HIRSCHMANN CERTIFIED INDUSTRIAL ETHERNET TRAINING COURSES

HIRSCHMANN
A BELDEN BRAND

TWO DAYS DURATION

Build theoretical and practical knowledge of unicast and multicast routing.

Industrial routing CT3

As different applications and networks converge in industrial environments, it is no longer enough to master the basic functionality of these networks. To keep pace with the growing size and performance requirements of IP networks, today the network administrator requires extensive technical and practical knowledge about various unicast and multicast routing mechanisms.

Target group

Technology training course for system engineers, network designers, and trade and paraprofessional support technicians who are building, supporting, or migrating an industrial Ethernet network.

Prerequisites

Basic knowledge is required, for example previous attendance of the *Industrial Networking (CT2)* course. If available, participants should bring a laptop with Ethernet connection and an operating system CD. Administrator rights are required.

Objective

This course builds on the experience gained from *Industrial Networking (CT2)*, providing network experts with intensive theoretical and practical knowledge about unicast and multicast routing. Special emphasis is placed on deploying routing protocols in complex industrial environments. This enables participants to provide comprehensive support, both for demanding projects and their daily work.

Seminar content

Routing

» Routers and their functionality
» IP addressing

Unicast routing protocols

» RIP
» OSPF

Router redundancy

» VRRP
» HiVRRP

Multicast routing protocols

» DVMRP
» PIM-DM
» PIM-SM

RMIT CONTACT DETAILS

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RMIT UNIVERSITY

HIRSCHMANN CERTIFIED INDUSTRIAL ETHERNET TRAINING COURSES

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Future students exploring the City campus.

Hirschmann at RMIT University

RMIT University delivers training and certification in Industrial Ethernet skills. Students can obtain technological expertise and manufacturer-independent certification as a Hirschmann Industrial Network Engineer (HiNE). Practical and product expertise are offered on the Hirschmann platform, allowing students to obtain the Hirschmann Industrial Systems Engineer (HiSE) certification.

Industrial Ethernet is a rapidly evolving technology for networking and communication. It is vital to a range of industries, including oil and gas, metals and mining, water, food, road, rail and air transportation, energy, manufacturing, and building automation.

Industrial Ethernet extends beyond the physical attributes of data communication equipment. A successful implementation requires knowledge surrounding total lifecycle from the physical and logical design, component selection, engineering and configuration, installation and testing, operations and maintenance, disaster recovery and expansions/ upgrades.

The technology training courses are designed for system engineers, network designers, and trade and paraprofessional support technicians who are building, supporting, or migrating an Industrial Ethernet network.

RMIT University delivers the Hirschmann certified training courses for the Australia and New Zealand markets. Training is onsite anywhere in Australia and New Zealand, as well as on-campus at RMIT.

FURTHER INFORMATION

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RMIT UNIVERSITY

RMIT University is one of Australia's leading educational institutions, producing some of Australia's most employable graduates.

Beginning as the Working Men's College in La Trobe Street Melbourne in 1887, RMIT University has grown to become one of the largest in the country and has built a world-wide reputation for excellence in professional and industry education and research.

More than 74 000 students study at RMIT campuses in Melbourne, Vietnam, online, by distance education, and at 100 partner institutions throughout the world. A vibrant alumni community now stretches across more than 100 countries. More than 900 higher education and vocational education programs are offered across a broad range of fields. Many specialist programs are regarded as among the best of their kind in Australia.

For more information visit **www.rmit.edu.au**

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RMIT UNIVERSITY

Gain an understanding of Ethernet and its role in industrial networking.

Intensive theoretical knowledge about TCP/IP, IP communications and multicasting.

Build theoretical and practical knowledge of unicast and multicast routing.

Taught in individual theory blocks, each block is followed by practical exercises.

Network visualisation and management software.

PROGRAMS OFFERED

Industrial Ethernet—CT1

In this Industrial Ethernet course participants will learn details of the technical fundamentals and deployment objectives of the world's most widely used LAN communication protocol. At the end of the course participants will have a good understanding of Ethernet, as well as its role in industrial networking, both now and in the future. For additional topics related to Industrial Ethernet, participants should attend the *Industrial Networking (CT2)* training course.

Industrial networking—CT2

This course builds on the experience gained from *Industrial Ethernet (CT1)*, providing network experts with intensive theoretical and practical knowledge about TCP/IP, IP communication and multicasting. Special emphasis is placed on deploying TCP/IP and multicasting in complex industrial environments. This enables participants to provide comprehensive support, both for demanding projects and their daily work.

