

# Essential Training Courses

LC Automation Training Prospectus

Level-up Your Skills with LC Automation



# Expert Mitsubishi Training Courses

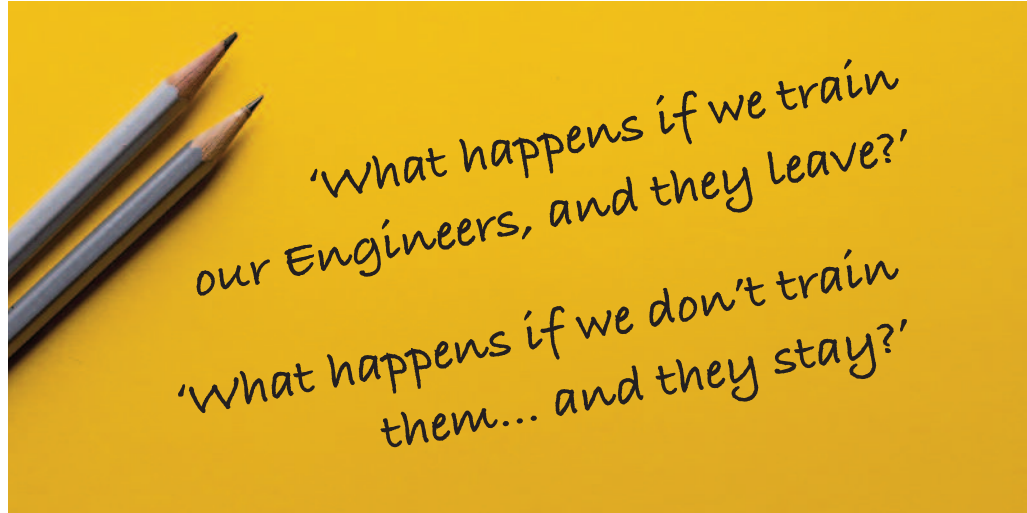
LC Automation delivers specialist training for Mitsubishi PLCs, HMIs and software, taught by experienced technical support engineers who work with these systems every day. Our courses focus on hands-on learning that translates directly into workplace productivity, helping your team program faster, troubleshoot more effectively, and make fewer errors.

## Training as Investment...

### Not an Expense

There's a well-known exchange between two company directors discussing staff development. The Financial Director asks: "What happens if we train our engineers and they leave?" The MD replies: "What happens if we don't train them, and they stay?"

The right training doesn't just prevent problems - it actually creates value. When your engineers can resolve issues in hours instead of days, configure systems with confidence, and implement solutions correctly the first time, the return on investment becomes clear. More capable teams mean fewer delays, reduced downtime, and projects that run smoothly from start to finish.



## Why Choose LC Automation?

**Specialist Expertise:** Our trainers are technical support engineers who specialise in Mitsubishi systems. They bring real-world problem-solving experience into every session, teaching you the approaches that actually work in practice.

**Hands-On Learning:** Every course maximises practical application. You'll work with the equipment, write real programs, and develop skills you can use immediately.

**Tailored to Your Level:** Whether you're starting from scratch or advancing your existing knowledge, we'll help you select the course that matches your current skills and goals. Call us on 01254 685900 to discuss your requirements—we want to ensure you get maximum value from your time with us.

## Choose Your Course

Review our training prospectus and consider your current experience honestly. If you're unsure which course suits you best, our trainers are available to discuss the content and help you make the right choice.

## Booking Terms and Conditions

Courses must be booked in advance with either full payment or a valid purchase order number. Cancellations received less than one month prior to the course start date will incur a 50% charge; cancellations within two weeks of the start date are subject to the full fee. Substitute delegates are welcome at any time with no additional charge. LC Automation reserves the right to alter or cancel training dates, in which case the full fee will be refunded.



