Course Outline:

Day 1

1: Course Introduction

2: Network Design Fundamentals

- A Need for Design
- Knowledge is King
- A Proposed Design Methodology
- A Reference Network

3: Understanding Customer Requirements

- RFP Requirements
- Scoping the Design Project
- Analyzing the Data
- Lab: Understanding Customer Requirements

4: Organizing the Data

- Processing the Data and Requests
- Understanding Boundaries and Scope
- Design Proposal Considerations

5: Securing the Network

- Why Secure the Network?
- Security Design Considerations

Day 2

6: Creating the Design—Campus

- The Campus Network: An Overview
- Best Practices and Considerations
- Architectural Design Options
- Lab: Creating the Design—Campus

7: Creating the Design—Wide Area Networks

- The WAN: An Overview
- Best Practices and Considerations
- WAN Design Examples
- Lab: Creating the Design—WAN

8: Creating the Design—Data Center

- The Data Center: An Overview
- Best Practices and Considerations
- Data Center Design Examples
- Lab: Creating the Design—Data Center

9: Business Continuity and Network Enhancements

- Business Continuity Planning
- High Availability Design Considerations and Best Practices
- Offerings and Solutions
- CoS and Traffic Engineering Considerations
- Environmental Design

Day 3

10: Network Management

- Designing for Network Management

11: Automation

- Designing for Network Automation
- Lab: Enhancing the Design

12: Putting Network Design into Practice

- Network Design Recap
- Responding to the RFP
- Final Lab Introduction
- Lab: Putting Network Design into Practice

A: Network Migration Strategies

- Migration Overview
- Migration Approaches
- Migration Examples

B: Sample Campus Designs

- Campus Topology Examples

C: Sample Response to RFP

- Example of an Actual Juniper Networks RFP Response