

TEQIP-II Sponsored Faculty Development Program

On

**TECHNICAL WRITING USING LATEX**

July 28 - 30 2016



Organized by

Department of Computer Science & Engineering  
Tripura Institute of Technology, Agartala

**Course Coordinators:**

Sri Gautam Pal, Assistant Professor  
CSE Deptt. TIT, Narsingarh

Sri Bibhash Roy, Assistant Professor  
CSE Deptt. TIT, Narsingarh

Tripura Institute of Technology,  
Agartala Aerodrome-799009, Tripura, India  
Phone: 0381-2342330, Fax: 0381-2342322  
Website: [titagartala.ac.in](http://titagartala.ac.in)

# THE INSTITUTE

## **Vision of the Institute:**

To emerge as one of the best Technical Institute of the Country in creating quality engineers and leaders through excellence in technical education, for industries and for the society.

## **Mission of the Institute:**

1. Imparting quality technical education to develop innovative, entrepreneurial and ethical Technocrats.
2. Developing collaborative partnership with industries and academia.
3. Developing sustainable technology solutions for the societal needs.
4. Participative learning in a cross-cultural environment that encourages learning beyond the class room.

## **About The Institute:**

**Tripura Institute of Technology** (erstwhile Polytechnic Institute, Narsingarh) bred from its embryo in the year 1958 with three conventional branches of Civil, Electrical and Mechanical Engineering, affiliated to West Bengal State Council of Technical Education. Later, one more branch namely Electronics & Tele-Communication Engineering has started in the year 1995. The institute through its excellence and glorified journey over a period of more than 50 years could attract name, fame and reputation countrywide and as a result the Ministry of Human Resource was kind enough to extend its assistance through World Bank under Tech. Ed.-III Project for the growth of this institute in terms of capacity expansion and quality improvement during the period from 2001 to 2007. Implementation of this project assistance by the Government of Tripura commensurate sea changes in the institutional infrastructure resulting into the opening up of 4 (four) more new branches such as Computer Science & Technology, Food Processing Technology, Automobile Engineering, Architecture Assistantship. Huge procurement of equipment and machineries, books and LR's, introduction of new labs and other infrastructure development have multiplied the academic resources of the institute. The Institute is administered by Education (Higher) Department, Government of Tripura and is affiliated to the Tripura University. With the introduction of the degree module from the academic session 2007-08 the entire academic control of both degree and diploma would come under Tripura University. In addition of eight diploma course, Institute has offering five degree engineering course namely Civil Engineering, Electrical Engineering, Mechanical Engineering, Electronics & Communication Engineering and Computer Sc & Engineering. Presently, Technical Education Quality Improvement Programme Phase-II (TEQIP-II), World Bank project is running in Degree module at TIT for Strengthening Institutions to produce high quality engineers for better employability. Tripura Institute of Technology is located in a beautiful landscape of natural antiquity adjacent to Agartala Aerodrome which is about 12 KM away from capital city of Tripura state Agartala. The Institute is affiliated to Tripura University (A Central University) and recognized by the AICTE, New Delhi.

# THE DEPARTMENT

## **Vision of the Deptt.:**

To produce quality engineering graduates by imparting quality education and research in the field of computer science & information technology in order to respond to the challenges of the 21<sup>st</sup> century.

## **Mission of the Deptt.:**

**M1.** To provide quality professional education in science and technology in fields relating to computer science and information technology that enable students to effectively apply education to solve real-life problems.

**M2.** To provide a platform for students that helps students to inculcate event management skills and entrepreneurial skills.

**M3.** To create an ambience that helps students realizing social responsibilities and values of professional ethics.

**M4.** To conduct research in advanced and application-oriented arena relating to computer and information science involving students which promote continuous learning.

**M5.** To establish strong bonding with industries.

## **Program Educational Objectives (PEOs) of the Deptt.:**

**PEO-1:-**To lead a successful career in industries or pursue higher studies or entrepreneurial endeavours.

**PEO-2:-** To offer techno-commercially feasible and socially acceptable solutions to real life engineering problems.

**PEO-3:-**To demonstrate effective communication skill, professional attitude and a desire to learn.

## **About The Department:**

Computer Sc & Engg Department of TIT Agartala is one of the new and leading Departments. The Department has been offering Diploma in Computer Sc & Technology since 2002 and Degree in Computer Sc & Engineering since 2007. Within a very short span of time, the Department has created an excellent learning environment with dedicated young faculty members, technical staff, and innovative academic processes. The department provides computational facilities for programmers, application development and research.

