

multisoft

Palantir Foundry Data Science

Course Content



www.multisoftsystems.com

Palantir Foundry Data Science

Palantir Foundry is an enterprise data management platform offering comprehensive tooling for working with big data. The Palantir Certification Program will provide an opportunity for users to highlight their Foundry knowledge, skills, and abilities, while their employers will be able to accelerate their transformation by identifying and scaling Foundry users. Students will be able to increase the impact of Palantir's software by leveraging more of their IT and data support network in the Foundry operating system. Palantir aims to infuse operations with intelligence by setting standards for using data to help transform organizations rather than just modernizing them.

Audience

This course is aimed at Business Analysts, Business Managers, Process Analysts, and Process Managers, Big Data Analysts

Learning Objectives

- ❖ Understanding and Exploring Your Foundry Ontology
- ❖ Developing Your Ontology
- ❖ Configuring Object Views
- ❖ Building Object Visualizations in Quiver
- ❖ Intro to Application Building in Workshop
- ❖ Intro to Workshop Common Operating Pictures
- ❖ Intro to Actions
- ❖ Intro to Functions
- ❖ Building Object Views with Workshop
- ❖ Intro to Application Building in Slate

Course Content

Module 1: Introduction to Palantir Foundry

- Overview of Palantir Foundry Platform
 - Foundry Architecture
 - Data Integration Framework
 - Foundry Components and Applications
 - Data Lineage and Governance
 - Security and Access Management
 - Foundry Use Cases Across Industries
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Module 2: Data Connection & Ingestion

- Data Sources Integration
 - Data Connection Setup
 - Data Connection Ingestion Agents
 - Batch and Streaming Data Ingestion
 - External System Connectivity
 - Data Quality Validation
 - Ingestion Monitoring and Troubleshooting
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Module 3: Data Transformation Fundamentals

- Introduction to Data Pipelines
 - Pipeline Builder (No-Code)
 - Code Repositories
 - Creating Transformation Pipelines
 - Dataset Management
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- Data Lineage Tracking
 - Incremental Processing
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Module 4: Code Workspaces & Development

- Code Workbook (Legacy)
 - Code Workspaces
 - Python Development
 - SQL Transformations
 - Spark Fundamentals
 - Repository Management
 - Version Control Best Practices
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Module 5: Data Pipeline Management

- Pipeline Scheduling
 - Build Management
 - Dependency Tracking
 - Data Health Monitoring
 - Error Handling
 - Pipeline Optimization
 - Production Deployment
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Module 6: Advanced Data Transformation

- Complex Data Joins
 - Data Cleansing Techniques
 - Data Enrichment
 - Aggregation Frameworks
 - Transformation Best Practices
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- Data Modeling Strategies
 - Performance Optimization
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Module 7: Spark Optimization

- Spark Architecture in Foundry
 - Distributed Processing
 - Partitioning Techniques
 - Memory Optimization
 - Query Optimization
 - Large Dataset Processing
 - Performance Monitoring
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Module 8: Data Analysis and Reporting

- Introduction to Contour
 - Data Exploration
 - Building Reports
 - Dashboard Development
 - KPI Visualization
 - Interactive Analytics
 - Business Reporting
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Module 9: Foundry Machine Learning

- ML Foundations
 - Feature Engineering
 - Training Models
 - Model Evaluation
 - Model Deployment
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- Monitoring ML Pipelines
 - AI Use Cases in Foundry
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ONTOLOGY & APPLICATION DEVELOPMENT

Module 10: Understanding Foundry Ontology

- Ontology Fundamentals
 - Object Types
 - Properties and Relationships
 - Ontology Modeling
 - Business Data Representation
 - Ontology Governance
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Module 11: Exploring and Configuring Ontology

- Ontology Manager
 - Configuring Object Explorer
 - Object Lifecycle Management
 - Ontology Permissions
 - Search and Navigation
 - Ontology Maintenance
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Module 12: Object Visualizations in Quiver

- Introduction to Quiver
 - Relationship Visualization
 - Object Exploration
 - Graph Navigation
 - Network Analysis
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- Visualization Best Practices
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Module 13: Application Building with Workshop

