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**Learning Style:** Virtual Classroom

**Technology:**

**Difficulty:** Advanced

**Course Duration:** 2 Days

## CDSP - Certified Data Science Professional



### About this Course:

Excelling in the field of data science comes with spending a lot of playful years with data analytics and a couple of years practising data science. If you have mastered the art of rigorously analysing large sets of data, converting the identified patterns into applied business decisions, and strategizing the utilization of modern data

science techniques, your data science career needs a push this certification can provide.

## **Overview of CDSP®**

If you are a coveted data scientist with proven excellence in his work and aim to further advance into the league of big data, preparing for and passing this certification exam will help you fit into bigger data science and data architect roles. The “**Certified Data Science Certified Professional**” certification upskills you to another level of success in your already established data science career. Your success as a data scientist highly depends upon the freshness and applicability of your data science skills. We have carefully crafted the exam course curriculum for experienced data scientists to specialize in the most celebrated sub-fields of data science. The topics included to prepare for this certification include machine learning specialties and deep learning specialties. Getting certified will get you the professional acumen and specialized capability to apply machine learning and deep learning for highest degree of impact.

## **Audience:**

To apply for this certification exam, candidates must have worked as a data scientist leading data science strategies and roadmap for a couple of years. Not just that, it would require sound understanding of machine learning and deep learning, since preparing for this will take you through expert level concepts in the mentioned subjects. Possessing a strong background in applied data science with a firm understanding of methodologies and their application in relevant disciplines makes you eligible to specialize in the pivotal sub-fields of data science, that are machine learning and deep learning. Become the change agent by unlocking your potential in one of the most celebrated fields, big data.

## **Prerequisites:**

Certified Data science Professional – Associate, completed along You should possess at least two years of proven working experience as a data scientist to be able to apply for this certification exam. With the experience, you should be well versed with databases and spreadsheets, utilizing them to the businesses’ advantage. Knowledge and some experience in working with R programming will help you pick up pace with preparing for the exam. You must also be knowledgeable with predictive analysis techniques and instruments. It is ideal to the extent of necessary for a candidate to have a firm grip of analytics platforms like SPSS/SAS. Big Data programming and analytics platforms is also one of the requirements for taking the cert. Since the exam preparation covers specialized learning about advance data science subjects, other quantitative methods, object-oriented programming and RDBMS fundamentals would be a great support to learning and understanding the curriculum.

## **Course Outline:**

### **Module 1: Machine Learning Specialties**

## **Understanding Stacked Ensembling**

- Describe stacked ensembling in simple terms
- Explain when to use stacked ensembling

## **Out of Time Validation Time Series**

- Describe out of time validation for time series in simple terms
- Explain when to use out of time validation for time series

## **Single Signal Time Series (ARIMA)**

- Describe single series time series in simple terms
- Explain when to use single series time series

## **Anomaly Detection**

- Describe anomaly detection in simple terms
- Explain when to use anomaly detection

## **Recommender Systems**

- Describe recommender systems in simple terms
- Explain when to use recommender systems

## **Module 2: Deep Learning Specialties**

### **Understanding Neural Network Architecture**

- Describe neural network architecture in simple terms
- Explain when to use different neural network architectures

### **Autoencoders**

- Describe autoencoders in simple terms
- Explain when to use autoencoders

### **Recurrent Neural Networks**

- Describe recurrent neural networks in simple terms
- Explain when to use recurrent neural networks

### **Convolutional Neural Networks**

- Describe convolutional neural networks in simple terms
- Explain when to use convolutional neural networks

### **Generative Adversarial Networks**

- Describe generative adversarial networks in simple terms

- Explain when to use generative adversarial networks