

V. P. R. P. T. P. Science College, Vallabh Vidyanagar

Add-on Certificate Courses

Course Title: Elementary Course in LATEX

Coordinator : Mr. R. P. Solanki and Mr. Nilesh Y. Patel

Department: Mathematics & Statistics

Duration : 30 Hours(Theory :10,Practical :20 hrs)

Content:

- Introduction to word Processor and Type Setting Software. Introduction to MikTeX and TexStudio.
- The structure of a Latex document, Defining class of the document through `\documentclass` and using packages through `\usepackage`, `\begin{document}` and `\end{document}`
- Text formatting and colouring commands.
- Introduction to Mathematics Environment, Writing Greek Symbols and some basic mathematics type structure like Fractions, Superscript, subscript, Overline, Underline etc.
- Matrix, Determinant and Other similar structure.
- Equations and Arrays
- Inserting pictures and tables, Defining, redefining and using Macros
- Special Environments Enumerates, Tabular, Cases etc.
- Power point Presentation using Beamer
- Advance packages

➤ **Students Outcomes :** After successfully completing Elementary Course in LaTeX, students will be able to

1. Successfully install LaTeX and its related components on a home/ Personal computer.
2. Independently typeset Mathematical, Scientific and general purpose documents in a well organized manner and atmost accuracy.
3. Use of LaTeX and various templates acquired from the course to compose Mathematical documents, Presentation and reports.

➤ **Reference Books :**

1. Math into LaTeX and Introduction to LaTeX and AMS LaTeX by George Gratzer
2. The Not So Short Introduction to LaTeX 2E by Tobias Oetiker, Hubert Partl, Irene Hyna and Elishabeth Schlegl
3. The LaTeX Companion Second Edition by Frank Mittelbach and Michel Goossens