UNIVERSITY OF DELTA, AGBOR, NIGERIA
COMPUTING
INFORMATION AND COMMUNICATION TECHNOLOGY
B.Sc. Information and Communication Technology

UNIDEL-CYB 308: **Business Continuity & IT Disaster Recovery** (3 Units; **Compulsory**; **LH=30; PH=45)**

Senate-approved Relevance
The training of high-skilled graduates who can implement security measures that will effectively safeguard sensitive data in the event of cyber-attack is in tandem with the vision and mission of the University of Delta, Agbor of producing well motivated, skillful graduates that are capable of exhibiting expertise in proffering solutions for the workplace of tomorrow. This ensures that cyber security graduates with demonstrable potentials possess necessary skillet research and investigate the potential impact of new threats and exploits and guide the information security team in examining and developing network security solutions for organizations and industries within the catchment areas. The relevance of this course is seeing and producing cyber security graduates of the University of Delta, Agbor that are adequately armed with the ability to provide advice on vulnerabilities or potential vulnerabilities within architecture, analyze security-related data from a wide variety of security products and services and create tools and processes for scanning, testing, monitoring, and reporting.

Overview
Business continuity and IT disaster recovery is set of processes and techniques used to help an organization recover from a cyber-attack or disaster and continue to or resume routine business operations. This course combines the roles of and functions of IT and business in the after of cyber-attack or any disaster.

This course provides a strong foundation in each area by looking at what business continuity management is, why it is important and how it can be implemented within the overall risk management process, before reviewing the disaster recovery process. Business continuity is the ability to preserve operations or services in the face of a disruptive event. On the other hand, information technology disaster recovery focuses on the technology part of your business and aims to restore operations and systems as soon as possible after an incident happens. The objectives of the course, learning outcomes, and course synopsis are provided to address this need.

Objectives
The objectives of this course are to: (i)explain business continuity management; (ii) describe the business continuity management process; (iii) describe the impact of business disruption on an organization; (iv) describe the business continuity implementation process and implementation planning; (v) describe disaster recovery strategy and importance of disaster recovery planning; (vi) describe the different standby systems; and (viii) describe the importance of robust documentation and testing of the plan

Learning outcomes

Upon completion of this course, students should be able to: (i)identify at least four risks to an organization's cyber environment; (ii) identify four cyber risks of a large organization from those of a small company; (iii) identify specific laws and acts both foreign and domestic related to business continuity; (iv) implement an appropriate disaster recovery/business continuity implementation plan; (v) describe a business continuity management structure which contains a business continuity plan, a crisis communication plan, an emergency response; (vi) describe a contingency plan appropriate for a small to medium size business; (vii) identify four different backup strategies; (viii) identify four data storage technologies appropriate for secure data backups; (ix) identify three existing industry software and tools which support competent continuity strategies

Course Contents

Introduction to business continuity. Introduction to IT data recovery. Business continuity team. Business impact analysis. Disaster recovery and virtualization technologies. Fundamental protocols necessary for the recovery and continuity of a business in the event of a severe cyber failure. Disaster or attack under weather related incidents and other types of disasters both man-made and natural disasters to protect the company and organizations' ability to do business under any circumstance, and to be resilient. Risk assessment. IT recovery strategy. IT recovery architecture. data storage & recovery. IT disaster recovery plan. Business continuity/continuity of operations plan. Business continuity programme. Measuring performance & plan maintenance. Table top exercise and corrective actions.

Project: The lecturer divides students into groups a–c and each group will attempt each of the projects. (a) Different disaster types often bring with them different needs for services. Select a company, either real or fictitious, and write a report that includes: (i) the key services; (ii) the way those services might be impacted by the different kinds of disasters; (iii) which services would first be affected, based on the type of disaster (natural, technical, or human)?; (iv) the minimum services that must be maintained for that company after each of the selected disasters; (v) which service should be restored first; (vi) what services can be put off until later; and (vii) what recommendations you would offer to apply/add to the disaster recovery plan and to the business continuity documents. Your paper should be 3-5 pages in length. (b) Put yourself in the position of creating a disaster recovery planning team in a small organization (real or fictitious) with limited resources (capital and human). Discuss the following: (i) the organization's business; (ii) the most critical roles to fill on the team; and (iii) how you might be combined or fill roles that you do not have the resources to fill in-house. Your paper should be 3-5 pages in length. (c) Put yourself in the position of having a home-based business. You may have one or two part-time employees, including family members. Discuss the following: (i) the business that you have and what goods or services you provide; and (ii) how you would best cover the key roles on a disaster recovery team. Identify situations where you might lack resources or knowledge. Where would you get extra help? The recovery locations in your situation may be quite different than for a large organization. What might you use as a recovery location for your home business? Your paper should be 3-5 pages in length.

Minimum Academic Standards

NUC minimum academic standard requirements for facilities