Certified in Emerging Technology (CET) Certification Curriculum

Module 1: Overview of Emerging Technologies

- Understanding Emerging Technologies

- Impact of Emerging Technologies on Business and IT

- Key Trends in Innovation and Digital Transformation

- Case Studies: Successful Technology Adoption

Module 2: Artificial Intelligence (AI) and Machine Learning (ML)

- Fundamentals of AI and ML

- Applications of AI in Cybersecurity, Healthcare, and Finance

- Ethical and Responsible AI Practices

- Tools and Platforms for AI/ML Implementation

Module 3: Blockchain Technology

- Blockchain Basics and Distributed Ledger Technology (DLT)

- Smart Contracts and Decentralized Applications (DApps)

- Applications in Finance, Supply Chain, and Identity Management

- Security and Scalability Challenges in Blockchain

Module 4: Internet of Things (IoT)

- IoT Architecture and Communication Protocols

- Security Risks and Challenges in IoT Networks

- IoT Use Cases: Smart Cities, Healthcare, and Industrial Automation

- Managing and Monitoring IoT Devices

Module 5: Cloud Computing and Virtualization

- Cloud Service Models: IaaS, PaaS, SaaS

- Cloud Deployment Models: Public, Private, and Hybrid

- Security Considerations in Cloud Environments

- Introduction to Virtualization and Containerization (e.g., Docker, Kubernetes)

Module 6: Data Analytics and Big Data

- Big Data Fundamentals and Technologies

- Introduction to Data Analytics and Visualization Tools

- Managing and Securing Large Data Sets

- Case Studies: Insights from Big Data Applications

Module 7: Cybersecurity in Emerging Technologies

- Security Challenges in AI, Blockchain, IoT, and Cloud

- Strategies for Securing Emerging Technology Implementations

- Regulatory Compliance for Emerging Technologies

- Threat Intelligence and Incident Response

Module 8: Certification Preparation and Capstone Project

- Review of Key Concepts and Technologies

- Practice Questions and Mock Certification Exams

- Capstone Project: Designing a Solution Using Emerging Technologies

- Final Presentation and Feedback

Key Features of the Curriculum

- **Interactive Learning**: Includes real-world case studies and hands-on labs.

- **Capstone Project**: Application of learning to solve real-world business challenges.

- **Exam Preparation**: Tailored guidance for CET certification success.