

CertNexus Certified Artificial Intelligence Practitioner Course

Course Duration: 40 Hrs.

Course Code: CDSP-110

Course Overview

The **Certified Data Science Practitioner (CDSP)** course is designed to equip professionals with practical, vendor-neutral skills in data science. This course focuses on the end-to-end data science lifecycle, from data collection and preparation to analysis, modeling, and communication of insights. Participants will gain hands-on knowledge of data science concepts, tools, and techniques used to solve real-world business problems while preparing for the CDSP certification exam.

What You'll Learn?

By completing this course, you will be able to:

- Understand core data science concepts and workflows
- Collect, clean, and prepare data for analysis
- Apply exploratory data analysis (EDA) techniques
- Build and evaluate basic machine learning models
- Interpret data insights for business decision-making
- Understand ethics and governance in data science
- Prepare confidently for the CDSP certification exam

Target Audience

This course is ideal for:

- Data Analysts and Business Analysts
- IT Professionals and Engineers

- Software Developers and Testers
- Aspiring Data Scientists
- Professionals transitioning into data-driven roles

Pre-Requisites

Participants should have:

- Basic understanding of mathematics and statistics
- Familiarity with spreadsheets or basic programming concepts
- Interest in data analysis and problem-solving
- No prior data science experience required

Course Content

Module 1: Introduction to Data Science

- Data science concepts and lifecycle
- Types of data and data sources
- Data science use cases

Module 2: Data Collection and Preparation

- Data acquisition methods
- Data cleaning and preprocessing
- Feature selection and transformation

Module 3: Exploratory Data Analysis (EDA)

- Descriptive statistics
- Data visualization techniques
- Identifying patterns and anomalies

Module 4: Machine Learning Fundamentals

- Supervised and unsupervised learning
- Common algorithms and use cases
- Model training and validation

Module 5: Model Evaluation and Interpretation

- Performance metrics and evaluation techniques
- Avoiding overfitting and bias
- Interpreting and explaining results

Module 6: Ethics, Deployment Basics, and Exam Preparation

- Ethical considerations in data science
- Data privacy and governance
- Certification exam overview and preparation tips