St. Xavier's University, Kolkata

Faculty of Science

Value-Added/Skill Enhancement Courses to be Offered

By

Department of Computer Science

Course Name: Latex Programming

Credit: 2

Duration: 30 contact hours

Start Date: 19.02.2024

End Date: 13.04.2024

Mode of Class (Online/Offline/Hybrid): Offline

Intake Capacity: 30

Full Marks (FM): 100

Marks (QM): 50

Enrolment Date: 10/02/2024

Eligibility: Pursuing Graduate & above

Course Coordinator(s): Dr. Mrinmoyee Bhattacharya & Dr. Sayan Das

About the Course:

This course aims to equip students with the skills to use LaTeX for creating professional and structured documents. It covers the basics of document preparation, including starting with TeXworks, formatting, and typesetting using pdf LaTeX. Students will learn to troubleshoot and create advanced content, such as titles, sections, reports, and books, while mastering font effects, alignment, and tables. The course emphasizes integrating graphics, equations, and mathematical symbols, ensuring precision in technical documentation. Additionally, students will gain proficiency in managing bibliographies and citations using BibTeX and natbib, preparing them for academic and research-focused documentation needs.

Syllabi of the Course:

Module No.	Module Name	Module Description	Lecture No.
1	Basic documents and Format menu	Document structure, Starting TeXworks, Line Numbers, Syntax Coloring, Typeset, pdf LaTeX	5
2	Troubleshooting and Creating in LaTex	Title, sections, report and book classes, labels, table of contents, Font Effects, Colored Text, Font Sizes,	5

		Lists, Comments & Spacing, and Special Characters	
3	Typesetting Text and Tables	Font Effects, Colored Text, Font Sizes, Lists, Comments & Spacing, Special Characters, Left-aligned, rightaligned, centre-aligned, tabular	5
4	Figures and Equations	Include graphics, centering, caption, label, Graphics and plotting, Inserting Equations, begin {equation}, end {equation}, {eqnarray}, {equation*}, {eqnarray*}.	5
5	Mathematical Symbols and Styles	Powers & Indices, Fractions, Roots, Sums & Integrals, Greek, Letters, Plain, Abbrv, Unsrt, Alpha	5
6	Bibliographic records, citation processing and Author-date citations	Inserting references, BibTeX file, natbib [plainnat, abbrvnat and unsrtnat], citep{...}.	5