Map the Planet. Decode the Landscape.

Geospatial Intelligence for a Changing World

Programme Snapshot

Master the technologies transforming environmental research—from satellite intelligence and GIS to drone-based mapping.

Learn to convert spatial data into powerful visual insights for conservation, climate action and environmental decision-making.



Key Learning Domains

- GIS Fundamentals & Spatial Analytics
- Remote Sensing & Satellite Intelligence
- GPS & Geospatial Data Collection
- Land-Use/Land-Cover Mapping
- Image Classification & Change Detection
- Environmental & Habitat Mapping
- Coastal & Wetland Geospatial Analysis
- Drone/UAV Applications
- Digital Mapping & Spatial Visualisation
- Geospatial Decision Support



Experiential Learning

Coastal Change • Mangrove Mapping • Habitat Mapping • Wetland Assessment • Environmental Risk Mapping



You Will Learn To

- Build professional thematic maps
- Analyse satellite imagery
- Conduct spatial investigations
- Integrate GIS, RS & field data

Career Horizon

GIS Analyst | Remote Sensing | Drone Technology | Environmental Consulting | Conservation | Geospatial Research

BIO-TEXTILE INNOVATION

From Bio-Resources to Future Fabrics

Biofibres • Biomaterials • Natural Dyes • Biofabrication • Circular Economy



INTERNSHIP SNAPSHOT

Explore how plant, agricultural and marine bio-resources can be transformed into innovative, sustainable textile materials through practical experiments and product development.



KEY LEARNING AREAS

- Biofibre Extraction - Banana, pineapple, coconut & plant fibres
- Marine Biomaterials - Seaweed, algae, shell & fishery by-products
- Natural Dyes - Plant & biological sources
- Biomedical Development - Biofilms, biocomposites & bio-leather alternatives
- Emerging Biofabrication - Mycelium & bacterial cellulose
- Circular Textile Innovation - Converting biological waste into value-added products



HANDS-ON PROJECT



Bio-Object → Bio-Material → Textile Prototype

Students develop and present an innovative bio-textile material or prototype using a selected biological resource.



SUITABLE FOR

Biotechnology | Marine Biology | Microbiology | Zoology | Textile Technology | Fashion Design | Environmental Science | Chemistry | Life Sciences



TAKEAWAY



Certificate



Practical
Experience



Project
Portfolio



Innovation
Skills

MARINE BIOTECHNOLOGY & BIOINNOVATION

Discover Nature's Next Generation of Solutions

Marine Life → Molecules → Innovation

Programme Snapshot

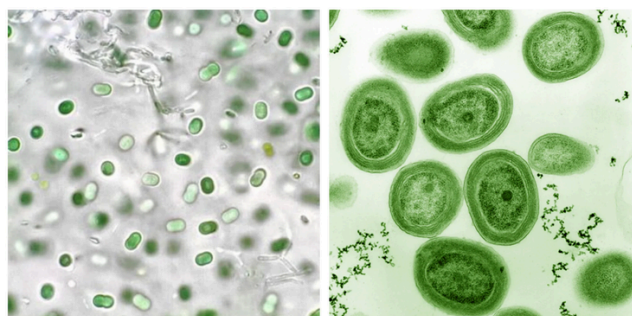
Enter the exciting world of marine-derived bioinnovation. Explore how algae, microorganisms, invertebrates and other marine resources are inspiring breakthroughs in pharmaceuticals, nutraceuticals, biomaterials, environmental biotechnology and sustainable industries.

Experiential Learning

Laboratory Exposure | Sample Observation | Culture Techniques | Bioactive Screening Concepts | Research Case Studies

Career Horizon

Marine Biotechnology | Microbiology | Biochemistry | Pharma R&D | Food Biotechnology | Bioinnovation



Marine cyanobacteria

Key Learning Domains

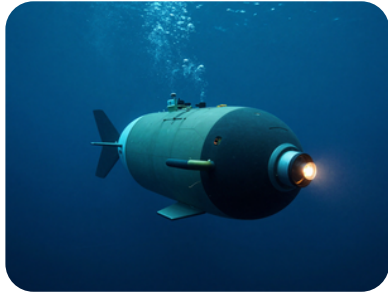
- Marine Biotechnology Fundamentals
- Marine Microbiology
- Algal & Microalgal Biotechnology
- Marine Natural Products
- Bioactive Compounds
- Marine Enzymes & Biomolecules
- Aquaculture Biotechnology
- Marine Biomaterials
- Bioremediation
- Pharmaceutical & Nutraceutical Applications
- Sustainable Bioprospecting
- Bioinnovation & Entrepreneurship

Innovation Themes

Marine Algae • Bioactive Molecules • Bioremediation • Biomaterials • Nutraceuticals

You Will Learn To

- Explore marine bioresources
- Understand biotechnology workflows
- Identify research opportunities
- Translate biological resources into innovation



Marine Ecosystems & Ocean Exploration



Coral Reef Ecology • Deep-Sea Science • Biodiversity • Ocean Technology

Programme Snapshot

This integrated programme provides a structured introduction to coral reef ecosystems, marine biodiversity, deep-sea environments and modern ocean exploration. The programme combines marine ecology, biodiversity assessment, ecosystem processes, climate impacts, deep-sea adaptations and oceanographic technologies to develop a broad foundation in contemporary marine ecosystem research.



Key Learning Domains

- Coral Biology and Reef Ecology
- Climate Change and Marine Ecosystems
- Deep-Ocean Zones and Processes
- ROVs and AUVs
- Underwater Imaging
- Oceanographic Instruments
- Seafloor Mapping
- Oceanographic Data Interpretation
- Technologies for Deep-Sea Research

You Will Learn To

- Interpret reef ecosystems
- Document marine biodiversity
- Recognise reef-health indicators
- Develop marine research questions



Experiential Learning

Reef Observation | Biodiversity Documentation | Ecosystem Assessment | Conservation Case Studies | Field Research

Research Themes

Reef Health | Coral Bleaching | Marine Biodiversity | Deep-Sea Ecology | Climate Change | Marine Pollution | Ocean Technology | Conservation

Career Horizon

Marine Biology | Oceanography | Marine Ecology | Deep-Sea Research | Conservation | Marine Technology | Ocean Exploration





Your Internship Journey



Apply Online



Orientation

Meet mentors and fellow interns



Field Training

Hands-on coastal and marine fieldwork



Research Projects

Contribute to real conservation efforts



Certification

Receive your REEF certificate





Get In Touch



Ready to start your marine conservation journey?



Scan to apply or visit
reefeducation.org/internship

APPLY NOW



EMAIL

reefedu2024@gmail.com
info@reefeducation.org



PHONE

+91 98948 76613
+91 95004 76613
+91 63830 33935
+91 75399 55217



ADDRESS

REEF OFFICE, 1ST FLOOR
MCC MRF Innovation Park
Madras Christian College
East Tambaram
Chennai - 600059, Tamil
Nadu, India