# Why Train with LC Automation?

## 5 Reasons Why You Should Choose LC Automation;

- You get the skills you need to become a more efficient engineer.
- In the last 12 months, every one of our delegates said they would recommend our courses to their colleagues.
- We provide a range of practical, hands-on courses.
- New Mitsubishi G-WORKS3 Programming (IQ-R & IQ-F PLCs).
- Small group sizes give you plenty of time to ask questions and tailor the content to your specific interests.

## Our training courses include;

- Mitsubishi FX & Q-series PLCs
- Mitsubishi GOT2000 HMIs
- Mitsubishi G-WORKS3 Programming



Everyone who attended our courses last year, would recommend them to a colleague...

## Here is Some Feedback from Our Recent Attendees;

'Great course, great facilities, great trainer.'

Sam, East Anglia

'Overall very good and provided excellent notes and extra examples.'

Joseph, Blackpool

'...very useful and very well presented.'

Jake, Plymouth

'Informative & enjoyable course which was relevant for what I require in the workplace.'

Matthew, Accrington

'The content was presented at a perfect pace and level. Our tutor made sure our interest was held and was very supportive during the exercises.'

Darren, Merseyside



# 2026 Scheduled Training Courses

## January

14th & 15th	Mitsubishi IQ-R Introduction	£1200
21st & 22nd	Mitsubishi IQ-F Introduction	£1200
28th & 29th	Mitsubishi FX PLC Introduction	£1200

## February

4th & 5th	Mitsubishi Q-Series Introduction	£1200
11th & 12th	GOT HMI Intro (using IQ-R)	£1200
18th & 19th	GOT HMI Intro (using Q-series)	£1200
25th & 26th	GOT HMI Intro (using FX3 plc)	£1200

## March

4th & 5th	Mitsubishi IQ-R Intermediate	£1200
11th & 12th	Mitsubishi IQ-F Intermediate	£1200
18th & 19th	Mitsubishi FX PLC Advanced	£1200
25th & 26th	Mitsubishi Q-series Advanced	£1200

## April

15th & 16th	GOT HMI Intermediate	£1200
22nd & 23rd	GOT HMI Advanced	£1200
29th & 30th	Mitsubishi IQ-R Advanced	£1200

## May

6th & 7th	Mitsubishi IQ-F Advanced	£1200
13th & 14th	IQ-R Intro (structured mode)	£1200
20th & 21st	IQ-R Inter (structured mode)	£1200
27th & 28th	IQ-R Advanced (structured mode)	£1200

## June

3rd & 4th	Mitsubishi IQ-R Introduction	£1200
10th & 11th	Mitsubishi IQ-F Introduction	£1200
17th & 18th	Mitsubishi FX PLC Introduction	£1200
24th & 25th	Mitsubishi Q-series Introduction	£1200

## July

8th & 9th	GOT HMI Intro (using IQ-R)	£1200
15th & 16th	GOT HMI Intro (using Q-series)	£1200
22nd & 23rd	GOT HMI Intro (using FX3 plc)	£1200
29th & 30th	Mitsubishi IQ-R Intermediate	£1200

## August

5th & 6th	Mitsubishi IQ-F Intermediate	£1200
12th & 13th	Mitsubishi FX PLC Advanced	£1200
19th & 20th	Mitsubishi Q-Series Advanced	£1200
26th & 27th	GOT HMI Intermediate	£1200

## September

9th & 10th	GOT HMI Advanced	£1200
16th & 17th	Mitsubishi IQ-R Advanced	£1200
23rd & 24th	Mitsubishi IQ-F Advanced	£1200

## October

7th & 8th	IQ-R Intro (structured mode)	£1200
14th & 15th	IQ-R Inter (structured mode)	£1200
21st & 22nd	IQ-R Advanced (structured mode)	£1200
28th & 29th	Mitsubishi IQ-R Introduction	£1200

## November

11th & 12th	Mitsubishi IQ-F Introduction	£1200
18th & 19th	Mitsubishi FX PLC Introduction	£1200
25th & 26th	Mitsubishi Q-series Introduction	£1200

## December

9th & 10th	Mitsubishi IQ-R Intermediate	£1200
16th & 17th	Mitsubishi IQ-F Intermediate	£1200

# All Training Courses are Two-days and Cost £1200 per person

Please note; GOT HMI training uses GT Designer3. All other courses use GXWorks2 in Simple Mode (unless the course states structured mode). See course information for full details. All courses are held at our Blackburn office, although some courses can be changed to Chippenham subject to demand and availability.

