

# RISE WITH EDUCATION

NAAC REACCREDITED - 'A' GRADE

SIES College of Arts, Science and Commerce (Autonomous) Affiliated to University of Mumbai

Syllabus under NEP effective from June 2024

Programme: B.Sc.

Subject: Information Technology

**Vocational Skill Course** 

Class: SYBSc(IT)

Semester : III

Course Name Green Computing

**Choice Based Credit System (CBCS)** with effect from the academic year 2024-25

## Semester III Vocational Skill Course

This Core course is offered to students of BSc(IT) in Semester III, who have chosen Information Technology as Major & Minor subject

Name of Programme: Bachelor of Science Subject: Information Technology						
Class	Semester	Course Code	Course Name	No. of lectures/ practical per week	Credits	Marks
SYBSc(IT)	III	SIUITVS211	Green Computing	1L + 1P	2	50
P (Practical) = 2 Hours per week						

# Course Name: Green Computing Credits: 1 Type: Theory

Expected Course Outcomes	Expected	Course	Outcomes
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On completion of this course, students will be able to

- 1. Explain the importance of Green IT & some issues related to it.
- 2. Illustrate the use of cooling and minimizing power usage.
- 3. Find how to recycle e-waste, reduce paper waste and carbon footprint.
- 4. Describe the importance of the use of environmentally sustainable computers and electronic systems.
- 5. Examine the various global standards and initiatives in green computing.

Unit	Contents	No. of Lectures
Unit I	Green IT Overview, Minimizing Power Usage, Cooling, Changing the Way of Work, Going Paperless, Green Devices and Hardware, Greening Your Information Systems, Staying Green.	15

#### SIES COLLEGE OF ARTS, SCIENCE AND COMMERCE, AUTONOMOUS, SION WEST

## Course Name: Green Computing Credits: 1 Type: Practical

#### **Expected Course Outcomes**

On completion of this course, students will be able to

1. Understand the importance of green IT ,initiate to go paperless, recycle e-waste.

### Practical

Project and Viva Voce

A project should be done based on the objectives and concepts of Green Computing.

The project can be done individually or a group of two students.

The students will have to present the project during the examination.(a working model can be included)

A certified copy of the project report is essential to appear for the examination.

A report of minimum 50 pages should be prepared. The report should have a font size of 12, Times new roman and 1.5 line spacing. The headings should have font size 14. The report should be hard bound.

#### References

- 1. Green IT, by Velte, Anthony Velte, Robert Elsenpeter, McGraw Hill Publication, 2008 Edition
- 2. Green Computing and Green IT Best Practice, by Jason Harris, Emereo Publication, 2008 Edition.
- 3. Green Computing Tools and Techniques for Saving Energy, Money and Resources by Bud E. Smith, CRC Press Publication, 2014 Edition

## **Scheme of Evaluation:**

I) Continuous Internal Evaluation (20 Marks)		
Class Test	20 Marks	
II) Practical Examination (30 Marks)		
Certified Journal	5 marks	
Viva Voce	5 marks	
Practical exam	20 marks	