

GUJARAT TECHNOLOGICAL UNIVERSITY

M.E. Computer Engineering (IT Systems and Network Security)

Semester: I

Subject Name: **Network Defense and Countermeasures (NDC)**

Subject Code: **715104**

Course Content:

Security Fundamentals, Firewalls, Application Layer Firewalls, Packet Filtering Firewalls, Hybrids, Intrusion Detection And Prevention, Intrusion risks, Security policy, Monitoring traffic and open ports, Detecting modified files, Investigating and verifying detected intrusions, Recovering from, reporting and documenting intrusions, Define the Types of intrusion Prevention Systems, Set Up an IPS, Manage an IPS, Understand Intrusion Prevention, Issues with Intrusion Prevention, IP Signature and Analysis, Risk Analysis, Virtual Private Networks, Define Virtual Private Networks, Deploy User VPNs, Benefits of user VPNs Managing User VPNs, Issues with User VPNs, Deploy Site VPNs, Benefits of Site VPNs, Managing Site VPNs, Issues with Site VPNs

Text Book:

1. Fundamentals of network and Security, Eric Maiwald/TMH

Reference Book:

1. Network Security: The Complete Reference, Bragg