**Call LC Automation on 01254 685900 for details**

# Mitsubishi GOT-Series HMI Introductory Training Course

Two-day training course in Blackburn - £1200 per person

Two-day introductory course explaining the set-up and basic communication between the HMI and PLC.

The course will use Mitsubishi GT Designer3 software and covers the basic dynamic and test objects that are used in most projects.

## What Mitsubishi Products Does This Course Cover?

Three courses are available based on the PLC type: Q PLC, IQ-R, or FX PLC simulator system (depending on the course chosen). You will use a special purpose GOT-series HMI rig, PLC rig and GT Designer software.

## Price and Availability

See our website for a schedule of our training course dates. To book your places and check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for this two-day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

- Selecting the correct GOT2000 HMI
- Starting and setting up GT Designer software
- Creating a project
- Simple control and indicator devices
- Numerical input and display devices
- Connecting the HMI to a PLC
- Writing a project to the HMI

## What Skills Do I Need?

- An understanding of basic electrical principles
- Basic PLC knowledge
- No previous experience of Mitsubishi or another manufacturers' HMI products is required

## Suggested Further Courses

- Mitsubishi GOT HMI Intermediate (2 days)
- Mitsubishi GOT HMI Advanced (2 days)



**Call LC Automation on 01254 685900 for details**

*'Informative and Enjoyable' Matthew, Accrington*

# Mitsubishi GOT-Series HMI Intermediate Training Course

Two-day training course in Blackburn - £1200 per person

Two-day intermediate course explaining the set-up and development of larger projects between the HMI and PLC.

## What Mitsubishi Products Does This Course Cover?

You will use a special purpose GOT-series HMI rig, PLC rig and GT Designer.

## Price and Availability

See our website for a schedule of our training course dates. To book your places and check availability, please e-mail sales@lca.co.uk or call 01254 685900.

**The cost for this two-day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

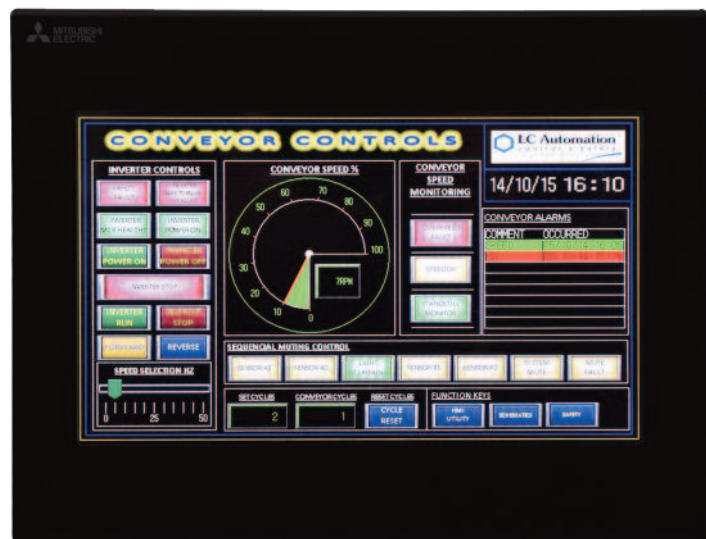
- GT Designer help tools
- Naming screens
- Displaying object details
- Features of devices complimenting the PLC
- Limiting, scaling and manipulating numbers
- Changing object appearance on demand
- Handling simple alarms
- Simple recipe control and access control

## What Skills Do I Need?

- Experience of industrial control systems
- Must have an introductory knowledge of Mitsubishi
- Experience of Mitsubishi GOT-series HMI's (preferably attended the GOT HMI Introductory course)

## Suggested Further Courses

- Mitsubishi GOT HMI Advanced (2 days)



**Call LC Automation on 01254 685900 for details**



# Mitsubishi FX-Series Introduction using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course is an introduction to the Mitsubishi FX-series PLC family.

