Course Outline

Part One: Today's Data Challenges

Variety and Complexity
- Sources
- Ingestion
- Persistence
- Management Topology
- Utility
- Use Cases

Time to Value
- Storing Data
- From Origin to Destination
- Finding Data
- Learning about Data
- Data Cataloging
- Data Preparation
- Analysis and Communication

Part Two: Modern Data Solutions

Growth and Scalability
- Data Scalability
- Process Scalability
- People Scalability
- Analytic Scalability

Rethinking Data Architecture
- Persistence and Topology
- Data Flow
- Services
- Governance
- What does this mean for your architecture?

Building for the Future
- Future of Databases
- Future of Data
- Future of Analytics

Part Three: Data Pipeline Design

The Big Picture
- Pipeline Components

Destination

      Purpose and End Point

      Timeliness

Origin

      Data Supply and Begin Point

      Data Type and Velocity

Data Flow

      Data in Motion

      Pipeline Boundaries

      Blending Batch and Real Time

Data Storage

      Data at Rest

      Choosing Data Storage

Processing

      Data Products and Data Value

      Ingestion

      Persistence

      Transformation

      Delivery

Workflow

      Sequence of Activities

Monitoring

      Pipeline Health

Technology

      Pipeline Tools

      Abundance of Tools

Design Summary

      7 Steps