

Duration: 5 days

Course Objectives:

- Validate a participant's knowledge of IoT terminology, their ability to understand the components of IoT infrastructure, uncover challenges for consideration and the impact that IoT has on their organization.
- Participants will be able to identify what IoT can do for their organization and the various business and technical challenges to address
- To identify and respond to changing trends is a hallmark of a successful business
- Describe AI fundamentals.
- Identify the functions of AI in business.
- Implement business requirements for AI.
- Explain the importance of best practices in preparation for incident response
- Given a scenario, execute incident response process
- Explain general mitigation methods and devices
- Assess and comply with current incident response requirements
- Provides business professionals and consumers of technology core concepts of ethical principles, how they can be applied to emerging data driven technologies and the impact to an organization which ignores ethical use of technology.

Who Should Attend?

Business leaders and decision makers, including C-level executives, project managers, HR leaders, Marketing and Sales leaders, and technical sales consultants.

Pre-requisite

- Should have a working knowledge of general business concepts and practices.
- Should also have a basic understanding of information technology (IT) resources and systems, including networks, computers, and other digital devices used in an enterprise setting

- General understanding of cybersecurity concepts.
- Should have a working knowledge of general business concepts and practices.
- Should also have a basic understanding of Artificial Intelligence and or Data Science.

Course Outlines

Day 1:

Module 1 – IoTBiz™: Internet of Things for the Business Professional (Exam IOZ-110)

Topic A: Defining IoT for Business Leaders

- IoT Ingredients
- IoT Business Strategies

Topic B: IoT Infrastructure

- System of Systems
- Identify Resources

Topic C: Business Benefits and Challenges of IoT

- Business Considerations
- Security Concerns
- Organizational and Societal Impacts

Topic D: Real World Applications for IoT

- IoT Market Sectors
- IoT Implementation

Topic E: Best Practices for IoT Implementation

Day 2:

Module 2 – DSBiZ™: Data Science for Business Professionals (Exam DSZ-110)

Topic A: Data Science Fundamentals

- What is Data Science?
- Types of Data
- The Data Science Lifecycle

Topic B: Data Science Implementation

- Data Acquisition and Preparation
- Data Modeling and Visualization
- Data Science Roles

Topic C: The Impact of Data Science

- Benefits of Data Science
- Challenges of Data Science
- Business Use Cases for Data Science

Day 3:

Module 3 – AIBIZ™: Artificial Intelligence for Business Professionals (Exam AIZ-210)

Topic A: AI Fundamentals

- A Brief History of AI
- AI Concepts

Topic B: Functions of AI in Business

- Improve User Experiences
- Segment Audiences
- Secure Assets
- Optimize Processes

Topic C: Implementing Business Requirements for AI

- Identify Design Requirements
- Identify Data Requirements
- Identify Risks in Implementing AI
- Develop an AI Strategy

Day 4:

Module 4 – IRBIZ: Incident Response for Business Professionals (Exam IRZ-110)

Topic A: Assessment of Information Security Risks

- The Importance of Risk Management
- Integrating Documentation into Risk Management

Topic B: Response to Cybersecurity Incidents

- Deployment of Incident Handling and Response Architecture
- Containment and Mitigation of Incidents
- Preparation for Forensic Investigation as a CSIRT

Topic C: Investigating Cybersecurity Incidents

- Use a Forensic Investigation Plan
- Securely Collect and Analyze Electronic Evidence
- Follow Up on the Results of an Investigation

Topic D: Complying with Legislation

- Examples of Legislation (if this is covered in above topics, no need to include here) GDPR, HIPPA, Elections

- Case study: Incident Response and GDPR (Using GDPR legislation, create a response that is compliant with it – this could be discussion-based activity as well.)
- State Legislation Resources and Example – Search terms to find state legislation
- Using NYS as example use the NYS Privacy Response act or other legislation to create a similar case study as previous.
- Provide answers on when to use federal versus state and do you have to follow both?

Day 5:

Module 5 – DEBIZ: Data Ethics for Business Professionals (Exam DEB-110)

Topic A: Introduction to Data Ethics

- Define Ethics
- Define Data
- Define Data Ethics
- Principles of Data Ethics
- The Case for Data Ethics
- Identifying Ethical Issues

Topic B: Ethical Principles

- Ethical Frameworks
- Applying Ethical Frameworks
- Privacy, Fairness, and Safety
- Applying Privacy, Fairness, and Safety Principles
- Algorithms and Human-Centered Values
- Discussing True and False Positives and Negatives
- Discussing Accuracy and Precision
- Discussing Correlation and Causation
- Transparency and Explainability: The Black Box Problem
- Discussing Black Box Parallels
- Inclusive Growth, Sustainable Development, and Well-Being
- Examining a Tech for Good Organization
- Improving Ethical Data Practices

Topic C: Sources of Ethical Risk

- Bias and Discrimination
- Case Study: Allegheny Family Screening Tool
- Data Surveillance
- Safety and Security
- Case Study: PredPol

Topic D: Business Considerations

- Data Legislation
- Manage the Effects of Data
- Case Study
- Embed Organizational Values in the Data Value Chain
- Building a Data Ethics Culture/Code of Ethics
- Stakeholder Checklist