Contents

COEP Technological University

Development Tools Laboratory

Teaching Scheme Lectures: 1 Hrs / Week Laboratory : 2 Hrs / Week

1 Course Contents

1.1 LaTEX:

Basic syntax, compiling and creating documents; Document structure, sections, paragraphs; packages, Math, Adding Images, Drawing images (using tools like Inkscape) Table of contents; Source code, graphs (using tools like Graphviz), Adding references, different templates, IEEE format, Bibliography

1.2 Shell Programming:

Shell functions, pipe and redirection, wildcards, escape characters; Awk script: Environment and workflow, syntax, variables, operators, regular expressions, arrays, control flows, loops, functions, output redirections

1.3 GIT:

Creating a project using git locally, add, commit, status, diff; branch and merge, GIT: cloning a remote repo, working with a remote repo – git push, pull, fetch; creating issues and pull requests; working on a project in a distributed fashion

2 Course Outcomes:

At the end of the course, the student will be able to: 1. Develop an application in a group using GIT, demonstrating ability to work remotely, push, and pull. 2. Write a report in a specified format using LaTEX. 3. Demonstrate programming ability using Unix Shell.

3 Suggested List of Assignments:

1. Develop an application in a group using GIT, demonstrating ability to work remotely, push, and pull. 2. Write a report in a specified format using LaTEX. 3. Demonstrate programming ability using Unix Shell.