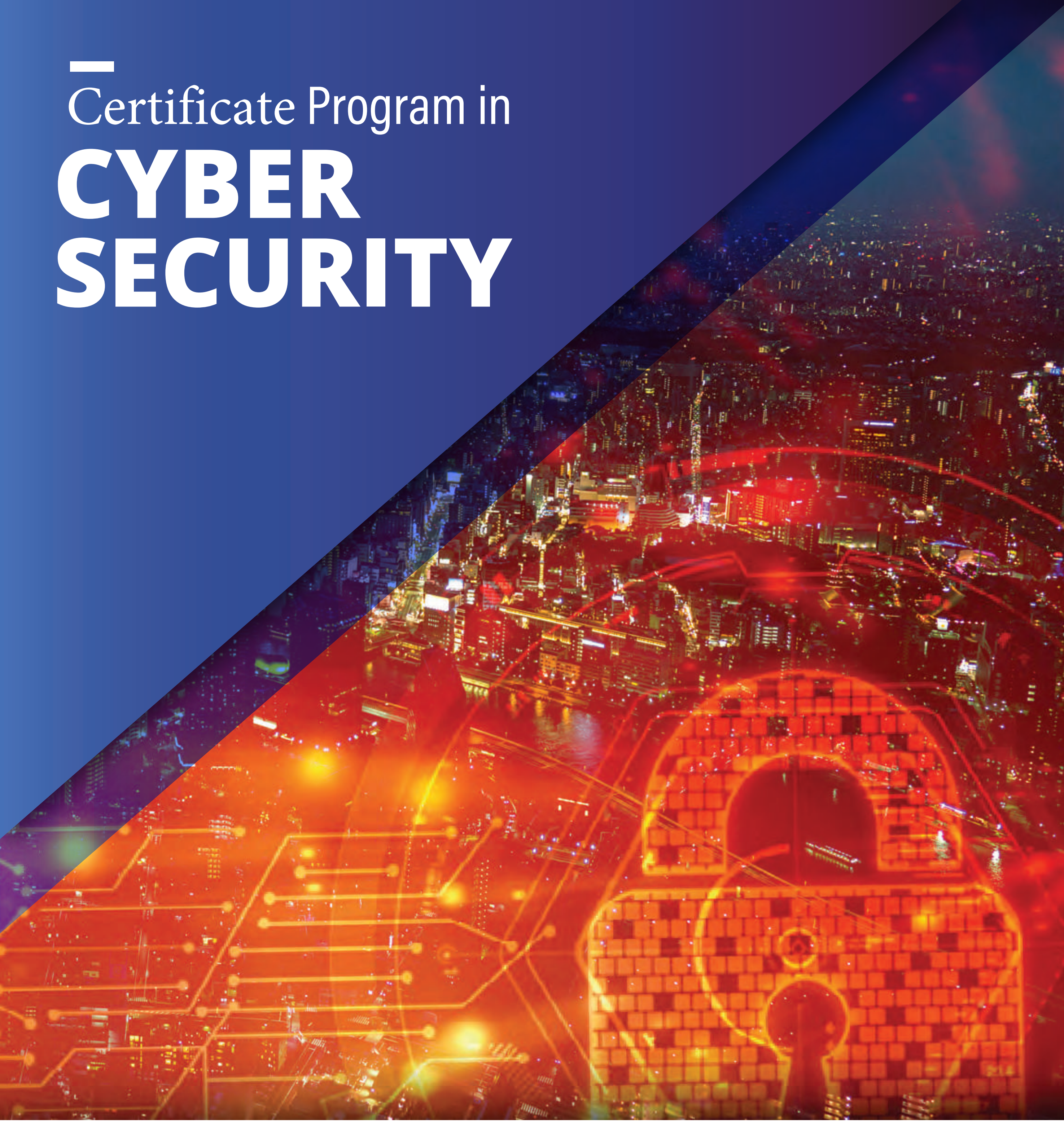
Certificate Program in

CYBER SECURITY



With Modules from

INNOVATICS

INNOVATION THROUGH ANALYTICS

internet 2.0 Conference

Dubai, UAE

(2022)

★★★★★

Mo Medwani

Founder & CEO | Big Bang Data Science

INTERNET 2.0 - OUTSTANDING LEADERSHIP AWARD

Internet 2.0 Outstanding
Leadership Award - Dubai 2022

About the Program

Accelerate your career with this Program in Cyber Security. This program features a mix of theory, case studies, and extensive hands-on practice to prepare you for an exciting career in Cybersecurity. You will master CompTIA Security+, CEH, and CISSP, and learn how to protect your infrastructure by securing data and information, running risk analysis, architecting cloud-based security, and achieving compliance.