## **ABOUT THE FDP- Technical Writing using LATEX**

**LaTeX** (lah-tekh, commonly mispronounced as lah-tek or lay-tek, TeX is a document preparation system. When writing, the writer uses plain text as opposed to formatted text as users of word processors like Microsoft Word. The writer uses markup tagging conventions to design the general structure of a document (such as article, book, and letter), to stylize text throughout a document (such as bold and italic), and to add citations and cross-references. A TeX distribution such as TeX Live or MikTeX is used to produce an output (such as PDF or DVI) suitable for printing or digital distribution. Within the typesetting system, its name is stylized as LATEX. LaTeX is used for the communication and publication of scientific documents in many fields, including mathematics, physics, computer science, statistics, economics, political science etc. It also has a prominent role in the preparation and publication of books and articles that contain complex multilingual materials, such as Sanskrit and Arabic. LaTeX uses the TeX typesetting program for formatting its output, and is itself written in the TeX macro language. LaTeX is widely used in academia. LaTeX can be used as a standalone document preparation system, or as an intermediate format. In the latter role, for example, it is sometimes used as part of a pipeline for translating DocBook and other XML-based formats to PDF. The typesetting system offers programmable desktop publishing features and extensive facilities for automating most aspects of typesetting and desktop publishing, including numbering and cross-referencing of tables and figures, chapter and section headings, the inclusion of graphics, page layout, indexing and bibliographies. Like TeX, LaTeX started as a writing tool for mathematicians and computer scientists, but from early in its development it has also been taken up by scholars who needed to write documents that include complex math expressions or non-Latin scripts, such as Arabic, Sanskrit and Chinese. LaTeX is intended to provide a high-level language that accesses the power of TeX in an easier way for writers. In short, TeX handles the layout side, while LaTeX handles the content side for document processing. LaTeX comprises a collection of TeX macros and a program to process LaTeX documents. Because the plain TeX formatting commands are elementary, it provides authors with ready-made commands for formatting and layout requirements such as chapter headings, footnotes, cross-references and bibliographies. LaTeX was originally written in the early 1980s by Leslie Lamport at SRI International. The current version is LaTeX2e. LaTeX is free software and is distributed under the LaTeX Project Public License.

## **TOPICS TO BE COVERED**

1. Introduction
2. Installation and package maintenance
3. Structure of a LATEX document
4. What is this LATEX and why would I need it?
5. Basic Document preparation
6. Advanced Document preparation
7. Tables and Graphics
8. Thesis and Report preparation
9. Mathematical expressions and equations
10. Bibliography/ Creating Bibliography with LaTeX
11. Project report creation
12. Citations and References
13. Bibliography, Index and Glossary
14. Troubleshooting
15. Using Online Resources

## **RESOURCE PERSONS**

The resource persons constitute experts/senior faculty members from TIT Agartala and guest speakers from other reputed institutions including Jadavpur University, Industries, Research Institutes, etc.

## **WHO CAN ATTEND THE FDP**

The course is aimed to attract and bring together Faculty Members, Scientists, Engineers, Technologists, Technical Staffs, Technical Assistants, Research Scholars and Final Year UG/PG students from Academic and Research Institutions and Industries. The participants will be benefitted immensely and will get new insights and knowledge about the topic through close interactions/discussions with the Senior Faculty Members/Scientists and Experts of the respective field during the lecture sessions as well as in some laboratory sessions. There is no course fee.

## **BOARDING & LODGING**

Boarding, lodging and travel expenses shall be borne by the participants. No TA/DA is given to the participants. Several good hotels are available in and around Agartala, Tripura. Participants may contact directly or through the coordinator(s) for accommodation in Hotels.

## **Contact Address**

**Mr. Gautam Pal, Assistant Professor**  
Computer Science & Engineering Deptt.  
Tripura Institute of Technology, Narsingarh  
Agartala Aerodrome-799009, Agartala, Tripura (W)  
Mobile:-09436457131; Fax:-03812342330  
E-Mail-goutamtit2003@gmail.com

## REGISTRATION FORM

Three days Faculty Development Program  
on

### **Technical Writing using L<sup>A</sup>T<sub>E</sub>X**



Organized by

Department of Computer Sc. & Engg. , Tripura Institute of Technology

Sponsored by TEQIP-II Project, TIT, Narsingarh

**28<sup>th</sup> - 30<sup>th</sup> July, 2016**

Name of the Participant: \_\_\_\_\_

Affiliation: \_\_\_\_\_

Institute/College/University: \_\_\_\_\_

Whether the Institute is AICTE / UGC affiliated: \_\_\_\_\_ Sex (M/F): \_\_\_\_\_

Highest Qualification (with Branch Specialization): \_\_\_\_\_

Experience (in years) Teaching: \_\_\_\_\_ Industry: \_\_\_\_\_ Research: \_\_\_\_\_

Publication (if any): \_\_\_\_\_

Address for Correspondence: \_\_\_\_\_

\_\_\_\_\_ Pin Code: \_\_\_\_\_

Phone (Landline): \_\_\_\_\_ Mobile No.: \_\_\_\_\_

E-mail id: \_\_\_\_\_

#### Declaration by the Applicant

The information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the program. If selected, I shall attend the program for the entire duration.

Place: \_\_\_\_\_

Date: \_\_\_\_\_

Signature of the Applicant

#### Sponsorship Certificate

Certified that Dr./Mr./Mrs./Miss \_\_\_\_\_ is an employee of this Institution/College/University and hereby allowed to attend the Three days Faculty Development Program On **Technical Writing using L<sup>A</sup>T<sub>E</sub>X** at Tripura Institute of Technology, Narsingarh during 28th - 30th July, 2016. He /she will be permitted to participate in the program fully, if selected.

Place:-

Date:-

Signature of the sponsoring authority (HOD/Principal/Director) & Seal

*N.B.: Photocopy of this form may also be used for registration. Please send the completed application form scanned copy to the Course Coordinator by E-mail.*

#### **Important dates**

Last date of receipt of filled in applications : 18-07-2016

Date of intimation regarding selection : 20-07-2016