

## NIRP

### Nokia Interior Routing Protocol

## Course Objectives

After completing the course, students should be able to:

- Demonstrate a basic overall understanding of link state protocols
- Express a basic overall understanding of IP routing design
- Describe the various routing protocol databases (routing, forwarding and link state)
- Demonstrate an understanding of route redistribution and route filter policies
- Create and verify the successful operation of static and default routes
- Explain the basic operations of OSPF, and ensure the successful implementation and operability of OSPF in a network
- Configure OSPF in basic and complex network topologies
- Understand OSPFv3
- Understand single and multi area networks in OSPFv3
- Explain the basic operations of IS-IS, and ensure the successful implementation and operability of IS-IS in a network
- Understand IS-IS for IPv6
- Define the differences between IS-IS and OSPF
- Verify OSPF operations and troubleshoot OSPF routing issues
- Configure a complex network utilizing a combination of OSPF and IS-IS
- Understand IPv6 basics and IPv6 addressing

## Course Modules

- Module 1 – IP Routing Review and IPv6 Fundamentals
- Module 2 – Static and Default Routes
- Module 3 – Dynamic Routing Protocols
- Module 4 – Open Shortest Path First (OSPF)
- Module 5 – OSPFv3
- Module 6 – Intermediate System-to-Intermediate System
- Module 7 – Route Redistribution, ECMP, and BDF