This Program in Cyber Security equip you with the skills needed to become an expert in this rapidly growing domain. This program also helps to develop a 360-degree view of the Cybersecurity domain that now comprises a wide array of security components and technologies.

Key Features of the Program in Cyber Security

Online Classes

60+ hours of instructor led online classes

Projects

Capstone Project in 3 domains

Content

60 hours of e-learning content

Learning Kit

EC Council Learning Kit

Blended Learning

60+ hours of Blended Learning

Faculty

Masterclasses from InnovatiCS Faculty

Certification

- Overall Program Completion: InnovatiCS
- Accredited 'Cyber Security' verified & certified certified

Community

Large Professional InnovatiCS Programs Community

Learning Path Visualization

1 Introduction to Cybersecurity

2 Design systems to secure applications, networks, & device

3 Build a Hacker MIndset and defend against future attacks

4 Design, engineer and manage the overall security posture of an organization

5 Cybersecurity- Technology, Application and Policy

6 Cybersecurity- Capstone Project

7 **InnovatiCS Certificate**

Program Outcomes

At the end of this Certificate Program, you will be equipped with the following skillets:

Install, configure and deploy public key infrastructure and network components while assessing and troubleshooting issues to support organizational security

Master advanced hacking concepts to manage information security efficiently

Design security architecture and framework for a secure IT operation

Frame cloud data storage architectures and security strategies, and utilize them to analyze risks

Protect data movement, perform disaster recovery, access CSP security and manage client databases

Implement technical strategies, tools, and techniques to secure data and information for your organization

Adhere to ethical security behaviour for risk analysis and mitigation

Understand security in cloud computing architecture in depth

Comprehend legal requirements, privacy issues and audit process methodologies within the cloud environment

Focus on IT compliance and the integrity of enterprise systems to establish a more secure enterprise IT framework

Who Should Enroll in this Program?

This program caters to those who are hoping to enter the world of Cyber

- ✓ All levels of IT auditor/penetration tester
- ✓ Security consultants/managers
- ✓ IT directors/managers/consultants
- ✓ Security auditors/architects
- ✓ Security systems engineers
- ✓ Chief information security officers (CISOs)
- ✓ Chief compliance/privacy/risk officers
- ✓ Network specialists, analysts, managers, architects, consultants or administrators
- ✓ Technical support engineers
- ✓ Systems analysts or administrator

Introduction to Cybersecurity

InnovatiCS Cyber Security course is designed to give you a foundational look at today’s cybersecurity landscape and provide you with the tools to evaluate and manage security protocols in information processing systems.

Design systems to secure applications, networks, & device

This course will enable learners to gain knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques; participate in risk mitigation activities; operate with an awareness of applicable policies, laws, and regulations. Upon successfully validating their skills by passing the certification exam learners will be able to perform these tasks to support the principles of confidentiality, integrity, and availability. CompTIA Security+ meets the ISO 17024 standard and is approved by the U.S.

Course curriculum

✓ Week 1 - PROGRAM ORIENTATION

Learning Objectives: As an Information security profession you will learn how to evaluate risk against the companies' asserts and implement safeguards to mitigate those risks.

Session 1 Program Orientation

- Program Orientation (Agenda – Curriculum)
- 'Informatic Website | Canvas | Slack walk-through

Session 2 Why should you become a Security Engineer/Analyst?

- Software & Data Explosion
- Why Security? | What is Information Security? | Type of Security Roles
- Career in Information Security
- Introduction Faculty and Students

✓ Week 2 - SECURITY RISK MANAGEMENT

Learning Objectives: In this module, we will learn about Security Risk Management, which focuses on risk analyses and mitigation. Also, we will cover security governance, and organizational structure required for a successful information security program.

