### VASAVI COLLEGE OF ENGINEERING (Autonomous) IBRAHIMBAGH, HYDERABAD – 500 031 DEPARTMENT OF INFORMATION TECHNOLOGY

#### INTRODUCTION TO LINUX

(Open Elective – I) SYLLABUS FOR –III SEMESTER (Common for CIVIL, ECE, EEE & MECH)

L:T:P(Hrs./week): 2:0:0	SEE Marks :60	Course Code : U210E320IT
Credits : 2	CIE Marks :40	Duration of SEE : 3 Hours

COURSE OBJECTIVES	<b>COURSE OUTCOMES</b> On completion of the course, students will be able to		
Acquire basic skills for using Linux operating system.	<ol> <li>Install Linux operating system and use desktop environment.</li> <li>Identify and use Linux utilities to create and manage simple file processing operations.</li> <li>Organize directory structures with appropriate security.</li> <li>Configure and use Linux shell.</li> </ol>		

## UNIT – I:

Introduction to Linux, Installing Linux, Running Linux from USB Drive, Understanding X Windows System and Desktop, Navigating through Linux Desktop and Managing files. Understanding Linux file system, listing files and directory attributes, Making files and directories, Listing and changing permissions and ownership.

## UNIT – II:

Understanding the Linux Shell, Understanding aliases, Using the shell from console or terminals, using command history and tab completion, Connecting and expanding commands, Creating aliases, Making shell settings permanent, Using man pages and other documentation.

# UNIT – III:

Introduction to Shell Scripting: Reading input from the user, logical operators, Arithmetic operators, Environment variables, Read-only variables, command line arguments, working with arrays.

### UNIT – IV:

Decision Making: Conditional constructs, Functions: Introduction to functions, passing arguments, sharing of data, declaration of local variables, returning information from functions, running functions in the background, creating a library of functions

### Learning resources:

- 1. Introduction to Linux A Hands On Guide, MachteltGarrels.
- 2. Ganesh SanjivNaik, Learning Linux Shell Scripting, Packt Publishing, 2015. Open Source Community
- 3. https://linuxjourney.com/
- 4. https://nptel.ac.in/courses/117106113/

The break-up of CIE: Internal Tests+ Assignments + Quizzes

1	No. of Internal Tests	:	2	Max. Marks for each Internal Tests	:	30
2	No. of Assignments	:	2	Max. Marks for each Assignment	:	5
3	No. of Quizzes	:	2	Max. Marks for each Quiz Test	:	5
Du	ration of Internal Tests	: 9	0 Minutes			