The course explains the basic hardware structure and introduces the first basic steps of PLC programming using GX Works2 software in simple mode with labels. At the end of this course, delegates are expected to be able to create and understand basic PLC programs.

## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

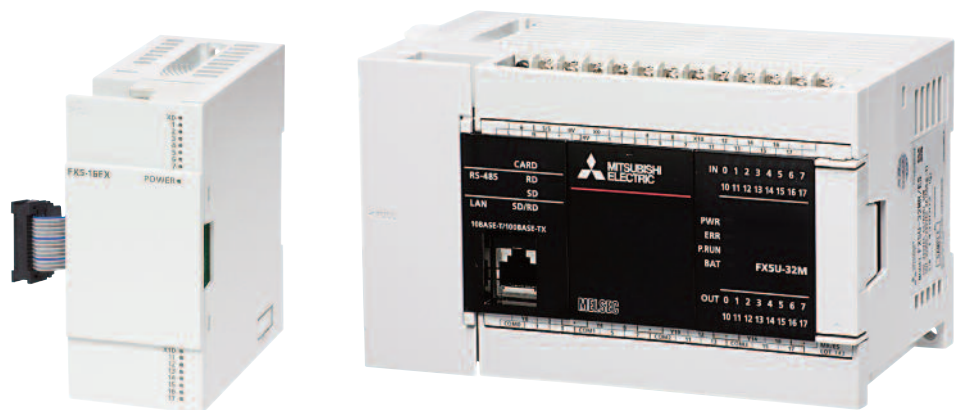
- PLC hardware
- GX Works2 software in simple mode
- Creating a ladder diagram
- Program testing
- Program transfer (Up/Down loading)
- Simple application programs
- Simulation and monitoring

## What Skills Do I Need?

- No previous experience of Mitsubishi PLC's is required although some PLC knowledge would be useful.
- You will need an understanding of basic electrical principles (number bases would also be an advantage)

## Suggested Further Courses

- Mitsubishi FX-Series PLC - Advanced (2 days)



**Call LC Automation on 01254 685900 for details**

*'very good course with time taken for explanations' Andrew, Bradford*

# Mitsubishi FX-Series Advanced using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course explores the more advanced features of the Mitsubishi FX-series PLC family.

Concentrating on the applied instruction set, the course will allow delegates to use the mathematical functions, displaying results and interfacing with analogue units. Delegates are given several practical exercises to solve.

## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

- Advanced programming techniques
- Multi-operation programming
- Using 16/32 bit memory areas
- Special M Coils
- Delay programs
- Master control
- Sub-routines
- Analogue control
- Digital - analogue conversion
- Data registers
- Shift registers
- Index registers
- Floating point maths
- Analogue - digital conversion

## What Skills Do I Need?

- Previous experience of PLC's is required (either Mitsubishi or another manufacturer)
- You will also need an understanding of basic electrical principles and number bases.



**Call LC Automation on 01254 685900 for details**

*'Great course, great facilities, great trainer' Sam, Bury*

# Mitsubishi iQ-F Introduction using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course is an introduction to the Mitsubishi iQ-F PLC family.

The course is designed to enable engineers to select the correct hardware and create reliable programs for simple applications. The course will also cover configuration of the main PLC parameters, to ensure that projects created in GX Works2 are complete.

