Latex Syllabus & Contains

LaTeX is a powerful typesetting system widely used in academia, research, and publishing for creating well-structured documents, particularly those containing complex mathematical, scientific, and technical content. Learning LaTeX involves understanding its document structure, syntax, and the wide range of packages available for customization.

1. Introduction to LaTeX

➢ Overview of LaTeX

➢ Installing LaTeX

➢ Creating a Basic Document

2. Document Structure and Formatting

➢ Document Classes

➢ Sections and Subsections

➢ Text Formatting

➢ Lists

➢ Page Layout and Margins

➢ Customizing Headers and Footers

3. Mathematical Typesetting

➢ Basic Math Mode

➢ Equations and Alignments

➢ Math Symbols

➢ Complex Mathematical Notation

➢ The amsmath Package

4. Tables and Figures

➢ Tables

➢ Table Formatting

➢ Figures

➢ Positioning and Captioning

- ➤ Subfigures and Sub table

5. Bibliography and Citations

- ➤ Basic Citations
- ➤ BibTeX and BibLaTeX
- ➤ Reference Styles
- ➤ Creating a Bibliography

6. Cross-referencing

- ➤ Labels and References
- ➤ Hyperlinks
- ➤ Glossary and Indexing

7. Document Customization

- ➤ Page Numbering
- ➤ Color and Graphics
- ➤ Font Customization
- ➤ Advanced Formatting

8. Advanced Topics

- ➤ Creating Presentations
- ➤ Multi-column Layouts
- ➤ Package Management
- ➤ Advanced Math and Science Notations
- ➤ Automation with LaTeX