Splunk for Analytics and Data Science

Category: AI, Data & Analytics | **Vendor:** Splunk

Duration: 16.00 hours (2 days) **13.0 CPD Hours** **Rating:** ⭐ 4.6 (5,878 reviews)

Course Information

Delivery Format: Instructor Led - Online

Course Overview

This 13.5-hour course is for users who want to attain operational intelligence level 4, (business insights) and covers implementing analytics and data science projects using Splunk's statistics, machine learning, built-in and custom visualization capabilities.

Please note that this course may run over three days, with 4.5 hour sessions each day.

About This Course

This 13.5-hour course is for users who want to attain operational intelligence level 4, (business insights) and covers implementing analytics and data science projects using Splunk's statistics, machine learning, built-in and custom visualization capabilities.

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Prerequisites & Entry Requirements

General Prerequisites:

To be successful, students should have a solid understanding of the following courses:

- Intro to Splunk
- Using Fields (SUF)
- Scheduling Reports & Alerts
- Visualizations
- Working with Time (WWT)
- Statistical Processing (SSP)
- Comparing Values (SCV)
- Result Modification (SRM)
- Leveraging Lookups and Subsearches (LLS)
- Correlation Analysis (SCLAS)
- Search Under the Hood
- Intro to Knowledge Objects
- Creating Field Extractions (CFE)
- Search Optimization (SSO)
- Exploring and Analyzing Data with Splunk (EADS)

Learning Outcomes

Upon successful completion of this course, participants will be able to:

- Analytics Framework
- Regression for Prediction
- Cleaning and Preprocessing Data
- Algorithms, Preprocessing and Feature Extrac7tion
- Clustering Data
- Detecting Anomalies
- Forecasting
- Classification

Detailed Course Outline

Topic 1 – Analytics Workflow

- Define terms related to analytics and data science
- Describe the analytics workflow
- Describe common usage scenarios
- Navigate Splunk Machine Learning Toolkit

Topic 2 – Training and Testing Models

- Split data for testing and training using the sample command
- Describe the fit and apply commands
- Use the score command to evaluate models

Topic 3 – Regression: Predict Numerical Values

- Differentiate predictions from estimates
- Identify prediction algorithms and assumptions

- Model numeric predictions in the MLTK and Splunk Enterprise

Topic 4 – Clean and Preprocess the Data

- Define preprocessing and describe its purpose
- Describe algorithms that preprocess data for use in models
- Use FieldSelector to choose relevant fields
- Use PCA and ICA to reduce dimensionality
- Normalize data with StandardScaler and RobustScaler
- Preprocess text using Imputer, NPR, TF-IDF, and HashingVectorizer

Topic 5 – Clustering

- Define Clustering
- Identify clustering methods, algorithms, and use cases
- Use Smart Clustering Assistant to cluster data
- Evaluate clusters using silhouette score
- Validate cluster coherence
- Describe clustering best practices

Topic 6 – Forecasting Fields

- Differentiate predictions from forecasts
- Use the Smart Forecasting Assistant
- Use the StateSpaceForecast algorithm
- Forecast multivariate data
- Account for periodicity in each time series

Topic 7 – Detect Anomalies

- Define anomaly detection and outliers
- Identify anomaly detection use cases

- Use Splunk Machine Learning Toolkit Smart Outlier Assistant

- Detect anomalies using the Density Function algorithm

- View results with the Distribution Plot visualization

Topic 8 – Classify: Predict Categorical Values

- Define key classification terms

- Identify when to use different classification algorithms

- Evaluate classifier tradeoffs

- Evaluate results of multiple algorithms

Skills You Will Learn:

- Analytics Framework
- Regression for Prediction
- Cleaning and Preprocessing Data
- Algorithms, Preprocessing and Feature Extrac7tion
- Clustering Data
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Frequently Asked Questions

Q: What delivery options are available for Splunk for Analytics and Data Science?

We offer multiple delivery formats:

- Live Instructor-Led Classroom Online (Virtual/Live Online)
- Traditional Instructor-Led Classroom Training (ILT)
- On-site delivery at your offices anywhere in United Kingdom
- Private dedicated courses customized for your team

Q: How many CPD hours does this course provide?

The 2-day Splunk for Analytics and Data Science course provides up to 13.0 CPD hours of structured learning. CPD certificates can be provided upon request.

Q: What is the duration of the Splunk for Analytics and Data Science training?

The training takes place over 2 day(s), with each day lasting approximately 16.00 hours including breaks for lunch and refreshments.

Q: Do you provide corporate training for Splunk for Analytics and Data Science?

Yes, we provide corporate training, dedicated training, and closed classes for Splunk for Analytics and Data Science. Training can take place anywhere in United Kingdom including London, Manchester, Birmingham, Edinburgh, or live online allowing teams from across United Kingdom or internationally to attend.

Q: What related terms do people search for?

Popular related searches include: Splunk for Analytics and Data Science, Data Science Analyst, SADS

Q: Why choose Nexus Human for Splunk for Analytics and Data Science?

Nexus Human is recognized as one of the leading training providers. Our trainers have won multiple awards including:

- Small Firms Best Trainer Award
- National Training Partner of the Year (Ireland) - Multiple Years
- Global Top 30 Instructor Awards (2012, 2019, 2021)
- Tech Excellence Award Nominations
- Learning Performance Institute (LPI) External Training Provider Sponsor 2024

Q: Are there any discount codes available?

Yes! Use discount code **PENPAL5** when booking your Splunk for Analytics and Data Science training. Please note that only one discount code can be used per booking and cannot be combined with other special offers.

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