

BAHRIA UNIVERSITY,
(Karachi Campus)
Department of Software Engineering
ASSIGNMENT#03 – Spring 2025

COURSE TITLE: **Data Encryption and Security**
Class: **BSE – 8A&B**
Course Instructor: **DR. OSAMA REHMAN**
Due Date: **12-May-2025**

COURSE CODE: **CEN-451**
Shift: **Morning**
Date: **28-April-2025**
Marks: **8.0 Marks**

Instructions:

- 1. This activity is a Problem Based Learning and a group effort (Max. 3 members).**
- 2. The presented materials must be uploaded on LMS.**
- 3. Write group member names, registration number and section under presentation title.**

Prepare a 15 ~ 18 slides presentation in MS power point on one of the given topics below. Each member is required to present his/her part, where the presentation will be followed by cross-questioning from the instructor. All students should have knowledge regarding the complete contents of the presentation rather than focusing of the contents of his/her part only. The presentation content should be technical in nature, i.e. supporting the general patterns adopted in the relevant course, Data Encryption & Security. Technical contents of the presentation can only be prepared after conducting a thorough investigation regarding the concerned topic. The list of topics is provided below from which you need to select (*a topic can be selected only twice within a section*). You are also allowed to select a topic other than those mentioned in the list below after taking consent from course instructor.

[CLO#5, PBL, 8.0 marks]

List of Suggested Topics:

1. Quantum Cryptography
2. Hardware-Based Encryption
3. Lightweight Cryptography
4. Digital Certificates
5. OpenSSL
6. Blockchain
7. Steganography
8. Data Masking
9. Data Backup using RAID
10. Data Backup using SAN/NAS

Note: presentation MUST be self-made, where its uploaded softcopies will be checked for plagiarism as deemed necessary.

Good Luck!