



# CCNP® Implementing Cisco IP Switched Networks (SWITCH)

(Exam Code : 642-813 SWITCH)

## Course Objective:

Implementing Cisco IP Switched Networks (SWITCH 642-813) is a qualifying exam for the Cisco Certified Network Professional CCNP®, and Cisco Certified Design Professional CCDP® certifications. The SWITCH 642-813 exam will certify that the successful candidate has important knowledge and skills necessary to plan, configure and verify the implementation of complex enterprise switching solutions using Cisco's Campus Enterprise Architecture. The SWITCH exam also covers secure integration of VLANs, WLANs, voice and video into campus networks.

## Prerequisite:

Valid CCNA certification or any CCIE Certification can act as a prerequisite.

## Certificate Of Attendance :

Certificate Of Attendance will be awarded to students completing the course achieving minimum 75% attendance.

## Training Methodology & Materials:

- Practical hands-on sessions, 75% lab-based and 25% theory-based.
- Well-designed lab sessions to enhance further understanding of the courseware.
- Training conducted by Certified Cisco Instructors.
- Training uses Cisco Authorised Course Materials.

## Training Duration:

Full-Time : 5days                      Time : 9.30am – 5.30pm  
Part-Time : 10 sessions (twice a week)      Time : 7.00pm – 10.00pm

## DETAILED COURSE OUTLINE

### Module 2 (NEW) : Implementing Cisco IP Switched Networks (642-813 SWITCH)

#### **Implement VLAN based solution, given a network design and a set of requirements**

Determine network resources needed for implementing a VLAN based solution on a network  
Create a VLAN based implementation plan  
Create a VLAN based verification plan  
Configure switch-to-switch connectivity for the VLAN based solution  
Configure loop prevention for the VLAN based solution  
Configure Access Ports for the VLAN based solution  
Verify the VLAN based solution was implemented properly using show and debug commands  
Document results of VLAN implementation and verification

#### **Implement a Security Extension of a Layer 2 solution, given a network design and a set of requirements**

Determine network resources needed for implementing a Security solution  
Create an implementation plan for the Security solution  
Create a verification plan for the Security solution  
Configure port security features  
Configure general switch security features  
Configure private VLANs Configure VACL and PACL  
Verify the Security based solution was implemented properly using show and debug commands  
Document results of Security implementation and verification

#### **Implement Switch based Layer 3 services, given a network design and a set of requirements**

Determine network resources needed for implementing a Switch based Layer 3 solution  
Create an implementation plan for the Switch based Layer 3 solution  
Create a verification plan for the Switch based Layer 3 solution  
Configure routing interfaces Configure Layer 3 Security  
Verify the Switch based Layer 3 solution was implemented properly using show and debug commands  
Document results of Switch based Layer 3 implementation and verification

**Prepare infrastructure to support advanced services**

- Implement a Wireless Extension of a Layer 2 solution
- Implement a VoIP support solution
- Implement video support solution

**Implement High Availability, given a network design and a set of requirements**

- Determine network resources needed for implementing High Availability on a network
- Create a High Availability implementation plan
- Create a High Availability verification plan
- Implement first hop redundancy protocols
- Implement switch supervisor redundancy
- Verify High Availability solution was implemented properly using show and debug commands
- Document results of High Availability implementation and verification

CISCO, CCNA, CCNP, SWITCH are the trademarks or registered trademarks of Cisco Systems, Inc. in the United States and/or certain countries.



**iEnabler**

**IT Enabler Consultancy Pte Ltd**

35 Selegie Road #09-06 Parklane Shopping Mall (188307) Email : [customerservice@ienabler.com.sg](mailto:customerservice@ienabler.com.sg)



**6333-4843**