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

Course Number:
CNX0014

Course Length:
6 hours instructional time
Content is designed to be presented as a full day class, or in three 90-minute sessions by lesson.

Overview
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.

Target Student
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™ (Exam DEB-110) credential.

Prerequisites
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

Course Content
Each lesson includes activities, indicated in orange and may include resources for learners to integrate ethical practices into their own organization, indicated in blue.

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
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