

## Careers in Cyber Security Today

The Trend Careers Philippines help their one hour webinar via facebook live about careers in cyber security with resource speaker Danielle Landero. Today, we can read lots of news regarding the occurrence of hacking. Before, criminals were after tangible currency like peso, but today these criminals (cyber criminals) are after digital currency with value like bitcoin. Thus, we need cyber security jobs to safeguard information on cyber space and ward off online attacks, and this webinar explains those jobs and their roles.

Anything that has value to the organizations, its business and operation and continuity are considered assets that need protection. Speaking of assets, there are physical resources, information and data such as customer's information, software code, or billing data. And lastly is the operational resources like Microsoft excel used to process and manage organization's information. And to protect these assets we need information security. In information security three aspects are defined that need protection: One, confidentiality referring to information that can be viewed only by Authorized Parties. Second is integrity referring to information that can be modified only by authorized parties. And third is availability, which is preventing disruption when accessing information by authorized parties. These aspects can be attacked through ransom ware, environment attack (fire, loss of network) denial of service, key loggers, remote access tools, social engineering phishing (email), and pharming (website)

Before explaining the different careers in cyber security, the speaker differentiate first the information security and cyber security. To make it, information security intends to protect data from any form of threat to provide confidentiality, integrity, and availability. Cyber security on the other hand is when we deal with the security concerning our cyberspace; it deals with protecting networks/computers to prevent threats in order to ensure confidentiality, integrity, availability, authentication, and nonrepudiation. And to fight these cybercrimes, the following are jobs and what their roles are. These jobs are classified into five roles: those who build and maintain the security systems; monitor security systems; investigate and analyze security incidents; those who test security systems; and those who manage the security operations and processes.

In Building and maintaining the security systems, jobs are server system administrator - they secure UNIX and windows server platforms, and deploy and configure security related/ endpoint software. Next is network systems administrator to configure security settings in network devices, or

deploy and configure security related network devices such as firewalls and intrusion detection systems. In monitoring security systems, the jobs are security intrusion analyst which monitors the events generated by security systems, or identifies/investigates suspicious or possible cyber threats. And Incident and Forensic analyst which investigates computers and devices for possible cyber security break-ins, gathers digital forensic, and performs clean up. Next in investigating and analyzing security incidents the job role is malware analyst who focuses on reverse-engineering files and network traffic to identify possible computer viruses, and their network activity. For testing security perimeter and application security, one can be a penetration tester or ethical hacking tester who performs authorized hacking activities to check security configuration and procedures are working. One can also be a vulnerability analyst who performs authorized hacking on application software to identify vulnerabilities. And lastly, the job roles in managing the security operations and processes are chief information security officer who leads and manages the information security team, they also coordinates with top management on budget for security operations and enforcement of security related procedures. One can also be a security process analyst, security auditor - these roles are under the chief information security officer.