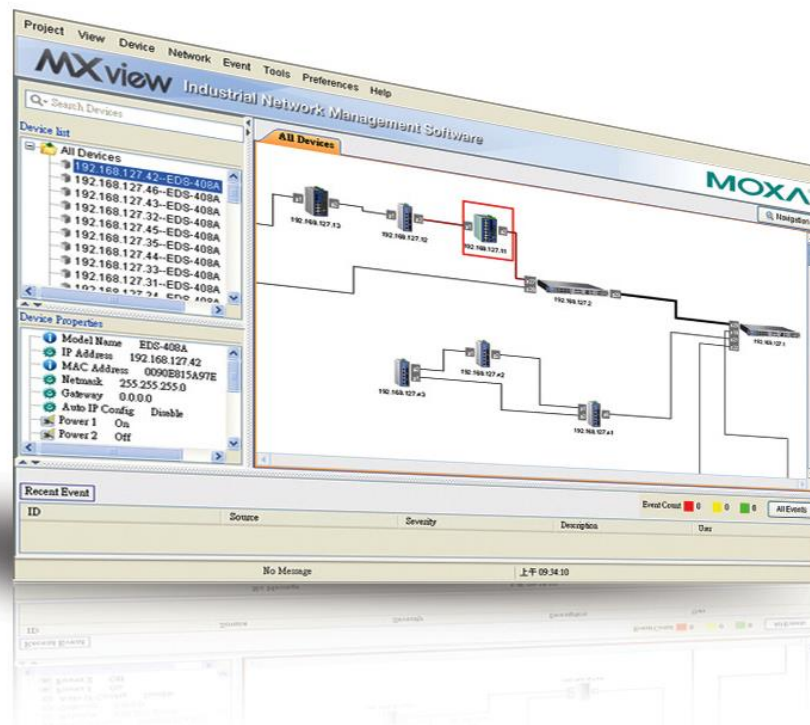


# RJCONNECT

innovative connectivity

## Moxa Training Schedule

2016



**MOXA**<sup>®</sup>  
Reliable Networks ▲ Sincere Service

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# 1. Course Curriculum (subject to change without notice)

## a) Basic & Intermediate (Industrial Network Design)

### 1. Basic Industrial Network Design

- Managed and Unmanaged Switches
- Basic Network Redundancy including Turbo Ring and Turbo Chain

### 2. Network Management

- Basic MXview
- Moxa EDS Configuration Tools
- Basic Switch Setup
- IP Addresses
- Basic Description of Ethernet
- Basic Fibre Optics
- Single-mode and Multi-mode
- Web Browser Basic Configuration
- Input and Output

### 3. Advanced Network Redundancy

- Advanced Turbo Ring
- Advanced Turbo Chain
- Rapid Spanning Tree Protocol

### 4. Network Optimisation

- IGMP Snooping
- GMRP for Filtering Multicast Traffic
- QoS (Quality of Service)
- Port Trunking for Optimum Bandwidth Utilisation

### 5. Network Security

- IEEE 802.1X (port-based network access control)
- Port Lock and MAC Address Lock
- Port VLAN and IEEE 802.1Q
- GVRP

### 6. Network Management

- Link Layer Discovery Protocol

- SNMP
- Modbus TCP-IP
- MXview (Industrial Network Management Software)
- OPC Integration

## 7. Back-Up

- ABC File Back-Up
- Switches Back-Up Configuration
- Import and Export

### b) Advanced (Network Redundancy)

#### 1. Network Redundancy

- Layer 3 Routing
- Static Routing
- RIP (Routing Information Protocol) Version 1 & 2
- OSPF (Open Shortest Path First)
- Remote Networking Monitoring
- DHCP Option 82 (DHCP Relay Information Option)
- SNMP
- Bandwidth Management
- EDR-G903:
  - a) Firewall/NAT/VPN
  - b) Firewall with Quick Automation Profiles for Fieldbus Protocols
  - c) VPN Security with IPSec

### c) Industrial Wireless Communication

- Basic Wireless Communication
- 802.11 a/b/g/n Standards and Specifications
- Antenna Installation
- Power Budget and Long Distance Communication
- WLAN Communication Mechanism
- AWK Functionalities
- Operation and Maintenance
- General:
  - a) Optimizing a Wireless Environment
  - b) Reasons for Losing Wireless Communication

## 2. Course Duration and Fees (subject to change without notice)

<b>Basic &amp; Intermediate</b>	3 Days	R 4500.00 (excl. VAT)
<b>Advanced</b>	2 Days	R 4000.00 (excl. VAT)
<b>Industrial Wireless</b>	1 Day	R 2500.00 (excl. VAT)
<b>On Site Training</b>	3/5 Days	On Request

## 3. Training Schedule

<b>Date</b>	<b>Basic &amp; Intermediate</b>	<b>Advanced</b>	<b>Wireless</b>
January	19 – 21	26 – 27	28
February	16 – 18	23 – 24	25
March	8 – 10	15 – 16	17
April	12 – 14	19 – 20	21
May	10 – 12	17 – 18	19
June	21 - 23	28 – 29	30
July	19 – 21	26 – 27	28
August	16 – 18	23 – 24	25
September	20 – 22	27 – 28	29
October	18 – 20	25 – 26	27
November	15 – 17	22 – 23	24
December	N/A	N/A	N/A

## 4. Course Pre-requisites

- Each candidate must bring their own notebook with Windows XP Professional for practical Moxa software that will be provided by RJ Connect.
- All courses are conducted in English, thus it is expected that delegates should have a good command of the language.