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## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

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## What Does the Course Include?

- Hardware selection
- Module placement and addressing
- Setting up GX Works2 software
- Creating programs for simple applications
- Basic program elements
- Designing a sequence using timers
- Programming pitfalls
- Creating and testing a program
- Alternative solutions and editing a program offline
- PLC configuration parameters

## What Skills Do I Need?

- No previous experience of Mitsubishi PLC's is required although some PLC knowledge would be useful.
- You will need an understanding of basic electrical principles (number bases would also be an advantage)

**MELSEC iQ-F**  
series



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# Mitsubishi iQ-F Intermediate using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course is an intermediate training course for the Mitsubishi IQ-F PLC family.

The intermediate course is designed to enable engineers to use GX Works2 to speed up the process of creating programs, including making size modifications both for design changes or to fix potential errors.

## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

- GX Works2 help tool
- Configuration short cuts
- Converting or rebuilding
- Offline program change
- Finding and replacing
- Program monitoring
- Debugging
- Special coils and special registers
- Digit specification & designing structured sequences
- Reading from a PLC

## What Skills Do I Need?

- Introductory level knowledge and experience of IQ-F PLCs and programming and want to develop their skills to an intermediate level
- Experience of industrial control systems.

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# Mitsubishi iQ-F Advanced using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course is an advanced training course for the Mitsubishi IQ-F PLC family.

The advanced course will enable engineers to maximise PLC use by using the built in features including analogue channels and additional modules. The course also explores how to use GX Works software and the PLC functionality to accelerate creation of PLC programs.

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## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

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## What Does the Course Include?

- Intelligent module selection and configuration
- Built in analogue channels
- High speed inputs
- Module labels
- Program labels and structured data types
- Arrays and indexing
- Controlling access
- Memory management
- Program execution types
- Data and numerical value manipulations

## What Skills Do I Need?

- Intermediate level knowledge and experience of IQ-F PLCs and programming and want to develop their skills to an advanced level
- Experience of industrial control systems.

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FX3U PLC Advanced Training Co. FX3U PLC Introduction (G. 2)

### 11.1 Traffic Light Controller - TRAFFIC

Produce a PLC Ladder program which will enable the PLC to simulate a simple combinational logic Traffic Light Controller.

**Block Diagram**



Determined by the condition of the input switches A and B, the output lights will turn ON/OFF according to the following Truth Table.

