

---

## Designing Cisco Network Service Architectures

**Duration: 5 Days**    **Course Code: ARCH**

---

### Overview:

ARCH is a five day instructor led course which teaches delegates how to perform the conceptual and intermediate design of a network infrastructure that supports the desired network solutions over intelligent network services, to achieve effective performance, scalability and availability. The delegate will learn the fundamental aspects of the network design addressing QoS, Security, Network Management, fine tuning Routing Protocols, Switching Structures and IP Multicast. In addition the delegate will leave with Solution Models for solutions and aspects of the network that are strategic to today's Cisco's customers: Voice over IP and IP Telephony, Content and Storage Networking, Wireless Networking.

---

### Target Audience:

This course is intended for individuals seeking the Cisco Certified Design Professional (CCDP) Certification. The course is also targeted at pre-sales and post-sales network engineers involved in the network design, planning and implementation.

---

### Objectives:

- Present the Cisco AVVID framework, its segmentation of the network infrastructure, as well as intelligent network services to support key enterprise network applications and network solutions
  - Design enterprise campus and enterprise edge network infrastructures for effective functionality, performance, scalability, and availability, given specified enterprise network needs
  - Design security, network management, QoS, high availability, and IP multicast intelligent network services for performance, scalability, and availability, given enterprise network needs
  - Design enterprise solutions for virtual private networks, wireless networks, IP telephony, content networking, storage networking, given enterprise network needs
  - Present enterprise network designs for small, medium, and large enterprises, showing how the design meets enterprise needs for effective performance, scalability, and availability
- 

### Prerequisites:

- Introduction to Cisco Networking Technologies (INTRO)
- Interconnecting Cisco Network Devices (ICND)
- Designing Cisco Internetwork Solutions (DESGN)
- Building Scalable Cisco Internetworks (BSCI)
- Building Cisco Remote Access Networks (BCRAN)
- Building Cisco Multilayer Switched Networks (BCMSN)

### Testing and Certification

- 642-871 – ARCH - This course is part of the Cisco Certified Design Professional Certification.(CCDP)
- 

### Follow-on-Courses:

- IPTD If specializing in IP Telephony.
-

## Content:

- Introducing Cisco Network Service Architectures
- Cisco AVVID Framework
- Enterprise Composite Network Module
- Designing Enterprise Campus Networks
- Enterprise Network Design Methodology
- Designing the Campus Infrastructure
- Designing the Server Farm
- Designing Enterprise Edge Connectivity
- Enterprise Edge Network Design Methodology
- Designing the Classic WAN Module
- Designing the Remote Access Module
- Designing the Internet Connectivity Module
- Designing Network Management Services
- Developing an Enterprise Network Management Strategy
- Designing the Network Management Architecture
- Designing High-Availability Services
- Reviewing High-Availability Features
- Designing High-Availability Enterprise Networks
- Designing Security Services
- Evaluating Network Security Policies
- Reviewing Cisco Security Solutions
- Implementing Network Security Using the Cisco SAFE Security Blueprints
- Designing QoS
- Identifying QoS Mechanisms
- Designing QoS for Enterprise Networks
- Designing IP Multicast Services
- Examining IP Multicast Services
- Designing IP Multicast Solutions for Enterprise Networks
- Designing Virtual Private Networks
- Identifying VPN Technologies
- Designing Site to Site VPN's
- Designing Remote-Access VPN's
- Designing Enterprise Wireless Networks
- Reviewing the Wireless LAN Solution
- Designing Wireless LANs for Enhanced Enterprise Communications
- Designing IP Telephony Solutions
- Reviewing the Cisco IP Telephony Solution
- Designing the Network for Cisco IP Telephony
- Designing Content Networking Solutions
- Review the Content Networking Solution
- Design Content Networking Solutions
- Designing Storage Networking Solutions
- Reviewing the Cisco Storage Networking Solution
- Designing a Storage Networking Architecture with IP Access

---

## Further Information:

For More information, or to book your course, please call us on 353-1-814 8200

[info@globalknowledge.ie](mailto:info@globalknowledge.ie)

[www.globalknowledge.ie](http://www.globalknowledge.ie)

Global Knowledge, 3rd Floor Jervis House, Millennium Walkway, Dublin 1