THE OPEN UNIVERSITY OF TANZANIA



INSTITUTE OF EDUCATIONAL AND MANAGEMENT TECHNOLOGIES

Cyber Security & Forensics Course

Course Description

Cyber security refers to securing computer systems and networks in order to prevent computer crimes while the field of **digital forensics** refers to the detection of computer crimes once they occur.

Digital Forensics and Cyber Security Course is designed to meet the growing needs of preventing and detecting computer crimes in our digital age.

Course Objectives

- a. To teach practical, hands-on, applied knowledge that can equip individuals on computer security techniques.
- b. To teach the latest applications and tools used in the IT security field.
- c. To provide the knowledge that will help user to meeting certification requirements in the IT security field.

Course Content

This course consist of the following topics

1. Coding Security

Learning objective:To examines security architectureelements within modernobject-oriented programminglanguages and create the frameworkfor securing programming.

2. Vulnerability Analysis & Control

Learning objective:To address hands-on ethical hacking, penetration testing, detection of malicious probes and their prevention.

3. Cyber Security Management

Learning objective: To examine the topics in the management of information technology security

including access control systems and methodology, business continuity and disaster recovery planning, legal issues in information system security, ethics, physical security etc using current standards models.

4. Database Security

Learning objective:Toengage trainee in an indepth examination of topics in data security including security considerations in applications & systems development, encryption methods, cryptography law and security architecture & models.

5. Cyber Security Technologies

Learning objective: To prepares Trainee for a role as a network security administrator and analyst.

6. Topics in Information Security Compliance

Learning objective: To examine topics insecurity compliance, including HIPAA, GLBA, NERC, SOX, PCI and compliance issues related to these requirements.

7. Cyber Forensics

Learning objective:Toaddress methods to properly conduct a computer and/or network forensics investigation including digital evidence collection and evaluation and legal issues involved in network forensics.

8. Cyber Security Technologies: Projects &Advanced Methods

Learning objective:To Prepare Trainee for a role as a networks security analyst and developer and give an individual experience in developing a production of security systems.

9. Information Security – Risk Analysis

Learning objective:To examine the security methodologies which are used in the assessment of organization risks.

10. Stenography

Learning objective:Tostudy both digital stenography and digital steganalysis (the science of discovering the existence of and extracting the covert information).

11. Operating System Security

Learning objective:To address theoretical concepts of operating system security, security architectures of current operating systems, and details of security implementation using best practices and to configure operating systems using industry security standards.

12. Topics in Information Security

Learning objective: To enable trainee to prepare an incident response, disaster recovery, business continuity, or crisis management plan for a realworld organization such as business or a government body or agency.

Target group:

The course targets individuals who are interested in learning about cyber security including;

- Information Security Professionals.
- Information Technology Professionals (System Administrators, Network Administrators, Application Programmers).
- Process Automation Control Systems and IT Engineers.
- Ethical Hackers and Cyber Security Professionals.
- Students and recent graduates

Training Mode

The course will be offered through blended mode F2F mode and online mode depending on course content and topic.

Teaching mode will include 30% theory and 70% practices using computer laboratories.

Course Duration

Three (3) months

Course Fee Course fee: Tshs 350,000

How to Register

Click here to register for Course

To register please contact us through the following details

Email: <u>richard.laizer@out.ac.tz</u> george.oreku@gmail.com

Telephone: 0687063988/0783992020