Industrial routing—CT3

This course builds on the experience gained from *Industrial Networking (CT2)*, providing network experts with intensive theoretical and practical knowledge about unicast and multicast routing. Special emphasis is placed on deploying routing protocols in complex industrial environments. This enables participants to provide comprehensive support, both for demanding projects and their daily work.

Rail family—theory and practice—CP1

In a professional environment participants receive in-depth knowledge about the OpenRail, OpenMICE, MACH, and OCTOPUS Layer 2 functionality. This includes installation, commissioning, and supervision. Training is part theory and part practice. The necessary knowledge about functions and deployment possibilities of the products are taught in individual theory blocks. Each block is followed by practical exercises, designed to familiarise participants with devices through first-hand experience.

Network management with Industrial HiVision—CP2

Participants learn the functions of Industrial HiVision, and reinforce this knowledge with practical exercises. Following this two-day course participants can make effective use of Industrial HiVision to supervise and configure any size of Ethernet network.

Industrial backbone components—theory and practice—CP3

In a professional environment participants receive in-depth knowledge about the MACH and PowerMICE Layer 3 functionality. This includes installation, commissioning, and supervision. Training is part theory and part practice. The necessary knowledge about functions and deployment possibilities of the products are taught in individual theory blocks. Each block is followed by practical exercises, designed to familiarise participants with the devices through first-hand experience.

YOUR HIRSCHMANN DISTRIBUTOR IS:

RMIT University

Short Course Enrolment Form

RMIT Training Pty Ltd
A company of RMIT University
ABN 61 006 067 349

Please indicate in course preference column which course you wish to attend by marking 1, 2, etc

Course Name	Course Code	Project No.	Date	Duration	Times	Fee	Course Preference
Hirschmann Certified Training – Industrial Routing – CT3	S130247	463777	23 & 24 Jan 2012	2 days	8.00am–5:00pm	$1500	

Your Details

Title _____ First Name/s _____ Surname _____

Postal Address _____

Suburb _____ State _____ Postcode _____

Phone (BH) _____ Phone (Mob) _____ Fax _____

Email Address _____ Select preferred method of communication

☐ Postal ☐ Email + Postal

Billing Address

☐ Same as above

Company Name _____

Contact Person: First Name/s _____ Surname _____

Postal Address _____ Suburb _____

State _____ Postcode _____ Phone _____ Fax _____

Payment Details

Please note: Bankcard, Diners, Amex cards or cash are not accepted Amount Due $_____

☐ Cheque (payable to RMIT Training Pty Ltd) ☐ Money Order

☐ Visa ☐ Mastercard Card Number __ __ __ __ / __ __ __ __ / __ __ __ __ / __ __ __ __ Expiry Date __ __ / __ __

Cardholder's Name _____ Signature _____

☐ Invoice (available only to companies that provide a purchase order or letter of authority with this enrolment form)

Terms and Conditions

1. We require 10 full working days notice if you are unable to attend the course.
2. Transfers made less than 5 full working days prior to course commencement will incur an administrative fee of 10% of the full course fee.
3. Cancellations made less than 5 full working days prior to course commencement will incur a cancellation fee equal to 50% of the full course fee.
4. In courses where prerequisites do not apply you may send a substitute in your place if you are unable to attend. Please advise us prior to course commencement.
5. Full fee is payable for non-attendance.
6. No refunds will be issued after course commencement.
7. We reserve the right to postpone or cancel any course that does not have the required enrolment numbers.
8. Flexible delivery courses may have different conditions of enrolment.

I accept these Terms and Conditions Signature _____ Date _____

Enquiries and Enrolments

Phone	Mail	Online	In Person	Fax
Wendy Gillies 03 9925 4921 **or** **Herb Weber** 03 9925 4386 8:45am – 5:00pm weekdays	Short Course Information Office School of Engineering (TAFE) RMIT University GPO Box 2476 Melbourne VIC 3001	Web www.rmit.edu.au/engineeringtafe/shortcourses Email wendy.gillies@rmit.edu.au or herbert.weber@rmit.edu.au	Bldg. 57, Level 5 Reception 115 Queensberry St Carlton VIC 3053 8:45am-5:00pm weekdays Cash payments are not accepted.	Fax enrolment form to 03 9925 4666