System Server Administration (Elective)

Course # COMP 4222

Credits 6

Prerequisites: Database Management Systems, Operating Systems, Computer Networks

Course Description

The System Server Administration introduces the student to the server operating systems. Students learn the basics of installing, administrating, and maintaining the Ubuntu Server on Raspberry Pi 400 / 4B. Administration of user and group accounts, SSH, DHCP, DNS, Apache, MariaDB, MPICH, backup, recovery, and disaster planning are covered. Students are guided through laboratory assignments designed to give them practical real-world experience. Students are encouraged to design, implement, and evaluate small-scale projects in teams of up to three people.

Course Learning Outcomes

Upon the completion of this course, students should be able to:

- Use multiple computer system platforms and understand the advantages of each
- Install and administer Ubuntu server on Raspberry Pi 400 / 4B
- Protect and secure users' information on computer systems
- Utilize SSH and related tools to remotely manage servers and infrastructure
- Use the command line interface for Ubuntu server administration
- Demonstrate strategies for planning/designing/recovering server systems
- Install and manage disks, file systems, and web/email/DNS servers

Course Assessments and Grading

Item	Weight
Problem-solving sessions (14 sessions)	35%
Homework assignments (1 assignment)	2 %
Quizzes (14 quizzes)	21 %
Midterm exam (1 midterm exam)	20 %
Final exam (1 final exam)	22 %