

AC/24.02.2024/RS1



College of Arts,
Science &
Commerce (Autonomous)

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

Open Elective

Class: Second Year

Semester : III and IV

Course Name

Sem III : Tools for Data Analysis - I

Sem IV : Tools for Data Analysis - II

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

**Semester III
Open Elective**

This Course is offered to students of BSc Biotechnology, BSc Environmental Studies, BA Mass Media and Communication, Bachelor of Management Studies, Bachelor of Management Studies (Capital Market), in Semester III, who have chosen Information Technology as Open Elective subject.

Name of Department: Information Technology						
Class	Semester	Course Code	Course Name	No. of lectures/ practicals per week	Credits	Marks
SYBSc(BT), SYBSc(EVS), SYBAMMC, SYBMS, SYBMS(CM)	III	SIUITOE211	Tools for Data Analysis - I	1L + 1P per batch	2	50
1P = 2 Hrs						

Course Name: Tools for Data Analysis - I Credits: 2 Type: Theory and Practical		
Expected Course Outcomes		
On completion of this course, students will be able to		
<ol style="list-style-type: none"> 1. Illustrate Uploading data to Power BI and Create Reports. 2. Create and share Dashboard and View reports and dashboards on mobile devices. 3. Construct a Data Model and improve Power BI reports. 		
Unit 1	<ul style="list-style-type: none"> • Introducing Power BI • Sharing the dashboard • Understanding data refresh • Using Power BI Desktop • Building a data model • Improving Power BI reports 	15 Lectures

References

1. Introducing Microsoft Power BI, By Alberto Ferrari and Marco Russo, PUBLISHED BY Microsoft Press A division of Microsoft Corporation One Microsoft Way Redmond, Washington 98052-6399, Copyright © 2016 by Microsoft Corporation

Scheme of Evaluation:

I) Continuous Internal Evaluation (50 Marks)	
Class Test	20 Marks
Practical Examination	30 Marks

**Semester IV
Open Elective**

This Course is offered to students of BSc Biotechnology, BSc Environmental Studies, BA Mass Media and Communication, Bachelor of Management Studies, Bachelor of Management Studies (Capital Market), in Semester IV, who have chosen Information Technology as Open Elective subject.

Name of Department: Information Technology						
Class	Semester	Course Code	Course Name	No. of lectures/ practicals per week	Credits	Marks
SYBSc(BT), SYBSc(EVS), SYBAMMC, SYBMS, SYBMS(CM)	IV	SIUITOE221	Tools for Data Analysis - II	1L + 1P per batch	2	50
1P = 2 Hrs						

Course Name: Tools for Data Analysis - II Credits: 2 Type: Theory and Practical		
Expected Course Outcomes		
On completion of this course, students will be able to		
<ol style="list-style-type: none"> 1. Illustrate how to work with worksheets, formatting and uploading data in Tableau. 2. Apply sorting and filters in Tableau, Construct Charts using Tableau. 3. Creating a dashboard with Tableau. 		
Unit 1	TABLEAU – DATA SOURCES, – Custom Data View, Extracting Data, Fields Operations, Data Joining and Blending, TABLEAU – WORKSHEETS – Add, Rename, Save, Delete, Reorder Worksheets, TABLEAU – CALCULATIONS - Operators, functions, Numeric, String, Date and Table Calculations, TABLEAU – SORT & FILTERS – Basic and Quick Sorting and filters, Context Filters, Condition Filters, TABLEAU – CHARTS – Bar, Pie and Line Charts, Crosstab, Scatter, Bubble Plots, Boxplot, Tree Map, Bump Chart, Gantt Chart	15 Lectures

References

2. Tableau An Introduction, Tutorial Point
3. TABLEAU TUTORIAL, BIOT 6610 - Hetal Patel Lauren Jagus Tyler Boulanger Elizabeth Ourumis

Scheme of Evaluation:

I) Continuous Internal Evaluation (50 Marks)	
Class Test	20 Marks
Practical Examination	30 Marks