विका परम देवनम्।

Tolani College of Commerce (Autonomous)

तोलानी वाणिज्य महाविद्यालय (स्वायत्त)

Knowledge is Supreme

(Sponsored and Managed by Tolani Education Society, Mumbai - 400 021) (Recognised Linguistic (Sindhi) Minority Institution, Affiliated to University of Mumbai)

Re-Accredited (3rd Cycle) by N.A.A.C. with 'A' Grade (CGPA 3.03)

150-151, SHER-E-PUNJAB SOCIETY, GURU GOBIND SINGH ROAD, ANDHERI (EAST), MUMBAI-400 093. Tel. : (022) 6153 5455 Fax : (022) 6153 5456 E-mail : tcc@tolani.edu Website : tcc.tolani.edu

Name of the Department/	Bachelor of Science in Information Technology						
Programme							
Name of the Course	Skill Enhancement Courses (SEC): Green Computing						
Semester	I						
Number of Credits	2						
Number of Lectures	30						
Lecture Duration	60 Minutes						
Total Marks:	CE	20	SEE	30	Total	50	

Sr.No.	Objectives
LOC1	To decrease the use of dangerous chemicals, maximize energy efficiency throughout the product's lifecycle.
LOC2	To maximize recyclability or biodegradability of obsolete manufacturing and production garbage.
LOC3	To build, develop, manufacture, use, and dispose of computing systems in a way that has a minimal environmental impact.

Learning Outcomes of the Course

Sr. No.	Outcomes		
CO1	Learn about green assets, modelling and information systems		
602			
CO2	Understand the concept of green compliance		
CO3	Obtain the fundamentals of green computing and its IT strategies		

Tolani College of Commerce (Autonomous)

तोलानी वाणिज्य महाविद्यालय (स्वायत्त)

Knowledge is Supreme

(Sponsored and Managed by Tolani Education Society, Mumbai - 400 021) (Recognised Linguistic (Sindhi) Minority Institution, Affiliated to University of Mumbai)

Re-Accredited (3rd Cycle) by N.A.A.C. with 'A' Grade (CGPA 3.03)

150-151, SHER-E-PUNJAB SOCIETY, GURU GOBIND SINGH ROAD, ANDHERI (EAST), MUMBAI-400 093. Tel. : (022) 6153 5455 Fax : (022) 6153 5456 E-mail : tcc@tolani.edu Website : tcc.tolani.edu

Module. No	Details	No. of Lectures
1	Overview and Issues: Problems: Toxins, Power Consumption, Equipment Disposal, Company's Carbon Footprint: Measuring, Details, reasons to bother, Plan for the Future, Cost Savings: Hardware, Power. Initiatives and Standards: Global Initiatives: United Nations, Basel Action Network, Basel Convention, WEEE Directive, RoHS, National Adoption, Asia: Japan, China, Korea.	10
2	Minimizing Power Usage: Power Problems, Monitoring Power Usage, Servers, Low-CostOptions, Reducing Power Use, Data De-Duplication, Virtualization, Management, Bigger Drives, Involving the Utility Company, Low-Power Computers. Cooling: Cooling Costs, Power Cost, Causes of Cost, Calculating Cooling Needs, Reducing Cooling Costs, Economizers, On-Demand Cooling, HP's Solution, Optimizing Airflow, Hot Aisle/Cold Aisle, Raised Floors, Cable Management, Vapour Seal, Prevent Recirculation of Equipment Exhaust. Going Paperless: Paper Problems, The Environment, Costs: Paper and Office, Practicality, Storage, Destruction, Going Paperless, Organizational Realities, Changing Over, Paperless Billing, Handheld Computers vs. the Clipboard, Unified Communications, Intranets, What to Include, Building an Intranet, Microsoft Office SharePoint Server 2007, Electronic Data Interchange (EDI).	10
3	Recycling: Problems, China, Africa, Materials, Means of Disposal, Recycling, Refurbishing, Make the Decision, Life Cycle, from beginning to end, Life, Cost, Green Design, Recycling Companies, Finding the Best One, Checklist, Certifications, Hard Drive Recycling, cleaning a Hard Drive, Pros and cons of each method, CDs and DVDs, good and bad about CD and DVDs disposal, Change the mind set	10

Tolani College of Commerce (Autonomous)

तोलानी वाणिज्य महाविद्यालय (स्वायत्त)

Knowledge is Supreme

(Sponsored and Managed by Tolani Education Society, Mumbai - 400 021) (Recognised Linguistic (Sindhi) Minority Institution, Affiliated to University of Mumbai)

Re-Accredited (3rd Cycle) by N.A.A.C. with 'A' Grade (CGPA 3.03)

150-151, SHER-E-PUNJAB SOCIETY, GURU GOBIND SINGH ROAD, ANDHERI (EAST), MUMBAI-400 093. Tel. : (022) 6153 5455 Fax : (022) 6153 5456 E-mail : tcc@tolani.edu Website : tcc.tolani.edu

Greening Your Information Systems:

Initial Improvement Calculations, Selecting Metrics, Tracking Progress, Change Business Processes, Customer Interaction, Paper Reduction, Green Supply Chain, Improve Technology Infrastructure, **Staying Green:**

Organizational Check-ups, Chief Green Officer, Evolution, Sell the CEO, SMART Goals, Equipment Check-ups, Gather Data, Tracking the data, Baseline Data, Benchmarking, Analyse Data, Helpful Organizations.

Reference Books:

1) Title: Green IT

Author: Toby Velte, Anthony Velte,

Robert Elsenpeter **Publisher:** McGrawHil

2) Title: Green Computing and Green IT Best Practice

Author: Jason Harris **Publisher:** Emereo