

**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: BCAT 216**

**COURSE NAME: NETWORK SECURITY**

**LEARNING OBJECTIVES:**

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

1. Students will be able to learn about basic security issues and concepts of Network Security.
2. Students will be able to understand the Describe briefly the use of Cryptography and Steganography.
3. To develop graduates that can identify, analyze, and remediate network security breaches.
4. To learn about Firewall and his principles.
5. Students will be able to understand the concept of Kerberos and use of this.
6. To Design and Implement different network security algorithm by using Program.
7. Students will be able to understand the computer network and secure network communication issues along with their remedies.
8. Students will be able to learn and evaluate the different algorithm by using Program.

**PRE-REQUISITES:**

1. Computer Network
2. C, C++ (Programming Knowledge of C/C++)

**COURSE OUTCOMES (COs):**

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

CO#	Detailed Statement of the CO
CO1	Define and explain the issues and basic concepts of Network Security. To understand how to draw a network model.
CO2	To Explain, understand and summarize the concepts, types and features of Firewall.
CO3	Explain and implement working of authentication, authorization, Packet security, IP Security, Firewall by using some suitable examples.
CO4	Classify and organize the architecture of network security management.
CO5	Evaluate different Network Security algorithms with the help of program.
CO6	Design and create network security architecture for an organization.