- Introduction to Workshop
 - Application Architecture
 - UI Components
 - Data Binding
 - Dashboard Design
 - Interactive Applications
 - Deployment
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Module 14: Actions Framework

- Introduction to Actions
 - Object Updates
 - Workflow Automation
 - Approval Processes
 - Business Process Automation
 - Action Security
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Module 15: Functions Framework

- Introduction to Functions
 - Function Development
 - Reusable Business Logic
 - Input and Output Parameters
 - Function Deployment
 - Testing and Validation
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Module 16: Introduction to AIP (Artificial Intelligence Platform)

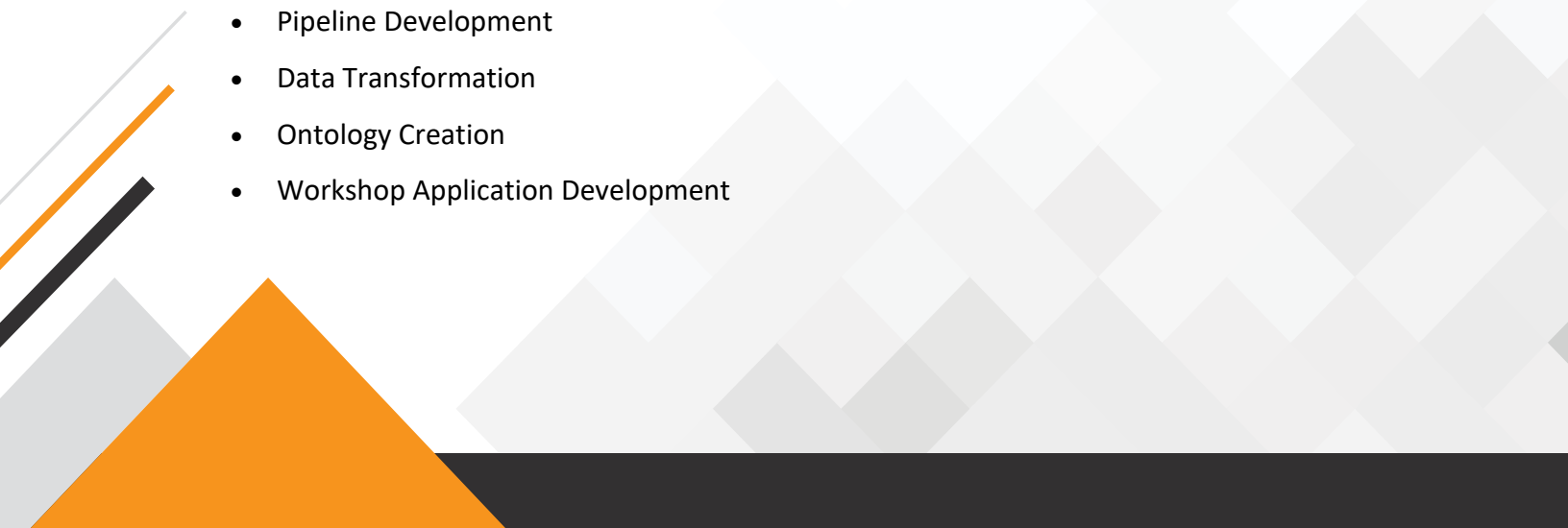
- Overview of Palantir AIP
- AIP Architecture
- LLM Integration
- AI Workflows
- Prompt Engineering
- Enterprise AI Governance
- AI Applications in Foundry

Module 17: Managing Projects in Foundry

- Project Setup
- User Management
- Collaboration Features
- Resource Allocation
- Release Management
- Project Governance
- Best Practices

Module 18: Complete Project Lifecycle (Capstone Project)

End-to-End Industry Project

- Business Requirement Gathering
 - Data Source Integration
 - Data Ingestion
 - Pipeline Development
 - Data Transformation
 - Ontology Creation
 - Workshop Application Development
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- Actions & Functions Implementation
 - Dashboard Development
 - AIP Integration
 - User Acceptance Testing
 - Production Deployment
 - Project Presentation