



### SNS COLLEGE OF ENGINEERING

Kurumbapalayam (Po), Coimbatore – 641 107 An Autonomous Institution Accredited by NBA – AICTE and Accredited by NAAC UGC wit'A' Grade Approved by AICTE, New Delhi & Affiliated to Anna University, Chennai

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING IOT Including CS&BCT COURSE NAME: DISTRIBUTED LEDGER TECHNOLOGY

**TOPIC: Blockchain in Defense** 





### Introduction to Blockchain and Cybercrime Prevention

The defense sector requires high levels of security, transparency, and trust. Blockchain provides a secure, tamper-proof way to manage military operations, logistics, and communication. Its decentralized and immutable structure helps prevent cyberattacks, unauthorized data access, and supply chain fraud—making it a strategic tool for national security.





## **Secure Communication and Data Integrity**

Military communications are often targeted by hackers and foreign threats. Blockchain can protect sensitive communications and classified data by:

- Encrypting messages and storing them across a decentralized network, making interception extremely difficult.
- Ensuring data integrity—any unauthorized change in logs or documents is immediately visible and traceable.
- Preventing data leaks in intelligence operations, troop movement records, and mission briefings.





# **Supply Chain Management in Defense**

Blockchain can strengthen defense logistics by ensuring transparent and verifiable supply chains.

- Tracks every component or weapon system part from manufacturer to deployment.
- Detects counterfeit parts or materials and ensures authenticity through immutable records.
- Reduces delays and fraud by allowing real-time tracking of assets like vehicles, aircraft parts, and ammunition.





#### **Defense Contracts and Cybersecurity**

Blockchain also brings efficiency and accountability in defense project management and cybersecurity.

- Smart Contracts can automate defense procurement and contractor payments only after successful delivery or milestone completion.
- Audit trails become easier and tamper-proof, reducing chances of corruption or mismanagement.
- Enhances national cybersecurity by acting as a resilient backbone for critical defense networks and systems.