

CSE420 GREEN COMPUTING

L T P C
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Version No.

Course

**Prerequisite/
Exposure:**

Objective

To help students to know a survey to gauge the impact of computing resources on environment and to devise new framework to reduce or possibly to eliminate the environmental issues caused by computing.

Expected Outcome

On completion of subject the students will be able to apply

1. The concept of Business impact of green computing and green computing implementation
 2. The concept of Grid Green computing, development organization in green computing and Green Electronics Council
 3. The concept of Green Grid Framework and Green Computing Strategic Initiative
 4. Green Information Technology, Organization Performance through Green Computing and Process Organization
 5. The concept of Green Computing for Organization

9 hours

The Role of Computer Consultants in Propagating Green Computing- The Business Impact of Green Computing -Impact Information Technology:- Green Computing Making Great Impact on Research-Adapting to Change in an Organization-Implementing Green Computing that Impact Leadership in the Organization

Unit No. II **GREEN COMPUTING ENVIRONMENT**

9 hours

The Globus Toolkit to Efficiently Build a Grid-Green Computing: An Effective Project Initiative-Understanding the Global Grid Forum- Green Computing Impact Development-The Rise of the Global Village- Important Roles of a Development Organization in Green Computing- Adopting a Green Data Center-Green Business- Green Computers Initiatives- Green Computing : Impact Organization Overview- Green Electronics Council

Unit No. III **GREEN COMPUTING PLATFORMS**

9 hours

The Green Grid Framework- Green Computing Initiative Platforms- The Green Grid Consortium- Green Computer Power - Organization Information Systems for Green Computing- Green Computing for Environmental Impact Management- Tips for Green Computing Strategic Initiative- Green Computing: Tips for Strategic Planning Organization

Unit No. IV GREEN COMPUTING AND ITS PERFORMANCE 9 hours

Green Computing Strategy Initiative - Green Information Technology - Knowledge Management Organization in Green Computing- Improving Organization Performance through Green Computing- Process Organization: Better Workflow Equals Better Efficiency

Unit No. V MANAGING GREEN COMPUTING IN AN ORGANIZATION 9 hours

Green Computing for Organization - Green Computing Organization Research -Green Computing: Climate Change Impact Reduction Strategy- Energy and Resource Management

Text / Reference Books

1. Lawrence Webber, Michael Wallace Green Tech: How to Plan and Implement Sustainable IT Solutions, 1st edition, AMACOM, 2009.
2. Jason Harris, Green Computing and Green IT Best Practices on Regulations and Industry Initiatives, Virtualization, Power Management, Materials Recycling and Telecommuting, 1st edition, Emereo Publisher, 2008.
3. Toby Velte, Anthony Velte, Robert Elsenpeter, Green IT: Reduce Your Information System's Environmental Impact While Adding to the Bottom Line, 1st edition, McGraw-Hill Osborne Media, 2008.

Mode of Evaluation : Tests, Assignments, Seminars

Recommended by the Board of Studies on

Date of Approval by the Academic Council