Session 1 CIA Triad, Laws & Regulations Compliance, Security Governance,

- CIA triad
- Laws & Regulations Compliance
- Security Governance

Session 2 Access Controls, Risk Analysis, Attackers

- Access Controls
- Risk Analysis
- Types of Attackers

✓ Week 3 - ASSERT SECURITY

Learning Objectives: In this module, we will learn about Assert security, which includes data classification, different types of ownerships, such as business, data, etc. and Security Controls.

Session 1 Data Classification, ownerships, & data Remanence

- Data Classification
- Types of Ownerships
- Data Remanence

Session 2 Access Controls, Risk Analysis, Attackers

- Data destruction
- Determining Security Controls

✓ Week 4 - SECURITY ENGINEERING PART 1

Learning Objectives: In this module, we will learn about Security architecture, security models and securing system hardware and software, Cryptography concepts, types of cryptography and physical security.

Session 1 Security Modules, Designing Secure Systems, Secure Hardware, Secure OS and Software

- Security Modules
- Designing Secure systems
- Design Secure Hardware Architecture
- Design Secure OS and Software Architecture
- Vulnerabilities, Threats and Remediation

Session 2 System Vulnerabilities, Threats and Remediations

- System Vulnerabilities
- Threats and Remediations

✓ Week 5 - SECURITY ENGINEERING PART 2

Learning Objectives:

In this module, we will learn about Security architecture, security models and securing system hardware and software, Cryptography concepts, types of cryptography and physical security.

Session 1 Cryptography Types, Attacks, Implementation

- Cryptography Types
- Crypto Attacks
- Crypto Implementation
- Physical Security

Session 2 Physical Security

- Physical Security

✓ Week 6 - NETWORK SECURITY

Learning Objectives: In this module we will learn about Network Security and communication. The Internet, Online banking, Online buying and selling, text messaging, email, etc. rely on network security.

Session 1 Network Design, Securing Network Devices and Protocols

- Discuss Network Design
- Securing network devices and protocols

Session 2 Securing Network Communication

- Securing Network Communication

✓ Week 7 - IDENTITY AND ACCESS MANAGEMENT

Learning Objectives:

In this module, we will learn what is Identity and Access Management. The main purpose of access management is to allow access to the authorized users and deny access to unauthorize users.

Authentication Methods, Access Control

- Types of Authentication Methods
- Access Control Technologies

Session 2 Access Control Modules

- Different Access Control Modules

Week 8 - SECURITY ASSESSMENT AND SECURITY TESTING

Learning Objectives: In this module, we will do security assessment and testing which are critical components of any information security program. Organizations must accurately assess their security, prioritize critical components and make necessary changes to improve.

Session 1 Access Controls

- Access Controls Assessments
- Prioritizations

Session 2 Security Testing

- Software Security Testing Methods

Week 9 - SOFTWARE DEVELOPMENT SECURITY

Learning Objectives: In this module, we will learn on secure software development. Software is everywhere. It is in our houses, cars, and medical devices, etc. As software is growing in complexity the number of security vulnerabilities are growing as well.

Session 1 Programming Concepts, Software Development Methods

- Programming Concepts
- Software Development Methods

Session 2 Relational Database Management systems, Object Oriented Programming

- Relational Database Management Systems Overview
- OO Programming overview

Week 10 - OWASP TOP 10 VULNERABILITIES

Learning Objectives: In this module, we will learn about what is OWASP and the Top 10 Vulnerabilities. Also, we will discuss SQL Injection vulnerabilities in the Software.

Session 1 Security Administration, Incident Response, Asset Management, Prevention & Detection Controls

- Discuss OWASP's Top 10 vulnerabilities

Session 2 SQL Injection Attack

- SQL Injection Demo

Week 11 - SECURITY OPERATIONS PART 1

Learning Objectives: In this module, we will learn about what is OWASP and the Top 10 Vulnerabilities. Also, we will discuss SQL Injection vulnerabilities in the Software.

