Course Name	Basics of Cryptography and Blockchain
Objective of the Course:	To give knowledge about blockchain technology
Pre-requisite:	Basic knowledge of computer networks
ExpectedOutcomesofthe Course:	After studying this subject, students will be able to understand how programmers and network professionals can use cryptography to maintain the privacy of computer data. And Basic understanding of Blockchain Technology.
EligibilityCriteria of Participants:	HSC Pass **or** Graduate
Course Syllabus (InDetail):	1 Cryptosystems 1.1 Introduction 1.2 Components of a Cryptosystem 1.3 Types of Cryptosystems 1.4 Symmetric Key Encryption 1.5 Asymmetric Key Encryption 1.6 Attacks On Cryptosystems 2 Traditional Ciphers 2.1 Caesar Cipher 2.2 Monoalphabetic and Polyalphabetic Cipher 2.3 Vigenere Cipher 2.4 Transposition Cipher 3 Modern Cipher 3.1 Modern Symmetric Key Encryption 3.2 Block Cipher 3.3 Data Encryption Standard 3.4 Triple DES 3.5 Advanced Encryption Standard 3.6 Public Key Encryption 3.7 Hash functions 3.8 Digital signatures 4 Data Integrity in Cryptography 5 Cryptography Benefits & Drawbacks 6 Introduction of Blockchain technology 6.1 History of Blockchain networks 6.2 What is Bitcoin? 6.3 Blockchain Hash Function 6.4 Blockchain Block Hashing 6.5 Blockchain Distributed ledger

	6.6 Blockchain Proof of work
References:	1. Cryptography and Network Security: Principles and Practice, Global Edition 2. Introduction to Cryptography & Network Security by Sunil Gupta , S.K. Kataria& Sons 3. Bitcoin and Cryptocurrency Technologies: A Comprehensive Introduction by Arvind Narayanan, Joseph Bonneau, Edward Felten, Andrew Miller, and Steven Goldfeder Princeton University Press