Green IT and Sustainable Digital Transformation Training Course



14 - 18 Dec 2026

Cape town

4600 € (Per Person)

Ref: #DT9878_273468

Course Introduction / Overview:

This course provides a comprehensive exploration of Green IT and its critical role in achieving sustainable digital transformation. In an era where environmental, social, and governance (ESG) criteria are paramount, organizations must align their technological advancements with sustainability goals. This program is designed to equip professionals with the knowledge and strategies to reduce the environmental footprint of IT operations while leveraging technology to drive broader sustainability initiatives. We will delve into the principles articulated by pioneers like San Murugesan, exploring concepts from foundational texts such as "Harnessing Green IT: Principles and Practices". Participants will learn to navigate the entire IT lifecycle, from green procurement and energy-efficient data centers to responsible e-waste management and sustainable software development. BIG BEN Training Center has developed this course to bridge the gap between technological innovation and corporate responsibility, enabling leaders to build resilient, efficient, and environmentally conscious digital infrastructures that create long-term value for their organizations and society.

Target Audience / This training course is suitable for:

- IT Managers and Directors.
- Chief Information Officers (CIOs) and Chief Technology Officers (CTOs).
- Sustainability and Corporate Social Responsibility (CSR) Officers.
- Operations Managers and Business Leaders.
- Project and Program Managers overseeing digital transformation.
- Procurement and Supply Chain Managers.
- IT Infrastructure and Data Center Professionals.
- Corporate Strategists and Planners.
- Environmental Compliance and ESG Specialists.

Target Sectors and Industries:

- Information Technology and Telecommunications.
- Banking, Finance, and Insurance Services.
- Manufacturing and Industrial Production.
- Healthcare and Pharmaceuticals.
- Retail and Consumer Goods.
- Energy and Utilities.
- Government Agencies and Public Sector Organizations.
- Consulting and Professional Services.
- Logistics and Transportation.

Target Organizations Departments:

- Information Technology (IT) Department.
- Sustainability and Corporate Responsibility Department.
- Operations and Facilities Management.
- Strategic Planning and Business Development.
- Procurement and Sourcing Department.
- Research and Development (R&D).
- Finance and Asset Management.
- Compliance and Risk Management.

Course Offerings:

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

- Develop a comprehensive Green IT strategy aligned with organizational goals.
- Assess and measure the carbon footprint of IT infrastructure and operations.
- Implement energy-efficient practices in data centers and cloud computing environments.
- Establish green procurement policies for hardware and software acquisition.
- Manage the entire IT asset lifecycle to promote a circular economy.
- Design and promote sustainable software engineering and green coding practices.
- Integrate sustainability metrics into digital transformation project scorecards.
- Navigate the evolving landscape of environmental regulations affecting technology.
- Foster a culture of sustainability within the IT department and the wider organization.
- Report on IT sustainability performance using established frameworks and KPIs.

Course Methodology:

The training methodology at BIG BEN Training Center is designed to be immersive, practical, and highly interactive, ensuring that participants can translate theoretical knowledge into actionable strategies. This course moves beyond traditional lectures by incorporating a dynamic blend of expert-led presentations, in-depth case study analyses of leading global companies, and collaborative group workshops. Participants will engage in hands-on exercises, such as calculating the carbon footprint of a sample IT department and developing a draft Green IT policy. Team-based activities will encourage peer-to-peer learning and the exchange of diverse industry perspectives. Interactive Q&A sessions, facilitated discussions, and problem-solving scenarios will be central to each module. We emphasize a continuous feedback loop, allowing participants to apply concepts to their own organizational contexts and receive expert guidance. The program culminates in the development of a strategic roadmap, providing a tangible takeaway that can be implemented immediately upon returning to the workplace.

Course Agenda (Course Units):

Unit One: Foundations of Green IT and Sustainable Digitalization

- The imperative for Green IT in the modern enterprise.
- Defining sustainable digital transformation and its business drivers.
- The link between IT, ESG goals, and corporate responsibility.
- Key frameworks and standards for IT sustainability.
- Assessing the environmental impact of current IT operations.
- The economic case for Green IT: ROI and long-term value.
- Global trends and regulatory pressures in sustainable technology.

Unit Two: Sustainable IT Infrastructure and Energy Efficiency

- Designing and managing green data centers.
- Metrics for energy efficiency: Power Usage Effectiveness (PUE) and beyond.
- Strategies for energy-efficient computing and networking hardware.
- The role of virtualization and server consolidation.
- Sustainable cloud computing: choosing providers and optimizing workloads.
- Implementing smart cooling and power management solutions.
- Renewable energy integration for IT infrastructure.

Unit Three: The Circular Economy and IT Asset Lifecycle Management

- Principles of the circular economy for electronics.
- Developing a green procurement strategy for IT assets.
- Extending the lifecycle of hardware through maintenance and upgrades.
- Sustainable software procurement and licensing models.
- IT Asset Disposition (ITAD) and secure data destruction.
- Responsible e-waste management, recycling, and refurbishment.
- Supplier engagement and building a sustainable supply chain.

Unit Four: Green Software and Sustainable Digital Services

- Introduction to sustainable software engineering principles.
- Green coding practices for energy-efficient applications.
- The environmental impact of AI, Big Data, and IoT.
- Eco-design for digital products and user experiences.
- Measuring the carbon footprint of software and digital services.
- Aligning software development lifecycles (SDLC) with sustainability goals.
- Case studies of sustainable digital innovation.

Unit Five: Strategy, Governance, and Future-Forward Green IT

- Developing a holistic Green IT strategic roadmap.
- Establishing governance structures and accountability for IT sustainability.
- Creating a culture of environmental responsibility within technology teams.
- Key Performance Indicators (KPIs) for tracking Green IT initiatives.
- Communicating and reporting on sustainability performance to stakeholders.
- Future trends: digital decarbonization, climate-positive IT, and beyond.
- Capstone workshop: building a Green IT action plan for your organization.

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:

Beyond cost savings and compliance, how can a robust Green IT strategy become a core driver of innovation and competitive advantage in a digitally-driven economy?

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

This course distinguishes itself by offering a holistic and strategic perspective that transcends purely technical IT management. While many programs focus narrowly on data center efficiency or e-waste, this curriculum integrates Green IT into the broader context of sustainable digital transformation and corporate strategy. We emphasize the critical link between technological decisions and overarching business objectives, including ESG performance, brand reputation, and long-term value creation. The content is uniquely structured to cover the entire IT ecosystem, from infrastructure and hardware lifecycles to the often-overlooked environmental impact of software and digital services. Participants will not only learn the "what" and "how" of Green IT practices but also the "why," gaining the skills to build compelling business cases and lead cultural change within their organizations. By focusing on practical roadmap development and governance frameworks rather than just isolated tactics, the course equips leaders to implement enduring and impactful sustainability initiatives that drive both environmental responsibility and competitive advantage.