Session 1 Security Administration, Incident Response, Asset Management, Prevention & Detection Controls

- Security Administration
- Incident Response Management
- Assert Management
- Prevention and Detection Controls

Session 2 Backup and Availability, Testing Training and Awareness

- Backup and Availability
- Testing
- Training and awareness

Week 12 - SECURITY OPERATIONS PART 2

Learning Objectives: In the Security operations phase, students will learn about Business continuity and Disaster recovery planning.

Session 1 Business Continuity and Disaster Recovery Planning (BCP) and (DRP)

- BCP and DRP Process
- BCP and DRP Development
- Backups, Restore and Availability
- Prevention and Detection Controls

Session 2 Backup and Availability, Testing Training and Awareness

- DRP Testing and Training
- DRP Awareness and Communication
- BCP/DRP framework

Week 13 - SECURITY TOOLS

Learning Objectives: In the Security operations phase, students will learn about Dynamic Application Security Testing (DAST) and Statics Application Security Testing (SAST) Tools

Session 1 Dynamic Application Security Testing (DAST)

- Dynamic Application Security Testing (DAST) overview

Session 2 Statics Application Security Testing (SAST)

- Statics Application Security Testing (SAST) Tools overview

Week 14 - REVIEW ALL THE MODULES AND TYPES OF CYBER SECURITY

Learning Objectives: In the Security operations phase, students will learn about Software Composition Analysis (SCA) and Network Scanning Tools

Session 1 Software Composition Analysis (SCA)

- Software Composition Analysis (SCA) Tools Overview

Session 1 Network Scanning Tools

- Network Scanning Tools Overview

Week 15 - REVIEW ALL THE MODULES AND TYPES OF CYBER SECURITY

Learning Objectives: In the session student will review all the modules and discuss types of security job available, Job applications and interview processes.

Session Review all the Modules covered and Types of Security Jobs

- Review all the modules covered.
- Types of Cyber Security Job

PROGRAM ADVISOR

Sr. Data Scientist, INNOVATICS CEO
(Dr. Mo Medwani)

Founder of InnovatiCS, is a PhD in Artificial Intelligence and an expert data scientist with a passion for transforming data into useful products. He has over 20 years of experience in service delivery management; Four master's degrees in data science, IT, machine learning, and business administration; and over 9 years of experience working with data science. Mo's specialties include data science, machine learning, big data, deep learning, data analytics, application support and IT service delivery management.

