Emerging Technologies

Certified Cyber Security Professional Program

<u>Curriculum</u>

Program Outline :

Module 1:Fundamentals of Cyber Security

1. **Introduction to Cyber Security** – Understand core concepts, terminology, and the importance of cybersecurity.
2. **Cyber Security Threats and Attacks** – Learn about common types of cyber threats and attacks.
3. **Basic Network Security** – Get familiar with basic network security measures and protocols.
4. **Security Architecture** – Understand how security is integrated into IT systems and networks.

Module 2: Advanced Security Techniques

5. **Risk Assessment and Vulnerability Management** – Learn techniques for assessing risks and identifying vulnerabilities.

6. **Threat Hunting and Detection** – Explore methods for proactively identifying and defending against cyber threats.

7. **Cryptography** – Learn about encryption and secure communication methods.

8. **Advanced Network Defense** – Delve deeper into network security techniques and defenses.

9. **Security Frameworks and Standards** – Study common security frameworks like NIST, ISO 27001, and CIS Controls.

Module 3: Practical Applications

10. **Incident Response and Management** – Learn how to detect, respond to, and recover from cybersecurity incidents.

11. **Penetration Testing** – Gain hands-on experience with ethical hacking and penetration testing techniques.

12. **Malware Analysis and Defense** – Understand how to detect and protect against malware and ransomware.

13. **Data Protection and Privacy** – Learn how to implement data security measures and comply with regulations like GDPR.

Module 4: Capstone Project

14. **Cyber Security Simulation** – Apply your knowledge by working on a simulated cybersecurity incident.

15. **Final Project** – Showcase your ability to design a comprehensive cybersecurity strategy for an organization.

Elective Modules

16. **Cloud Security** – Learn how to secure cloud-based systems and platforms.

17. **Mobile Security** – Understand the security challenges in mobile platforms and applications.

18. **Advanced Forensics** – Learn how to investigate cybercrimes and digital forensics techniques.

Websites:

- https://chools.in/
- https://ramaqchools.com/
- https://www.choolsgroup.com/