Sustainable Urban Planning and Environmental Design Training Course

21 - 25 Dec 2026

Madrid

5900 € (Per Person)

Ref: #ENV7159_102513

Course Introduction / Overview:

In an era of rapid urbanization and escalating climate challenges, the integration of environmental principles into urban planning is no longer an option but a necessity. This course provides a comprehensive framework for understanding and implementing sustainable urban development strategies. Drawing upon foundational concepts from pioneers like Ian McHarg, whose seminal work "Design with Nature" revolutionized the field, this program bridges the gap between ecological science and urban design. Participants will explore the intricate relationships between urban systems and the natural environment, learning to create cities that are not only economically vibrant but also resilient, equitable, and ecologically sound. This BIG BEN Training Center course is meticulously designed to equip professionals with the practical tools and strategic foresight needed to lead the transition towards sustainable urban futures. We will delve into critical topics such as green infrastructure, climate-adaptive urbanism, strategic environmental assessment, and community engagement, ensuring a holistic and actionable learning experience from A to Z. The curriculum moves beyond theoretical discussions to offer tangible solutions for today's complex urban environmental challenges, preparing participants to make a significant impact in their respective fields.

Target Audience / This training course is suitable for:

- Urban Planners and City Managers.
- Environmental Consultants and Specialists.
- Architects and Landscape Architects.
- Civil Engineers and Infrastructure Project Managers.
- Real Estate Developers and Investors.
- Government Officials and Public Policy Makers.
- Sustainability Officers and CSR Managers.
- Community Development Professionals.
- Researchers and Academics in Urban Studies.

Target Sectors and Industries:

- Government and Public Administration.
- Real Estate Development and Construction.
- Urban Planning and Architectural Services.
- Environmental Consulting and Management.
- Infrastructure and Utilities.
- Transportation and Logistics.
- Non-Profit and Non-Governmental Organizations.
- International Development Agencies.

Target Organizations Departments:

- Planning and Development.
- Environmental Management and Compliance.
- Sustainability and Corporate Social Responsibility (CSR).
- Public Works and Engineering.
- Policy and Regulation.
- Strategic Planning.
- Capital Projects and Infrastructure Management.
- Urban Design and Architecture.

Course Offerings:

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

- Integrate principles of sustainable development into urban planning projects.
- Apply tools like Strategic Environmental Assessment (SEA) to inform decision-making.
- Design and implement green infrastructure and nature-based solutions.
- Develop strategies for enhancing urban resilience to climate change.
- Analyze the environmental impact of urban development proposals.
- Formulate policies that promote sustainable land use and transportation.
- Engage stakeholders effectively in the environmental planning process.
- Evaluate the performance of sustainable urban initiatives using key metrics.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, interactive, and highly practical. We believe that adult learning is most effective when it connects theory to real-world application. Therefore, this course moves beyond traditional lectures to foster a dynamic learning environment. Participants will engage in a series of in-depth case study analyses of cities that have successfully implemented sustainable planning, such as Freiburg, Germany, and Curitiba, Brazil. A significant portion of the training will be dedicated to collaborative workshops and group exercises, where teams will work on simulated urban development projects, applying concepts like green infrastructure design and climate risk assessment. Interactive sessions, facilitated discussions, and peer-to-peer feedback are central to our approach, encouraging the exchange of diverse perspectives and experiences. Role-playing scenarios will be used to simulate stakeholder negotiations and policy-making processes, honing participants' communication and strategic thinking skills. Our expert instructors provide continuous guidance and constructive feedback, ensuring that each participant can translate the learned concepts into actionable strategies relevant to their professional context.

Course Agenda (Course Units):

Unit One: Foundations of Sustainable Urban and Environmental Planning

- Introduction to Sustainable Development Goals (SDGs) in an urban context.
- Historical evolution of environmental planning and urban design.
- The urban ecosystem concept and systems thinking.
- Principles of urban ecology and landscape urbanism.
- The social, economic, and environmental dimensions of sustainability.
- Key theories and thinkers in environmental design, including Ian McHarg.
- Global trends in urbanization and their environmental implications.

Unit Two: Strategic Environmental Assessment and Impact Analysis

- Introduction to Environmental Impact Assessment (EIA) for urban projects.
- Principles and process of Strategic Environmental Assessment (SEA) for plans and policies.
- Methods for baseline data collection and environmental analysis.
- Techniques for predicting and evaluating environmental impacts.
- The role of Geographic Information Systems (GIS) in environmental planning.
- Cumulative effects assessment in urban regions.
- Mitigation hierarchies and enhancement strategies in project design.

Unit three: Green Infrastructure and Nature-Based Solutions

- Defining green and blue infrastructure for urban areas.
- Designing urban parks, greenways, and ecological corridors.
- Implementing green roofs, living walls, and urban forestry programs.
- Sustainable Urban Drainage Systems (SuDS) for stormwater management.
- The role of nature-based solutions in enhancing biodiversity and human well-being.
- Integrating green infrastructure into existing urban fabrics.
- Calculating the co-benefits of green infrastructure investments.

Unit Four: Climate Resilience and Sustainable Resource Management

- Understanding urban vulnerability and climate change adaptation.
- Developing climate-resilient infrastructure and urban forms.
- Strategies for sustainable urban energy systems and conservation.
- Integrated water resource management in cities.
- Principles of circular economy and sustainable waste management.
- Promoting sustainable transportation and low-carbon mobility.
- Planning for food security through urban agriculture.

Unit Five: Governance, Policy, and Community Engagement

- The role of policy and regulation in driving sustainable urban development.
- Frameworks for multi-level governance and institutional collaboration.
- Techniques for effective public participation and stakeholder engagement.
- Financing mechanisms for sustainable urban projects.
- Monitoring and evaluating the performance of sustainability plans.
- Exploring concepts of environmental justice and social equity in planning.
- Developing a strategic action plan for a sustainable urban initiative.

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 cities effectively balance the urgent need for economic development and housing with the long-term imperative of environmental preservation and ecological justice?

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

This course distinguishes itself through its holistic and strategic approach, moving beyond a narrow focus on technical tools to cultivate a deep understanding of the integrated nature of urban environmental systems. Unlike programs that may treat planning, ecology, and policy as separate disciplines, we emphasize the synthesis of these fields. The curriculum is built around a "systems thinking" framework, enabling participants to analyze the complex feedback loops between urban development, climate resilience, and social equity. A key differentiator is our strong emphasis on the practical application of Strategic Environmental Assessment (SEA) at the policy and plan level, rather than just project-specific Environmental Impact Assessment (EIA), empowering participants to influence development outcomes at a much earlier and more impactful stage. Furthermore, the course content is enriched with contemporary case studies that showcase both successes and failures in global urban planning, providing nuanced and critical insights. We focus on building leadership and governance skills, preparing participants not just to design sustainable projects but to champion, finance, and implement them within complex institutional and political landscapes.