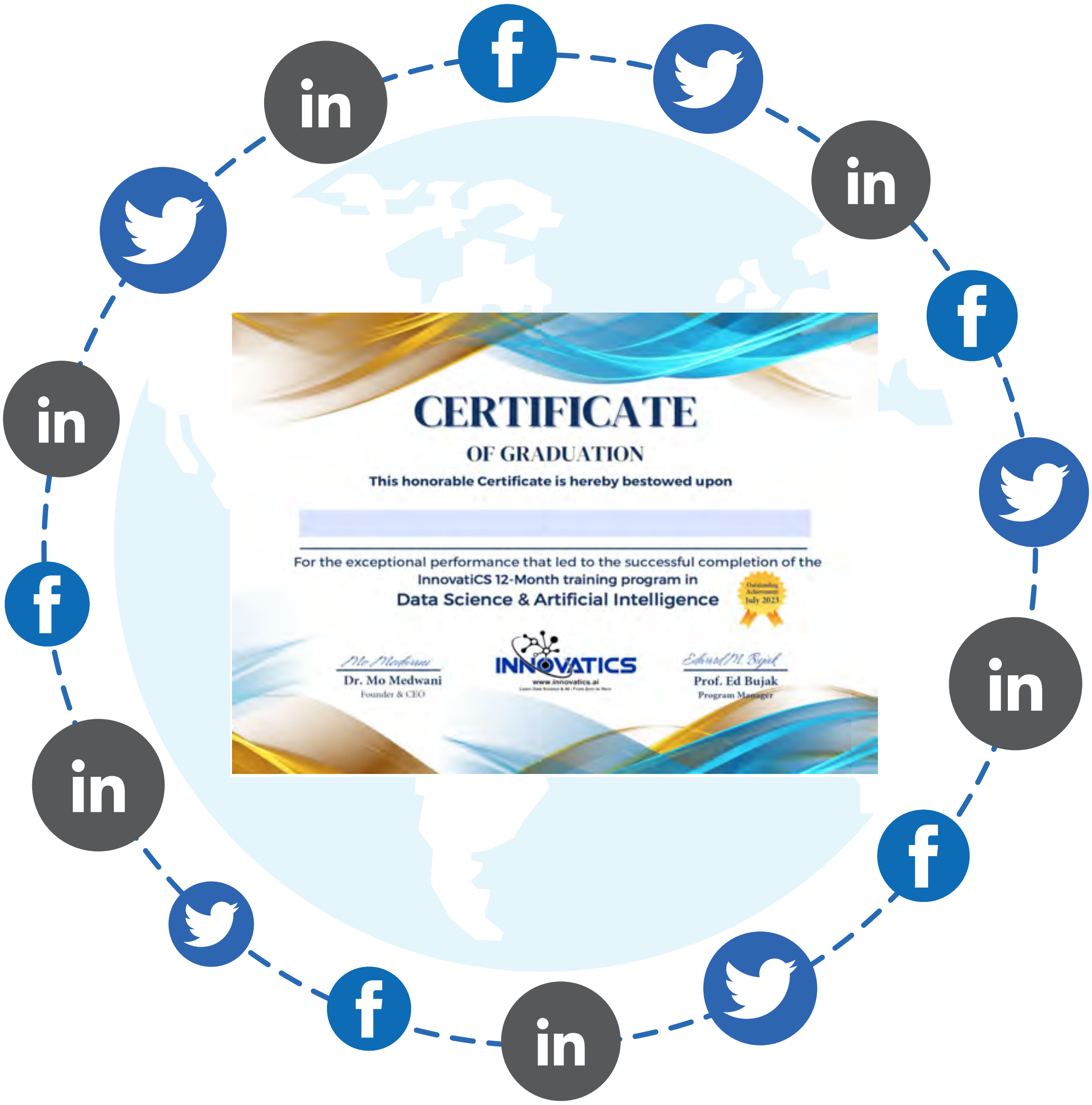
PROGRAM INSTRUCTOR

Cybersecurity Program Director at Emory
(Prof. Mohammed Mujeeb)

Bachelor's degree in Computer science and a Master of Business Adminis tration (MBA)Microsoft Certified. Technology Specialist in SQL Server Implementation and Maintenance Microsoft Certified. Azure cloud Fundamentals Certified. Computer Programming and Database Development Over 24 years of experience in Software Development, Database Development, and Cyber Security, and a strong background in all varieties of Application Development and Application Security 10 years of training experience Currently working as Manager, Security Business Intelligence at LexisNexis

CERTIFICATE OFCOMPLETION

Upon successful completion of the program, InnovatiCS grants a verified/ certified digital certification of graduation to participants. This program is graded as pass or fail; participants must receive 80% to pass and obtain the certificate of graduation



CERTIFICATE

OF GRADUATION

This honorable Certificate is hereby bestowed upon

For the exceptional performance that led to the successful completion of the InnovatiCS 12-Month training program in

Data Science & Artificial Intelligence

Outstanding Achievement July 2023

Mo Medwani
Dr. Mo Medwani
Founder & CEO

INNOVATICS
www.innovatics.ai
Learn Data Science & AI - From Zero to Hero

Edward M. Bujak
Prof. Ed Bujak
Program Manager

After successful completion of the program, your verified digital certificate will be emailed to you in the name you used when registering for the program. All certificate images are for illustrative purposes only and may be subject to change at the discretion of InnovatiCS

About INNOVATICS...

We are **INNOVATICS**, a holistic up-skilling platform driven by a unique, cohesive "Learn-Apply-Solve" framework.

This innovative solution provides application-oriented immersive and interactive learning experience with extensive real-industry courses, cases, datasets and projects. It also ensures a blended pathway between industry and academia through simulation and contextualisation.

INNOVATICS regularly presents at numerous conference workshops and until recently held regular monthly Meetups with industry experts as speakers.

We currently offer a few multi-week, multi session courses that are live (then recorded) programs that participants have thoroughly enjoyed since we support our participants with almost endless one-on-one or group live support sessions.

Have questions about the program or how it fits in with your career goals?

+1 (315) 975-1661

✉ **register@innovatics.ai** 🌐 **www.innovatics.ai**