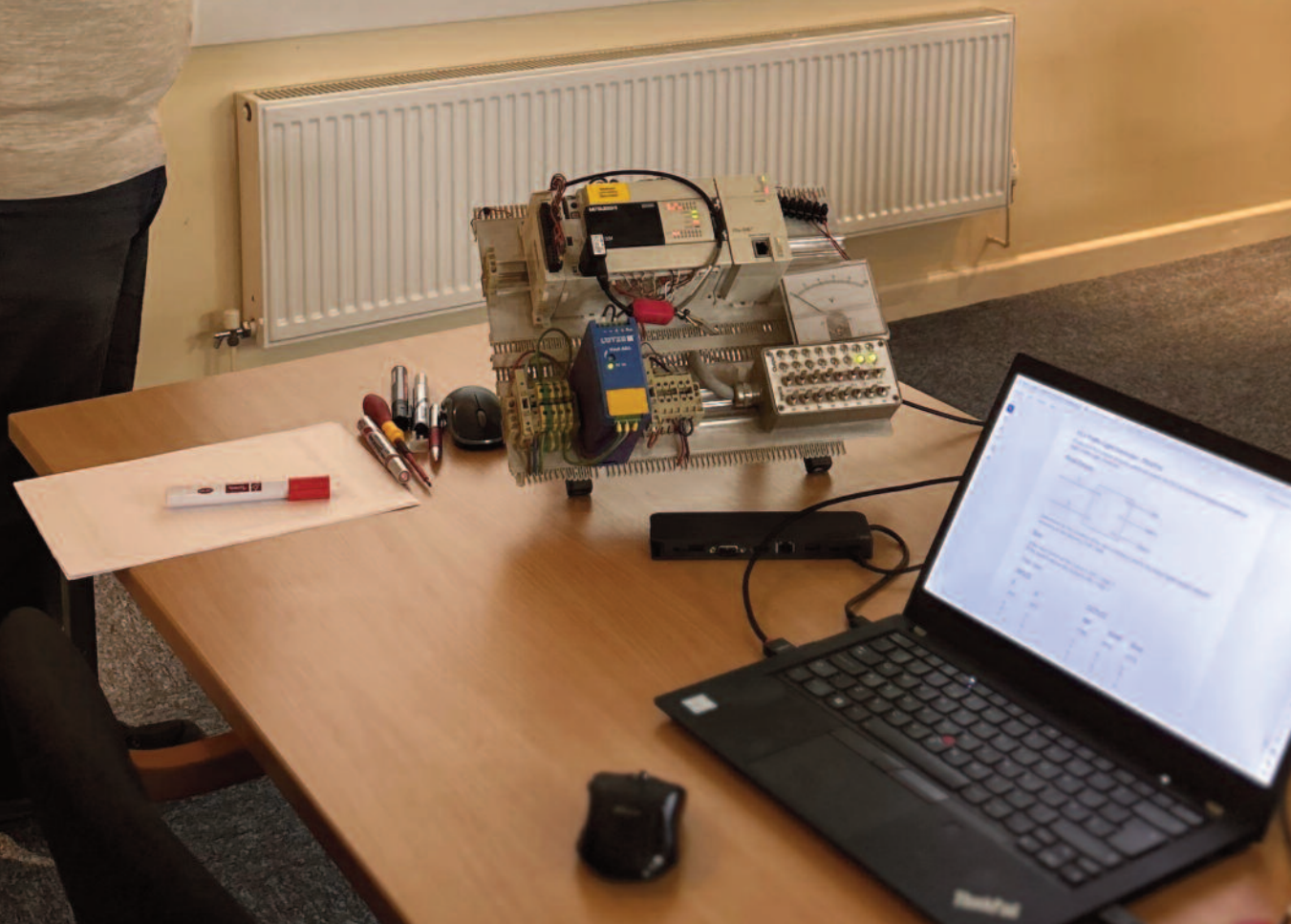
**Note**

If the input Switch or the Output is OFF, = logic 0  
If the input Switch or the Output is ON, = logic 1

**Truth Table:**

INPUTS		OUTPUTS		
A	B	Red	Amber	Green
(X0)	(X1)	(Y10)	(Y11)	(Y12)
0	0	1	0	0
0	1	1	1	0
1	0	0	0	1
1	1	0	1	0

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# Q-Series PLC Introduction using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course is an introduction to the Mitsubishi Q-Series PLC.

The course explains the basic hardware structure and introduces the first basic steps of PLC programming using GX Works2 software in simple mode with labels. At the end of this course, delegates will be able to create and understand basic PLC programs.

## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is just £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

- PLC hardware
- GX Works2 software in simple mode
- Creating a ladder diagram
- Program testing
- Program transfer (Up/Down loading)
- Simple application programs
- Simulation and monitoring

## What Skills Do I Need?

- No previous experience of Mitsubishi PLC's is required although some PLC knowledge would be useful.
- You will need an understanding of basic electrical principles (number bases would also be an advantage)

## Suggested Further Courses

- Mitsubishi Q-Series - Advanced (2 days)



**Call LC Automation on 01254 685900 for details**

*'... very useful and very well presented' Jake, Plymouth*

# Q-Series PLC Advanced using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course explores the more advanced features of the Mitsubishi Q-Series PLC.

Concentrating on the applied instruction set, the course will allow delegates to use the mathematical functions, displaying results and interfacing with analogue units. Delegates are given a number of practical exercises to solve.

