

# SYLLABUS

## FOUR YEAR UNDERGRADUATE PROGRAM IN MATHEMATICS

### SEC 2<sup>nd</sup> semester: LaTeX

Course title & Code	Credits	Credit distribution of the course		Eligibility Criterion	Pre-requisite of the course (if any)
		Lecture	Practical		
LaTeX Code: SEC0206803	3	2(30L)	1(30H)	Class XII	Nil

**Learning Objectives:** The course aims to familiarize students with typesetting software LaTeX which will enable them to prepare documents especially with mathematical equations, graphs and figures. This course will also acquaint them with the Beamer presentation techniques.

**Learning Outcomes:** After studying this course the student will be able to:

- Create and typeset a LaTeX document.
- Typeset a mathematical document using LaTeX.
- Learn about creating simple pictures using LaTeX.
- Create a beamer presentations.
- Learn LaTeX through overleaf.
- Assamese writing using LaTeX.

#### Unit 1: Elements of LaTeX

(15 hours)

Typing a LaTeX document, typing a mathematical document.

[1] Chapter 9.

#### Unit 2: Graphics in LaTeX

(10 hours)

Creating simple pictures, PS Tricks.

[1] Chapter 9, 10.

#### Unit 3: Beamer

(5 hours)

Beamer presentation, LaTeX through Overleaf, LaTeX in Assamese Language writing.

[1] Chapter 11

#### Text Book:

- Erickson, M. J. and Bindner, D., *A Student's Guide to the Study, Practice, and Tools of Modern Mathematics*, CRC Press, Boca Raton, FL, 2011.

#### Reference Book:

- Lamport, L., *LATEX: A Document Preparation System, User's Guide and Reference Manual*. Addison-Wesley, New York, second edition, 1994.