

TECNIA INSTITUTE OF ADVANCED STUDIES
Grade 'A' Institute
Department of Information, Communication & Technology
Bachelor of Computer Applications (BCA)
Scheme and Syllabus (w.e.f. AS 2021-22)

COURSE CODE: BCA 201

COURSE NAME: COMPUTER NETWORKS

LEARNING OBJECTIVES:

In this course, the learners will be able to develop expertise related to the following: -

1. To study different types of media, multiplexing, switched networks, the Internet, TCP/IP suite, fiber-optic communications and the state-of-art networking applications.
2. To develop an understanding of different components of computer networks, various protocols, modern technologies and their applications.
3. Identify and discuss the underlying concepts of IPv4 & IPv6 protocols, along with their characteristics and functionality.
4. Details of IP operations in the Internet and associated routing principles
5. Analyzing various layering protocols in computer networks.

PRE-REQUISITES:

1. Fundamentals of Computers and IT

COURSE OUTCOMES (COs):

After completion of this course, the learners will be able to: -

CO #	Detailed Statement of the CO
CO1	Utilize the fundamentals of data communication and networking to identify the Topologies and connecting devices of networks.
CO2	Understand and describe the layered protocol model (OSI and TCP/IP model)
CO3	Analyze the elements and protocols for peer – peer and communication between layers.
CO4	Evaluate and implement routing algorithms and Router basic configuration.
CO5	Evaluate the protocols and Principles in computer networking