

## Task 4

### Introduction to Cyber Security Course

This task aims at familiarising yourself with the current cyber security landscape and acquiring the knowledge of relevant tools to assess and manage security protocols in information processing systems. I also learned to perform business impact analysis and disaster recovery testing through this program.

This task gave me a basic idea about cybersecurity. Cybersecurity is one of the emerging fields in the world, it has become necessary to have a clear idea about it.

I learned about the fundamentals of cyber security. Confidentiality, integrity, and availability, also known as the CIA triad, is a model designed to guide companies and organizations to form their security policies. Technically, cybersecurity means protecting information from unauthorized access, unauthorized modification, and unauthorized deletion to provide confidentiality, integrity, and availability.

I learned about various threat actors, attacks, and mitigations. A cybersecurity policy sets the standards of behaviour for activities such as the encryption of email attachments and restrictions on the use of social media. Cybersecurity policies are important because cyberattacks and data breaches are potentially costly. I also learned about procedures for maintaining security policy. Cybersecurity risk mitigation involves the use of security policies and processes to reduce the overall risk or impact of a cybersecurity threat. Regarding cybersecurity, risk mitigation can be separated into three elements: **prevention, detection, and remediation**. I got to learn about these fundamentals of cyber security in depth.

I learned about enterprise architecture and its components. A cyber security architecture is the foundation of an organization's defence against cyber threats and ensures that all components of its IT infrastructure are protected. Environments that are secured by a cyber security architecture include Cloud. I learned about various wireless networks, Network Security Controls, cloud, virtualization, BYOD and IoT security which were very interesting topics and I enjoyed the learning process. Security testing is another important aspect of cyber security. Cyber security testing uses multiple methodologies and tactics to measure how effective your cyber security strategy is against a potential attack. It identifies critical vulnerabilities that are being actively used in the industry to launch cyber-attacks.

Information security governance is defined as “a subset of enterprise governance that provides strategic direction, ensures that objectives are achieved, manages risk appropriately, uses organizational resources responsibly, and monitors the success or failure of the enterprise security program.” I learned about various risk

management methods. I also learned about information security programs which made me realise that we are using a secure network.

In the field of cybersecurity, incident management can be defined as the process of identifying, managing, recording, and analysing security threats and incidents related to cybersecurity in the real world. This is a very important step after a cyber disaster or before a cyber disaster takes place in an IT infrastructure. This process includes knowledge and experience. Good incident management can reduce the adverse effects of cyber destruction and can prevent a cyber-attack from taking place. It can prevent the compromising of a large number of data leaks. An organization without a good incident response plan can become a victim of a cyber-attack in which the data of the organization can be compromised at large. I also learned about steps in incidence management, developing an Incident Management and Response System, Digital Forensics, Business Continuity and Disaster Recovery.

This task and this course made me realise the various cyber security factors which are important in day to day life. This course enlightened me about various risks, security policies and much more which helped me to have a little more mature idea about the concept of cyber security.

Below is my course completion certificate:

[https://certificates.simplicdn.net/share/3311563\\_1647184206.pdf](https://certificates.simplicdn.net/share/3311563_1647184206.pdf)

While performing an Introduction to Cyber Security task I learnt about new things. I want to learn more about cybersecurity. I am also exploring various scopes in the field of cybersecurity. I want to explore more about this by talking with people who are already in this field.