

About the event:

LaTeX, a high-quality typesetting system, has become the standard for creating technical and scientific documents. It is an essential tool for researchers and professionals, offering unmatched precision and efficiency in creating technical documents, research papers, and theses. Unlike traditional word processors, it provides powerful features for handling complex mathematical equations, automated formatting, dynamic cross-referencing, and bibliography management. It's an essential tool for students, researchers, and professionals looking to enhance their writing skills.

This value-added course, planned to be conducted on week-ends and evenings, will equip participants with the skills to produce high-quality, publication-ready documents, making it an invaluable resource for students, researchers, and anyone involved in technical writing.

Lectures Scheduled:

- **LaTeX:** Text formatting, Document Structure.
- Mathematics, Figures, Tables, Graphics.
- Citations, References & Bibliographies.
- **Beamer Presentations.**
- Advanced Documentations.
- **TikZ and PGFPlots**, Advanced TikZ & PGFPlots.
- Final Project with Q&A.

Mode: Blended mode

Offline Venue: TT135

Time: 10:00 AM to 5:30 PM

Online Platform: Microsoft Teams

Time: 10:00 AM to 5:15 PM

Time: 05:30 PM to 08:30 PM

Advisory Committee:

Dr. Jasmin Pemeena Priyadarisini

Professor and Dean,
School of Electronics Engineering (SENSE),
Vellore Institute of Technology, Vellore, India.

Dr. V. Noor Mohammed / HoD

Department of Communication Engineering,
SENSE, VIT Vellore.

Dr. B Karthikeyan / HoD

Department of Embedded Technology,
SENSE, VIT Vellore.

Coordinators

Dr. J. Christopher Clement, Professor

Dr. K.C. Sriharipriya, Associate Professor

School of Electronics Engineering,
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Resource Persons:

Dr. J. Christopher Clement, VIT, Vellore

Dr. K.C. Sriharipriya, VIT Vellore.

Registration fees for Participants

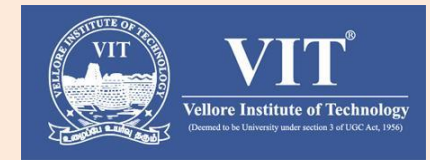
UG / PG Students : Rs.500/-

Research Scholars : Rs. 500/-

Faculty : Rs. 750/-

Registration Link: (Last Date: 23rd Jan 2025)

<https://events.vit.ac.in/>



Value Added Course on

VAC2411 – Technical Documentation with Latex

**09th February to 16th March
2025**

Organized by

**Department of Communication
Engineering &
Department of Embedded
Technology**

School of Electronics Engineering

**Vellore Institute of
Technology, Vellore**

Lecture Schedule

Sessions are planned to be conducted during the Week-ends and evenings.

Special Consultation for your own projects.

Session (3 hrs / session)	Topics
Session 1	Introduction to LaTeX : What is LaTeX? History and Uses, Installing LaTeX: TeXLive, MiKTeX, Overleaf, Basics of a LaTeX Document: Structure, Compiling, Writing Text: Sections, Subsections, Paragraphs.
Session 2	Text Formatting and Document Structure: Fonts, Styles, and Sizes, Lists: Enumerate, Itemize, and Description, Special Characters and Spaces, Creating a Title Page, Abstract, and Table of Contents
Session 3	Mathematics in LaTeX: Inline and Display Math, Common Mathematical Symbols, Fractions, Roots, Exponents, Aligning Equations, Multi-line Equations, Theorems, Lemmas, and Proofs
Session 4	Figures, Tables and Graphics: Including Graphics: graphicx Package, Creating Tables: tabular, tabu, long table, Positioning Figures and Tables, Captions and Labels
Session 5	References, Citations and Bibliographies: Creating and Referencing Labels, Citations: bibtex and biblatex Creating a Bibliography, Managing References with Tools like Zotero and Mendeley
Session 6	Beamer Presentations: Introduction to Beamer, Creating Slides, Sections, and Subsections, Themes and Customization Adding Figures, Tables, and Code Snippets, Animations and Overlays
Session 7	Advanced Document Documentation: Customizing Headers and Footers, Footnotes, Margin Notes, and Endnotes Custom Commands and Environments, Managing Large Documents: include and input, Creating Index and Glossary
Session 8	TikZ and PGFplots: Introduction to TikZ: Drawing Basics, Nodes, Edges, and Paths, Creating Flowcharts and Diagrams Plotting Data with PGFPlots, Customizing Plots and Adding Annotations
Session 9	Advanced TikZ and PGFplots: Complex Diagrams: Trees, Graphs, Networks, Advanced TikZ Libraries: Positioning, Matrix, and Fit, Creating 3D Plots with PGF Plots, Integrating TikZ with Beamer
Session 10	Final Project and Advanced topics: Working on a Comprehensive LaTeX Project, Exploring Additional Packages (e.g., siunitx, todonotes, minted), Tips for Writing Dissertations, Articles, and Books. Course Recap.
Session 11	Q & A on Final Project / Own Project.