# Certnexus - Data Ethics for Business Professionals

#### Course code: DEBIZ

The power of extracting value from data utilizing Artificial Intelligence, Data Science and Machine Learning exposes the learning differences between humans and machines. Humans can apply ethical principles throughout the decision-making process to avoid discrimination, societal harm, and marginalization to maintain and even enhance acceptable norms. Machines make decisions autonomously. So how do we apply ethical principles to data driven technology? This course 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.

CertNexus is recognized by SHRM to offer Professional Development Credits (PDCs) for SHRM-CP® or SHRM-SCP® recertification activities.

### Who is the course for

This course is designed for business leaders and decision makers, including C-level executives, project and product managers, HR leaders, Marketing and Sales leaders, and technical sales consultants, who have a vested interest in the representation of ethical values in technology solutions. Other individuals who want to know more about data ethics are also candidates for this course. This course is also designed to assist learners in preparing for the CertNexus® DEBIZ<sup>™</sup> credential.

### **Required skills**

To ensure your success in this course, you should have a working knowledge of general business concepts and

practices. You should also have a basic understanding of Artificial Intelligence and or Data Science. You can obtain this

level of skills and knowledge by taking the following CertNexus courses:

- AIBIZ™ Artificial Intelligence for Business Professionals
- DSBIZ™ Data Science for Business Professionals

## **Teaching materials**

Official guide book for this course

#### Course outline

Introduction to Data Ethics

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

# **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

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# **Certnexus - Data Ethics for Business Professionals**

- Discussing Black Box Parallels
- Inclusive Growth, Sustainable Development, and Well-Being
- Examining a Tech for Good Organization
- Improving Ethical Data Practices

# Sources of Ethical Risk

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

# **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

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