About FDP

This FDP is aimed at an advanced level of LaTeX, such as writing class file, style file, iterating through data, performing repetitive tasks, high level graphing, typesetting problem sheets, exam question papers, etc., The topics in this workshop ranges from basic to advance. However, the programme expects the participants to have a basic knowledge in LaTeX.

This Faculty Development Programme which introduces the LaTeX in advance level is of the first kind.

What do we Cover in the FDP?

1. **Programming**
   Basic programming in LaTeX such as if, if-else-if, for and for each loops using `pgffor` and using other language codes inside LaTeX.

2. **Book and Magazine design**
   A gentle introduction to designing books, flyers, brochures and magazines in LaTeX.

3. **Managing Data**
   Reading data from a CSV file / `.dbtex` file in LaTeX. Simple operations such as sorting, displaying the tabulated data, iterating through a database etc.,

4. **Graphing**
   An extensive use of `tikz` and `pgfplots`. Mathematical function plotting, Statistical Plots such as Bar Chart, Line Chart, Pie Chart, etc.,

5. **Writing our own class file**
   Designing around our own templates for documents such as reports, thesis, question paper, etc.,

6. **Writing our own style file**
   Creating our own packages in LaTeX such as `fancyhdr`, `listings`, etc.,

Resource Persons

Dr. S. Dhanasekar
SAS, VIT, Chennai

Dr. V. Parthiban
SAS, VIT, Chennai

Dr. A. Manivannan
SAS, VIT, Chennai

Dr. M. Ramesh Kannan
SCE, VIT, Chennai

Dr. M. David Raj
SAS, VIT, Chennai

Faculty Development Programme on

Advanced LaTeX

June 27-29, 2022
(Online Mode)

" A programmer who subconsciously views himself as an artist will enjoy what he does and will do it better.

−Donald Knuth "

Organised by
Division of Mathematics
School of Advanced Sciences (SAS)
Vellore Institute of Technology, Chennai

VIT − A Place to Learn; A Chance to Grow

About the School

The School of Advanced Sciences (SAS) at VIT Chennai comprises Divisions of Mathematics, Physics and Chemistry.

It offers the following programmes:

- ☑ Ph.D. - Physics/Chemistry/Mathematics/Geology
- ☑ M.Sc. - Physics/Chemistry/Data Science
- ☑ B.Sc. Mathematics & Computing
- ☑ B.Sc. Double Major
  - ❯ Physics and Chemistry
  - ❯ Chemistry and Mathematics
  - ❯ Mathematics and Physics

The school also offers a plethora of core and elective courses facilitating B.Tech., M.Tech., MCA. Management and Law programmes.

Vellore Institute of Technology

On being founded in 1984, VIT has made a mark in the field of higher education in India imparting quality education in a multi-cultural ambience, intertwined with extensive application-oriented research. VIT was established with the aim of providing quality higher education at par with institutions of international standards. It persistently seeks and adopts innovative methods to improve the quality of higher education in all fields of science and technology.

VIT was established by the well-known educationalist and former parliamentarian, honorable **Dr. G. Viswanathan**, the Founder and Chancellor, a visionary who transformed VIT into a Centre of excellence in higher technical education. The Government of India recognized VIT as an Institution of Eminence (IoE). The ARIIA, Govt. of India recognized VIT as a No. 1 Private University for Innovation. The MHRD, Government of India ranked VIT at No.15 among the Engineering Institutions (NIRF-2020 ranking).

Vellore Institute of Technology, Chennai

VIT Chennai is a globally engaged, competitive, comprehensive and research-enriched university campus strategically positioned in the capital city of Tamil Nadu, to respond to major industrial, social, economic and environmental demands and challenges. VIT Chennai is ably spearheaded by Vice Presidents, Mr. Sankar Viswanathan, Dr. Sekar Viswanathan, Mr. G.V. Selvam, Assistant Vice President Ms. Kadhambari S. Viswanathan, Vice Chancellor Dr. Rambabu Kodali, and Pro Vice Chancellor Dr. V.S. Kanchana Bhaaskaran.

They share in the mission to make VIT a global center. The focuses are to:

- Maximize the Industrial Connectivity.
- Create Centers of Excellence in niche areas of research.
- Enrich Technological and Managerial Human Capital nurtured in a multicultural ambience.
- Provide a common platform for the agglomeration of ideas of personnel from various walks of life for enriched learning.
- Create opportunities and exploit the available resources to benefit industry/society
- Foster International collaborations for mutual benefits in areas of research.

Registration

No Registration Fee. Interested Faculty, Research Scholars and UG/PG students are requested to register using the following link:

https://forms.office.com/r/KiYBUJx4xU

Last Date for Registration: **June 25, 2022**

The zoom link for the FDP will be shared through mail to the registered participants.

Conveners

Dr. S. Dhanasekar & Dr. V. Parthiban
Mathematics Division
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LaTeX source code of this brochure can be found at:

https://github.com/davidrajm/
Advanced-LaTeX-FDP-June-2022-Brochure