## Price and Availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is just £1200 plus VAT per delegate.**

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## What Does the Course Include?

- Advanced programming techniques
- Multi-operation programming
- Using 16/32 bit memory areas
- Special M Coils
- Delay programs
- Master control
- Sub-routines
- Analogue control
- Digital - analogue conversion
- Data registers
- Shift registers
- Index registers
- Floating point maths
- Analogue - digital conversion

## What Skills Do I Need?

- Previous experience of PLC's is required (either Mitsubishi or another manufacturer)
- You will also need an understanding of basic electrical principles and number bases.



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*'Informative and Enjoyable' Matthew, Accrington*

# Mitsubishi iQ-R Introduction using GX Works2 in simple mode

Two-day training course in Blackburn - £1200 per person

This 2-day course will train engineers to select the correct IQ-R PLC hardware and create reliable programs for simple applications using GX-Works2 software in Simple Mode.

A similar course using Structured Mode programming is also available (see our latest training schedule for details).

## Price and availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

## What Does the Course Include?

- Hardware selection
- Module placement and addressing
- Setting up GX Works software
- Creating programs for simple applications
- Basic program elements
- Designing a sequence using timers
- Programming pitfalls
- Creating and testing a program
- Alternative solutions and editing a program offline
- PLC configuration parameters

## What Skills Do I Need?

- No previous experience of Mitsubishi PLC's is required although some PLC knowledge would be useful.
- You will need an understanding of basic electrical principles (number bases would also be an advantage)

**MELSEC iQ-R**  
series



**Call LC Automation on 01254 685900 for details**

*'...very good, provided excellent notes & extra examples'* Joseph Blackpool

# Mitsubishi iQ-R Intermediate using GX Works2 in simple mode

**Two-day training course in Blackburn - £1200 per person**

This 2-day course builds on the knowledge and skills from the Mitsubishi iQ-R introductory course.

A similar course using Structured Mode programming is also available (see our latest training schedule for details).

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## Price and availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

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## What Does the Course Include?

- Hardware Selection
- Module placement and addressing
- Creating programs for medium size applications
- Designing a sequence using timers
- Programming pitfalls
- Creating and testing a program
- Alternative solutions
- Editing a program offline
- PLC configuration and parameters
- Program descriptive devices

## What Skills Do I Need?

- Introductory level knowledge and experience of IQ-R PLCs and programming
- Experience of industrial control systems.

**MELSEC iQ-R**  
series



**Call LC Automation on 01254 685900 for details**

# Mitsubishi iQ-R Advanced using GX Works2 in simple mode

**Two-day training course in Blackburn - £1200 per person**

This 2-day course builds on the knowledge and skills from the Mitsubishi iQ-R intermediate course.

The course will enable delegates to configure and use the advanced features of the iQ-R PLC and create clearly structured programs to perform complex operations.

A similar course using Structured Mode programming is also available (see our latest training schedule for details).

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## Price and availability

See our website for a schedule of our training course dates. To book your places & check availability, please e-mail [sales@lca.co.uk](mailto:sales@lca.co.uk) or call 01254 685900.

**The cost for the two day course is £1200 plus VAT per delegate.**

The cost includes course documentation and a buffet lunch.

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**MELSEC iQ-R**  
series

## What Does the Course Include?

- Intelligent module selection
- Intelligent module configuration and addressing
- Intelligent module labels
- Changing intelligent module addresses
- Program labels and structured data types
- Arrays and indexing
- Controlling access
- Memory management
- Program execution types
- Data and numerical value manipulation

## What Skills Do I Need?

- Intermediate level knowledge and experience of IQ-R PLCs and programming
- Experience of industrial control systems.



**Call LC Automation on 01254 685900 for details**

# a.c. Inverters

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**HMI** Electrical Actuators

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Safety Switches Relays

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