

Training For IT Leaders

Strategizing, Designing & Optimizing Green Computing Technologies



Course Code: SDOGCT

Course Overview: This engaging hands-on workshop (ISO/IEC 2382-36:2008 Compliant) focuses on the Strategy, Design and Continual Improvement phases of the GCI Process Life-cycle. Delegates will be led step-by-step through all the processes and functions that lead to a properly designed green computing initiative. This course leads to the [Certified Green Computing Architect](#) certification.

Course Objectives: At the end of the workshop, delegates will have learned all the strategy and design issues needed to achieve their organizations' green computing objectives. Delegates will gain the knowledge on how to develop their Green IT Policy, put together an action list to identify their organizations Green IT requirements, and how to address them.

Length: 3 Days

Language: English

Audience(s): This course is intended for IT managers, IT architects, consultants, system integrators, vendors, systems engineers and network specialists who are responsible for establishing green computing policies and procedures for an organization.

Delivery Method: Instructor-led (classroom)

Courseware: Printed GCI Official Training Guide with DVD

Pre-requisites: 1 to 3 years in designing or deploying IT systems

Course Outline:

Module 1 - Introduction to Green Computing

1.1. Definition

1.2. Objectives

- 1.3. Common Terminology
- 1.4. Statistics
- 1.5. Review

Module 2 - Introduction to the Green Computing Lifecycle (GCL)

- 2.1. Mapping the Concepts of Green Computing To the GCL
- 2.2. How Does The GCL Work?
- 2.3. Review

Module 3 - The Green Computing Strategy Phase

- 3.1. Strategy Objectives
- 3.2. Strategy Processes
- 3.3. Strategy Functions
- 3.4. Strategy Net Tangible Outputs
- 3.5. Review

Module 4 - The Green Computing Design Phase

- 4.1. Design Objectives
- 4.2. Design Processes
- 4.3. Design Functions
- 4.4. Design Net Tangible Outputs
- 4.5. Review

Module 5 - The Green Computing Implementation Phase

- 5.1. Implementation Objectives
- 5.2. Implementation Processes
- 5.3. Implementation Functions
- 5.4. Implementation Net Tangible Outputs
- 5.5. Review

Module 6 - The Green Computing Operations Phase

- 6.1. Operations Objectives
- 6.2. Operations Processes
- 6.3. Operations Functions
- 6.4. Operations Net Tangible Outputs
- 6.5. Review

Module 7 - The Green Computing Continual Improvement Phase

- 7.1. Operations Objectives
- 7.2. Operations Processes
- 7.3. Operations Functions
- 7.4. Operations Net Tangible Outputs
- 7.5. Review

Module 8 - Green Computing Technologies Primer

- 8.1. Data Center Energy Efficiency
- 8.2. Virtualization Techniques
- 8.3. Grid Computing
- 8.4. Cloud Computing

- 8.4.1. Software as a Service (SaaS)
- 8.4.2. Infrastructure as a Service (IaaS)
- 8.4.3. Platform as a Service (PaaS)
- 8.5. Power Optimization Techniques
- 8.6. Review

Module 9 - Green Computing Standards & Legislation

- 9.1. ISO 14001
- 9.2. ISO 50001
- 9.3. Energy Star
- 9.4. EPEAT
- 9.5. Kyoto Protocol
- 9.6. Review

Module 10 - Strategizing, Designing & Optimizing Data Center Energy Efficiency

- 10.1. Designing a DCEE Strategy for Existing Data Centers
- 10.2. Designing a DCEE Strategy for New Data Centers

Module 11 - Strategizing, Designing & Optimizing Virtualization Techniques

- 11.1. Developing a VT Strategic Plan
- 11.2. Designing a VT Infrastructure Plan

Module 12 - Strategizing, Designing & Optimizing Grid Computing

- 12.1. Developing a GC Strategic Plan
- 12.2. Designing a GC Infrastructure Plan
- 12.3. Planning a GC Optimization Policy

Module 13 - Strategizing, Designing & Optimizing Cloud Computing

- 13.1. Developing a CC Strategic Plan
- 13.2. Designing a CC Infrastructure Plan
- 13.3. Planning a CC Optimization Policy

Module 14 - Strategizing, Designing & Optimizing Power Optimization

- 14.1. Developing a PO Strategic Plan
- 14.2. Designing a PO Infrastructure Plan
- 14.3. Planning a PO Optimization Policy

