

**CENTRAL UNIVERSITY OF KERALA
DEPARTMENT OF COMPUTER SCIENCE
M.Sc. COMPUTER SCIENCE**

VALUE ADDED COURSE					
COURSE CODE	COURSE TITLE	CONTACT HRS/WEEK			CREDITS
		LEC	LAB	TUT	
CSC5054	LATEX	2	2	1	Nil

Lec = Lecture, Tut = Tutorial, Lab = Practical

This is an audited/value added **skill based course** and the credits will not be added to marklist.

Course Objective:

The main objective of this course is to impart knowledge on the basic principles of document preparation using LATEX.

By completing this course, students will obtain the following course/learning outcomes:

1. Knowledge gained:
 - (i) State of art of document preparation using LATEX
2. Skill gained:
 - (ii) Paper writing skill for international publisher
3. Competency gained:
 - (iii) Document preparation for all proposes using LATEX.

Prerequisites: Nil

Grading:

Lab implementation	– 25%
Participatory based group Project	– 25%
Assignment/Quiz/presentation	– 25%
Individual project	- 25%

CSC5054 – LATEX

Module 1

Installation of the software LaTeX, Understanding Latex compilation, Basic Syntex, Writing equations, Matrix, Tables

Module 2

Page Layout – Titles, Abstract Chapters, Sections, References, Equation references, citation. List making environments
Table of contents, Generating new commands, Figure handling, numbering, List of figures, List of tables, Generating index

Module 3

Packages: Geometry, Hyperref, amsmath, amssymb, algorithms, algorithmic graphic, color, tilez listing. Classes: article, book, report, beamer, slides. IEETran. Applications to: Writing Resumae, Writing question paper, Writing articles/ research papers, Presentation using beamer.

Text Books/References:

1. A Document Preparation System: LaTeX, by Leslie Lamport, ISBN 0-201-52983-1, published jointly by the American Mathematical Society and Addison-Wesley Publishing Company. The 2nd edition, 1994, describes LaTeX2e, the second widely distributed version of LaTeX. The first edition of this book, which appeared in 1985, described LaTeX 2.09.
2. The TeXbook by Donald E. Knuth, ISBN 0-201-13448-9, published jointly by the American Mathematical Society and Addison-Wesley, 1984
3. M. Goossens, F. Mittelbach, and A. Samarin, The LaTeX Companion, published by Addison-Wesley, ISBN 0-201-54199-8 (essential for the serious LaTeX hackers), 1993
4. L. Botway and C. Biemesderfer, LaTeX Command Summary, published by the TeX Users Group, Providence, RI is a good companion, 2019
5. A. Diller, LaTeX Line by Line, published by Wiley, 1999