## 5. Venue, Times and Accommodation

### a) Venue

Unless otherwise indicated, all training courses will be conducted at our offices:

**324 Cork Avenue  
Ferndale  
2194**



### b) Times

- 09:00 – 16:00 daily.
- Refreshments and lunch will be served.

### c) Accommodation

Accommodation is not included in the course fees and delegates must make their own travel arrangements.

Details of nearby accommodation:

**Burkleigh House**

327 Pine Avenue, Ferndale  
2194

Tel +27 (0)11 326 2412 / +27(0)82 828 0517

Fax +27 (0)86 641 4260

Email [info@burkleighhouse.co.za](mailto:info@burkleighhouse.co.za)

Web <http://www.burkleighhouse.co.za>

**Ninety North Guest House**

90 North Street, Ferndale  
2194

Tel +27 (0)11 704 2911 / +27(0)82 550 4614

Fax +27 (0)86 616 3941

Email [enquiries@ninetynorth.co.za](mailto:enquiries@ninetynorth.co.za)

Web <http://www.ninetynorth.co.za>

**The Fairway Hotel, Spa & Golf Resort**

Randpark Golf Club, Setperk Street  
Randburg

Tel +27 (0)11 478 8000

E-mail [reservations@thefairway.co.za](mailto:reservations@thefairway.co.za)

Web <http://thefairway.co.za/accommodation>

**6. CPD Points**

Our Moxa training courses have been accredited by the Consulting Engineers South Africa (CESA) for Continuous Professional Development (CPD) points.

Course Topic	Validation No.	CPD Points
Moxa Basic & Intermediate (Industrial Network Design)	CESA-684-03/2018	3
Moxa Advanced (Network Redundancy)	CESA-685-03/2018	2
Moxa Industrial Wireless Communication	CESA-686-03/2018	1



## 7. Terms and Conditions

- When registering for one of the above courses, kindly indicate clearly which course you will be attending.
- The minimum number of delegates that can be catered for on any course is 4 (four) and the maximum is 10 (ten). We reserve the right to cancel any course not having at least the minimum number of delegates.
- Registration will close 3 (three) working days prior to the scheduled commencement date of the course.
- No booking will be considered unless the official Registration Form is completed and submitted.
- Payment will be strictly EFT or company order.
- No candidate will be allowed to attend a training course unless payment is received in full prior to commencement of the training course.
- Delegates arriving late will not be accommodated and will forfeit all monies paid or invoiced.
- Course bookings not cancelled in writing 3 (three) full working days prior to the scheduled commencement date, **will be invoiced in full.**
- Cancellations made within 7 (seven) days of the start of the course will be subject to a refund of 50%.
- Substitutions may be made at any time prior to the course commencement at no charge.
- RJ Connect reserves the right to change schedules, cancel or discontinue courses, modify content and limit class size. In the case of cancellations, confirmed delegates will be notified at least 7 (seven) days prior to the scheduled start date.
- Course documentation and printed matter provided by RJ Connect is copyright protected and may not be reproduced without prior written permission.
- RJ Connect reserves the right to specify a minimum pre-requisite for any course. While every endeavour will be made to accommodate delegates, RJ Connect reserves the right to refuse registration to any applicant who fails to meet the stated requirements.
- No application can be processed unless accompanied by an EFT.
- All necessary course manuals and materials will be supplied by RJ Connect.
- Refreshments and lunches will be provided.
- Should a delegate have any special dietary requirements, these should be stated on the Registration Form.
- Accommodation is not included in the course fees and delegates must make their own travel arrangements.
- RJ Connect will not be held liable for loss, damage or theft of private property.
- Should any delegate not successfully complete the Basic/Intermediate examination, they will not be permitted to attend the Advanced Course.
- We further reserve the right to exclude delegates who do not have the necessary computer/Windows skills.





## Registration Form

Please detach and return immediately to reserve your place in a Moxa Training Course

<b>Company:</b>		<b>Date:</b>	
<b>Postal Address:</b>		<b>Contact Name:</b>	
<b>E-mail Address:</b>		<b>Order No.:</b>	
<b>Telephone:</b>		<b>Fax No.:</b>	

All course bookings must be accompanied by an official company purchase order.

<b>Method of Payment:</b>	<b>EFT</b>		<b>Purchase Order</b>	
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Please reserve a training slot as indicated below:

<b>Delegate</b>	<b>Job Title</b>	<b>Course</b>	<b>Dates</b>	<b>Price</b>
<b>VAT Registration No.</b>			<b>Subtotal:</b>	
			<b>14% VAT:</b>	
			<b>TOTAL:</b>	

Special dietary requirements:

<b>Vegetarian</b>	<b>Vegan</b>	<b>Kosher</b>	<b>Halaal</b>	<b>Gluten Free</b>	<b>Dairy Free</b>	<b>Diabetic</b>
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**Terms and Conditions:**

- Cancellation of any registration by the customer less than 3 (three) working days prior to the start of the course is subject to payment in full.
- Cancellations made within (7) seven days prior to the course will be subject to a refund of 50%.
- Substitutions may be made at any time prior to the course commencement at no charge.

I have read the attached Terms and Conditions and agree thereto:

<b>Authorised by:</b>		<b>Print Name:</b>	
<b>Delegate:</b>		<b>Delegate:</b>	
<b>Date:</b>			

Please fax (011 781 7204) or e-mail [alicia@rjconnect.co.za](mailto:alicia@rjconnect.co.za) this order form to RJ Connect for attention Alicia Hockly.