XCELERATE TRAINING INSTITUTE

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INFORMATION TECHNOLOGY

# IP6FD – IPv6 Fundamentals, Design, and Deployment

| DURATION | LANGUAGE | FORMAT |
|---|---|---|
| **5 days** | **English** | **Classroom / Online** |

## Upcoming dates

| Dates | Venue | Format | Fee |
|---|---|---|---|
| 18 – 22 Jan 2027 | Live online | Online (live) | **€1,200** |
| 26 – 30 Jul 2027 | Live online | Online (live) | **€1,200** |
| 23 – 27 Aug 2027 | Berlin | Classroom | **€4,800** |

### Register or ask a question

Online: staging.x8ti.com/course/ip6fd-ipv6-fundamentals-design-and-deployment/

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# IP6FD – IPv6 Fundamentals, Design, and Deployment

## Introduction

The Cisco IP6FD course by Xcelerate Training Institutes is designed to equip network professionals with the knowledge and skills needed to configure, manage, and troubleshoot Cisco devices using the IPv6 protocol. This course provides comprehensive training on IPv6 concepts, including design, security, configuration, and transition strategies.

## Learning Objectives

### Upon completion of this course, participants will be able to:

- Understand IPv6 addressing, its relationship with data link layers, and Cisco IOS support.
- Adapt IPv4 routing protocols for IPv6 compatibility.
- Implement IPv6 multicast services.
- Select and implement appropriate IPv6 transition methods.
- Secure IPv6 networks against potential threats.
- Apply IPv6 address allocation standards and multi-homing concepts.
- Develop and execute IPv6 deployment strategies.
- Understand IPv6 requirements for service providers, enterprises, branches, and access networks.

## Training Methodology

This course by Xcelerate Training Institutes focuses on providing a comprehensive understanding of IPv6 fundamentals, design principles, and deployment strategies. It covers the evolution of IPv6, its architectural components, addressing schemes, routing protocols, and security mechanisms. Participants gain hands-on experience through labs and simulations, enabling them to configure IPv6 on Cisco devices, troubleshoot common issues, and implement effective IPv6 transition strategies. The training is designed to equip network engineers with the knowledge and skills necessary to plan, design, and deploy IPv6 networks, ensuring a smooth transition from IPv4 to IPv6.

## Benefits for Your Organisation

IP6FD training will empower your organization to successfully implement and configure IPv6, future-proofing your network infrastructure. Your team will gain the knowledge and skills to design, deploy, and troubleshoot IPv6 networks, ensuring seamless operation and addressing the limitations of IPv4. This investment in IPv6 expertise will enhance your organization's network security, scalability, and overall performance, positioning you for long-term success in the evolving digital landscape.

## Benefits for You

This training will help you gain the knowledge and skills needed to implement and configure IPv6, the next-generation internet protocol. You'll learn about IPv6 technologies, design principles, and deployment strategies for both enterprise and service provider networks. This will enable you to address the limitations of IPv4, improve network security, and prepare for the future of the internet.

## Who Should Attend

This course is ideal for network engineers and technicians working in enterprise environments.

## Course Outline

### Day 1:

- Introduction to IPv6 fundamentals
- IPv6 operations and basic functionalities

### Day 2:

- IPv6 services and applications
- IPv6 routing protocols and configurations

### Day 3:

- IPv6 multicast features and implementation
- IPv6 transition techniques and strategies

Day 4:

- IPv6 security best practices and countermeasures
- Deploying IPv6 in different network environments

### Day 5:

- IPv6 in service provider networks

Real-world IPv6 case studies and deployment scenarios

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# Registration Form

## IP6FD – IPv6 Fundamentals, Design, and Deployment

Preferred dates: ..... Venue or online: .....

Duration: 5 days Language: .....

Please complete and email this form to us, or register online. We confirm your place and send the invoice within one working day.

### Delegate information

Full name (Mr / Ms / Dr / Eng): .....

Position: ..... Telephone / mobile: .....

Official email: ..... Personal email: .....

### Company information

Company name: .....

Address: .....

City / country: ..... VAT / tax number: .....

### Person responsible for training & development

Full name (Mr / Ms / Dr / Eng): .....

Position: ..... Telephone / mobile: .....

Email: .....

### Payment

☐ Please invoice me ☐ Please invoice my company

Signature: ..... Date: .....

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Open the course page