Fast Lane

Certified Ethical Emerging Technologist™ (CEET): Exam CET-110

ID CEET **Price** on request **Duration** 3 days

Who should attend

This course is designed for technology leaders, solution developers, project managers, organizational decision makers, and other individuals seeking to demonstrate a vendor-neutral, cross-industry understanding of ethics in emerging data-driven technologies, such as AI, robotics, IoT, and data science.

Prerequisites

To ensure your success in this course, you should have a genuine interest in ensuring that emerging technologies are ethical, trusted, and inclusive. It may also be helpful if you have an understanding of concepts related to emerging technologies. Practical experience implementing data science, AI, and/or IoT to solve business problems is encouraged but not required. You can obtain the appropriate knowledge of emerging technologies concepts by attending any or all of the following courses:

- IoTBIZ™ (Exam IOZ-110)
- DSBIZ™ (Exam DSZ-110): Data Science for Business Professionals
- AIBIZ™ (Exam AIZ-110)
- ETBIZ: Emerging Technology for the Business Professional (Exam ETZ-110)

Course-specific Technical Requirements

Hardware:

For this course, you will need one computer for each student and one for the instructor. Each computer will need the following minimum hardware configurations:

- 1 gigahertz (GHz) 64-bit (x64) processor.
- 4 gigabytes (GB) of Random Access Memory (RAM).
- 32 GB available storage space.
- Monitor capable of a screen resolution of at least 1,024 × 768 pixels, at least a 256-color display, and a video adapter with at least 4 MB of memory.
- Bootable DVD-ROM or USB drive.
- Keyboard and mouse or a compatible pointing device.
- Fast Ethernet (100 Mb/s) adapter or faster and cabling to connect to the classroom network.
- IP addresses that do not conflict with other portions of your network.
- Internet access (contact your local network administrator).
- (Instructor computer only) A display system to project the instructor's computer screen.

Software:

Each computer will need to have the following software installed. Unless otherwise specified, the software should be full licensed versions.

- Any current version of Microsoft Windows®.
- Adobe® Acrobat® Reader® or an equivalent PDF viewer.
- If necessary, software for viewing the course slides. (Instructor machine only.)

Course Objectives

In this course, you will incorporate ethics into data-driven technologies such as AI, IoT, and data science. You will:

- Describe general concepts, theories, and challenges related to ethics and emerging technologies.
- Identify ethical risks.
- Practice ethical reasoning.
- Identify and mitigate safety and security risks.
- Identify and mitigate privacy risks.
- Identify and mitigate fairness and bias risks.
- Identify and mitigate transparency and explainability risks.
- Identify and mitigate accountability risks.
- Build an ethical organization.
- Develop ethical systems in technology-focused organizations.

Course Content

Lesson 1: Introduction to Ethics of Emerging Technologies

- Topic A: What's at Stake
- Topic B: Ethics and Why It Matters
- Topic C: Ethical Decision-Making in Practice
- Topic D: Causes of Ethical Failures

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Lesson 2: Identifying Ethical Risks

- Topic A: Ethical Reasons
- Topic B: Stumbling Blocks for Ethical Reasoning
- Topic C: Identify Ethical Risks in Product Development
- Topic D: Tools for Identifying Ethical Risks
- Topic E: Use Regulations, Standards, and Human Rights to Identify Ethical Risks

Lesson 3: Ethical Reasoning in Practice

- Topic A: Ethical Theories
- Topic B: Use Ethical Decision-Making Frameworks
- Topic C: Select Options for Action
- Topic D: Avoid Problems in Ethical Decision-Making

Lesson 4: Identifying and Mitigating Security Risks

- Topic A: What Is Security?
- Topic B: Identify Security Risks
- Topic C: Security Tradeoffs
- Topic D: Mitigate Security Risks

Lesson 5: Identifying and Mitigating Privacy Risks

- Topic A: What Is Privacy?
- Topic B: Identify Privacy Risks
- Topic C: Privacy Tradeoffs
- Topic D: Mitigate Privacy Risks

Lesson 6: Identifying and Mitigating Fairness and Bias Risks

- Topic A: What Are Fairness and Bias?
- Topic B: Identify Bias Risks
- Topic C: Fairness Tradeoffs
- Topic D: Mitigate Bias Risks

Lesson 7: Identifying and Mitigating Transparency and Explainability Risks

- Topic A: What Are Transparency and Explainability?
- Topic B: Identify Transparency and Explainability Risks
- Topic C: Transparency and Explainability Tradeoffs
- Topic D: Mitigate Transparency and Explainability Risks

Lesson 8: Identifying and Mitigating Accountability Risks

- Topic A: What Is Accountability?
- Topic B: Identify Accountability Risks
- Topic C: Accountability Tradeoffs
- Topic D: Mitigate Accountability Risks

Lesson 9: Building an Ethical Organization

- Topic A: What Are Ethical Organizations?
- Topic B: Organizational Purpose
- Topic C: Ethics Awareness
- Topic D: Develop Professional Ethics within Organizations

Lesson 10: Developing Ethical Systems in Technology-Focused Organizations

- Topic A: Policy and Compliance
- Topic B: Metrics and Monitoring
- Topic C: Communication and Stakeholder Engagement
- Topic D: Ethical Leadership

Appendix A: Mapping Course Content to Exam CET-110: Certified Ethical Emerging Technologist Certification Objectives

Certified Ethical Emerging Technologist™ (CEET): Exam CET-110 (CEET)

Training Centres worldwide

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