

Lab Manual

Network Programming Lab



**Department of Computer Science &
Engineering**
College Of Engineering Cherthala , Alappuzha

COLLEGE OF ENGINEERING CHERTHALA, ALAPPUZHA
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Vision:

To evolve into a center of excellence in the field of computer science and engineering providing innovative and quality engineers contributing to the society and nation

Mission:

To impact high quality professional training with emphasis on state of the art technology in computer science and engineering including professional and ethical values in the young minds

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**PROGRAMME OUTCOMES (POs)**

PO1	Apply the knowledge of mathematics, science and engineering fundamentals to solve complex computer science and engineering related problems.
PO2	Identify, formulate, make literature reviews, and analyze complex computer science and engineering problems to reach substantiated conclusions.
PO3	
PO4	
PO5	
PO6	
PO7	
PO8	
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PO10	
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Syllabus

***Mandatory List of Exercises/ Experiments**

(Note: At least one program from each topic in the syllabus should be completed in the Lab)

1. Getting started with the basics of network configuration files and networking commands in Linux.*
2. To familiarize and understand the use and functioning of system calls used for network programming in Linux.*
3. Implement client-server communication using socket programming and TCP as transport layer protocol*
4. Implement client-server communication using socket programming and UDP as transport layer protocol*
5. Implementation of a multi user chat server using TCP as transport layer protocol.
6. Implementation of concurrent time server using UDP
7. Simulate sliding window flow control protocols.* (Stop and Wait, Go back N, Selective Repeat ARQ protocols)