

Training Course on Blue Carbon

Professional Development Training Course Outline

Category	Blue economy	Duration	10 Days
Base Fee	\$3,000 USD	Delivery Mode	Online / On-site Hybrid

Course Introduction

As the world grapples with the urgent need to mitigate climate change and achieve sustainability goals, **Blue Carbon** has emerged as a powerful solution. Blue carbon refers to the carbon captured by oceanic and coastal ecosystems such as **mangroves, seagrasses, and salt marshes**. These natural carbon sinks are increasingly recognized for their unparalleled ability to **sequester carbon, protect biodiversity, enhance climate resilience**, and sustain livelihoods. This training course aims to equip participants with comprehensive knowledge and practical skills in blue carbon science, policy, and project implementation.

This course provides a deep dive into the **ecosystem services** provided by blue carbon habitats, focusing on their **economic valuation, monitoring techniques, carbon credit systems**, and integration into **climate finance and carbon markets**. Participants will learn from case studies, hands-on tools, and global frameworks to unlock the potential of coastal ecosystems for **climate adaptation, carbon offsetting, and sustainable blue economy development**.

Programme Curriculum

Training Course on Blue Carbon

Introduction

As the world grapples with the urgent need to mitigate climate change and achieve sustainability goals, **Blue Carbon** has emerged as a powerful solution. Blue carbon refers to the carbon captured by oceanic and coastal ecosystems such as **mangroves, seagrasses, and salt marshes**. These natural carbon sinks are increasingly recognized for their unparalleled ability to **sequester carbon, protect biodiversity, enhance climate resilience**, and sustain livelihoods. This training course aims to equip participants with comprehensive knowledge and practical skills in blue carbon science, policy, and project implementation.

This course provides a deep dive into the **ecosystem services** provided by blue carbon habitats, focusing on their **economic valuation, monitoring techniques, carbon credit systems**, and integration into **climate finance and carbon markets**. Participants will learn from case studies, hands-on tools, and global frameworks to unlock the potential of coastal ecosystems for **climate adaptation, carbon offsetting, and sustainable blue economy development**.

Course Duration

10 days

Course Objectives

1. Understand the fundamentals of **Blue Carbon ecosystems** and their global importance.
2. Explore the role of blue carbon in **climate change mitigation and adaptation**.
3. Analyze global and regional **blue carbon policies and frameworks**.
4. Learn **carbon accounting and quantification methods** for coastal ecosystems.
5. Develop skills to design **Blue Carbon projects** aligned with **carbon market mechanisms**.
6. Understand **MRV (Monitoring, Reporting, and Verification)** systems for blue carbon credits.
7. Explore **ecosystem restoration** techniques for mangroves and seagrasses.
8. Examine financing options through **climate funds and carbon trading platforms**.
9. Evaluate **economic benefits and co-benefits** of blue carbon initiatives.
10. Study real-world case studies and **community-based conservation models**.
11. Build strategies for integrating **blue carbon into NDCs** and national policies.
12. Understand **stakeholder engagement and participatory planning** in coastal areas.
13. Learn how to leverage **GIS, remote sensing, and satellite data** for blue carbon assessment.

Organizational Benefits

- Position your organization as a leader in **climate-smart blue economy initiatives**.
- Enhance staff capacity in **sustainable marine resource management**.
- Access to global networks and emerging **carbon finance opportunities**.
- Improved ability to contribute to **SDGs**, especially Goals 13, 14, and 15.
- Generate new income streams through **verified carbon offsets and credits**.
- Strengthen your ESG (Environmental, Social, Governance) and CSR programs.

Target Participants

1. Environmental Scientists & Marine Biologists
2. Climate Change Officers and Sustainability Experts
3. Policy Makers and Government Officials
4. Conservation NGO Professionals
5. Coastal Project Planners and Developers
6. Finance and Carbon Market Consultants
7. University Researchers and Graduate Students
8. CSR and ESG Managers from Corporates

Course Outline

Module 1: Introduction to Blue Carbon

- Definition and importance
- Ecosystem types: Mangroves, Seagrasses, Salt Marshes

- Global significance in carbon mitigation
- Blue carbon vs terrestrial carbon
- Global case studies

Module 2: Climate Science and Coastal Carbon Sinks

- Climate change overview
- Role of oceanic ecosystems
- Carbon cycle in coastal zones
- Ocean acidification
- Blue carbon in IPCC reports

Module 3: Coastal Ecosystem Services

- Biodiversity benefits
- Livelihood support
- Shoreline protection
- Water filtration
- Ecosystem valuation

Module 4: Policy & Legal Frameworks

- UNFCCC and Paris Agreement
- National Determined Contributions (NDCs)
- Ramsar and other conventions
- Legal recognition of blue carbon
- Marine spatial planning

Module 5: Blue Carbon Accounting & Measurement

- Baseline data collection
- Biomass and sediment sampling
- MRV frameworks
- Standard protocols (IPCC, VERRA)
- Field vs remote methods

Module 6: Remote Sensing & GIS in Blue Carbon

- Satellite data sources
- Mapping tools and software
- Data interpretation
- Geospatial analysis
- Applications in project planning

Module 7: Carbon Markets & Credit Systems

- Voluntary and compliance markets
- Carbon trading platforms
- Offset project cycle
- Blue carbon certification
- Credit pricing models

Module 8: Financing Blue Carbon

- Climate finance architecture
- Green Climate Fund (GCF)
- Innovative financing models
- Public-private partnerships
- Investment case for blue carbon

Module 9: Mangrove Ecosystem Restoration

- Restoration techniques
- Site selection and preparation
- Community involvement
- Monitoring success
- Long-term sustainability

Module 10: Seagrass and Salt Marsh Conservation

- Species identification
- Ecological functions
- Threats and pressures
- Conservation best practices
- Restoration case studies

Module 11: Community-Based Blue Carbon Projects

- Participatory approaches
- Gender and social inclusion
- Traditional knowledge integration
- Co-management models
- Community benefits

Module 12: Integrating Blue Carbon into National Planning

- Policy entry points
- Alignment with NDCs
- Cross-sector collaboration
- Capacity building strategies
- Institutional frameworks

Module 13: Private Sector Engagement

- ESG alignment
- CSR blue initiatives
- Corporate partnerships
- Investment opportunities
- Risk management

Module 14: Monitoring, Evaluation & Reporting

- KPI development
- Impact tracking
- Data collection methods
- Feedback loops
- Adaptive management

Module 15: Capstone Project & Action Planning

- Group project design
- Real-world scenario simulation
- Strategic action plans
- Presentation & peer feedback
- Certification assessment

Training Methodology

- Expert-led live sessions
- Interactive workshops and group tasks
- Practical case studies and simulations
- GIS lab demonstrations
- Capstone project and evaluation
- Digital tools and templates
- Peer-to-peer learning
- Certificate of completion

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

- a. The participant must be conversant with English.
- b. Upon completion of training the participant will be issued with an Authorized Training Certificate
- c. Course duration is flexible and the contents can be modified to fit any number of days.
- d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.
- e. One-year post-training support Consultation and Coaching provided after the course.
- f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
21 Sep 2026	02 Oct 2026	Online	\$2,000
21 Sep 2026	02 Oct 2026	Physical	\$3,000
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0
21 Sep 2026	02 Oct 2026	Physical	\$0

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com