Integrated Strategies for Biodiversity and Ecosystem Restoration Training Course



14 - 18 Dec 2026

Cape town

4600 € (Per Person)

Ref: #ENV8170_266892

Course Introduction / Overview:

This training course is designed to equip professionals with the knowledge and practical skills needed to address the intertwined crises of biodiversity loss and ecosystem degradation. The health of our planet depends on resilient ecosystems, and this program goes beyond simple conservation to focus on proactive restoration. Offered by BIG BEN Training Center, this course provides a holistic framework for understanding, planning, and implementing effective restoration projects. We will explore the scientific principles that underpin both biodiversity conservation and ecosystem restoration, from the genetic level to entire landscapes. The curriculum is informed by leading academic work in the field, including the book Restoring Ecological Health to Your Land by Steven Apfelbaum and others, which provides practical guidance on how to plan and implement on-the-ground restoration projects. This course is for anyone who wants to translate ecological theory into real-world action. We will guide you through the process of assessing a site, setting realistic goals, choosing appropriate restoration techniques, and monitoring success to ensure lasting positive change.

Target Audience / This training course is suitable for:

- Environmental managers and consultants.
- Biologists and ecologists.
- Land use planners and landscape architects.
- Government officials in environmental agencies.
- Forestry and agriculture professionals.
- Non-profit and NGO personnel.
- Project managers in development.
- Government agencies and equivalents.

Target Sectors and Industries:

- Environmental consulting and services.
- Conservation organizations.
- Government and public administration agencies.
- Forestry and natural resources.
- Urban and regional planning.
- Sustainable development.
- Land management.
- Agriculture.

Target Organizations Departments:

- Environmental affairs and planning.
- Conservation and natural resource management.
- Corporate social responsibility (CSR).
- Operations and field management.
- Research and development.
- Sustainability.
- Strategic planning.
- Project management.

Course Offerings:

By the end of this course, the participants will have able to:

- Assess the causes of biodiversity loss and ecosystem degradation.
- Design and implement a comprehensive ecosystem restoration plan.
- Apply ecological principles to real-world conservation projects.
- Develop strategies for restoring specific habitats like forests and wetlands.
- Manage and control invasive species as part of a restoration effort.
- Monitor and evaluate the success of restoration initiatives.
- Engage and collaborate with local communities and stakeholders.
- Ensure projects comply with international conservation frameworks.

Course Methodology:

This training course uses a project-based and hands-on methodology. The program is built around a series of case studies and practical exercises that require participants to work through a restoration scenario from start to finish. We go beyond lectures by having participants use tools for habitat assessment, design a restoration plan for a degraded area, and create a monitoring protocol. The curriculum is highly interactive, with dedicated time for group work and peer feedback. Our trainers, experts in the field, provide personalized guidance and support throughout the program. BIG BEN Training Center is committed to providing a learning environment that is both intellectually rigorous and directly applicable to professional practice, ensuring that participants leave with the skills and confidence to lead effective biodiversity and ecosystem restoration projects. This approach ensures that the knowledge gained is not just theoretical but a powerful tool for positive environmental change.

Course Agenda (Course Units):

Unit One: Understanding Biodiversity Loss and Ecosystem Function

- Introduction to biodiversity conservation.
- The causes of biodiversity loss.
- Ecosystem functions and services.
- Principles of ecological restoration.
- The UN Decade on Ecosystem Restoration.
- Global and national conservation frameworks.
- The role of human action in degradation and recovery.

Unit Two: Restoration Planning and Site Assessment

- Conducting a site assessment and baseline study.
- Identifying drivers of degradation.
- Setting restoration goals and objectives.
- Developing a detailed restoration plan.
- Stakeholder analysis and community engagement.
- Selecting appropriate restoration techniques.
- The role of genetics in restoration.

Unit Three: Restoration of Key Ecosystems

- Forest restoration and afforestation.
- Wetland and aquatic ecosystem restoration.
- Grassland and dryland restoration.
- Restoration of urban and peri-urban landscapes.
- Soil restoration and soil health.
- Managing invasive species.
- Reintroduction of native species.

Unit Four: Monitoring and Adaptive Management

- Designing a monitoring plan.
- Selecting indicators of success.
- Data collection methods and tools.
- Analyzing monitoring data.
- The principles of adaptive management.
- Documenting and reporting restoration outcomes.
- Long-term project sustainability.

Unit Five: Policy, Finance, and the Future of Restoration

- The policy and legal framework for restoration.
- Financing restoration projects.
- Measuring the economic value of restored ecosystems.
- Community-based conservation and restoration.
- Case studies of successful projects.
- Career opportunities in restoration.
- The future of biodiversity and restoration.

FAQ:

Qualifications required for registering to this course?

There are no requirements.

How long is each daily session, and what is the total number of training hours for the course?

This training course spans five days, with daily sessions ranging between 4 to 5 hours, including breaks and interactive activities, bringing the total duration to 20 - 25 training hours.

Something to think about:

How can we move beyond viewing ecosystem restoration as a reactive measure to a proactive strategy that is integral to land use and economic planning?

What unique qualities does this course offer compared to other courses?

This training course stands apart because it offers an integrated approach that covers both the science and the practical implementation of biodiversity and ecosystem restoration. While many programs focus on either conservation or restoration, our curriculum shows how these two fields are deeply connected. The course is not just about theory; it's a hands-on experience where participants will use and apply planning tools and techniques to real-world scenarios. We emphasize the strategic aspects of project management, from engaging communities to securing funding, ensuring that participants have a comprehensive skill set. This course is designed for professionals who want to lead initiatives that create lasting environmental changes, helping them transform degraded landscapes into healthy, thriving ecosystems.