



TULSIRAMJI GAIKWAD-PATIL College of Engineering and Technology

Wardha Road, Nagpur-441108

Accredited with NAAC A+ Grade

Approved by AICTE, New Delhi, Govt. of Maharashtra

(An Autonomous Institution Affiliated to RTM Nagpur University)



Department of CSE (Data Science)

B. Tech VII Semester in CSE (Data Science)

Course Name: BDS4701 Cryptography and Network Security

BDSXX19 Course Outcomes	
After the completion of this course, students will be able to-	
BDS4701.1	Understand fundamental concepts of cryptography, security goals, attack types, and classical encryption techniques.
BDS4701.2	Apply symmetric key cryptographic techniques including DES, AES, and various cipher modes in securing data.
BDS4701.3	Analyze and implement public key cryptography techniques such as RSA, Diffie-Hellman, and ElGamal for secure communication.
BDS4701.4	Evaluate cryptographic hash functions, message authentication codes, and digital signature algorithms for data integrity and authentication.
BDS4701.5	Explore network security applications and protocols like IPsec, SSL/TLS, Kerberos, email security, and firewalls for system protection.