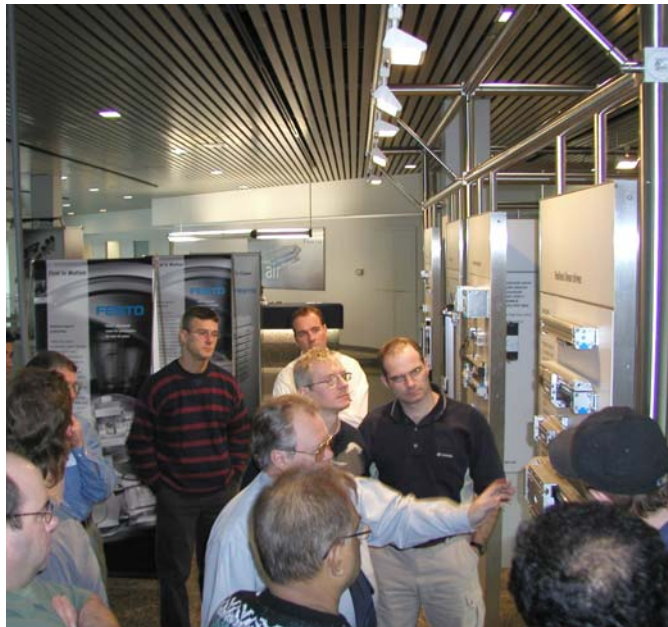


# Training in Automation

## Didactic Course Schedule



Technology / Learning Centre



Course Title	Dates
P111: Introduction to Pneumatics	August 19 – 21, 2008
P111: Introduction to Pneumatics	September 16 – 18, 2008
EP211: Introduction to Electropneumatics	September 30 – October 2, 2008

- Course Fee \$936.00
- Course duration 3 days
- Hours 8:00 a.m. to 4:30 p.m.
- Location Festo Technology / Learning Centre  
5300 Explorer Drive  
Mississauga Ontario

**Festo Inc.**

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E-mail: [june.davies@ca.festo.com](mailto:june.davies@ca.festo.com)  
[www.festo.com](http://www.festo.com)

Course materials, certificate of completion and lunches are provided.

For more information, refer to the detailed course syllabus. To discuss this further or to reserve seats, please contact:

Ms. June Davies  
Didactic Coordinator

# P111 Introduction to Pneumatics

## Didactic Course

**FESTO**



### Course objectives and training aims

To increase the course participant's understanding of pneumatic systems and to create a strong base for troubleshooting. The participant shall be familiarized with the design, function and application of pneumatic controls and elements.

### Target group

Maintenance and assembly personnel, skilled craftsmen, foremen, designers

### Contents

- Physical principles of compressed air
- Compressed air production, preparation and distribution
- Standard ISO pneumatic symbology
- Operation and application of pneumatic drives and valves
- Circuit design and assembly
- Pressure and flow control
- Basic logic functions and applications
- Sequence control and memory circuits
- Pneumatic time dependent and pressure dependent control
- Safety issues
- Troubleshooting through circuit analysis
- Practical exercises and hands-on work

### Prerequisites

General technical knowledge

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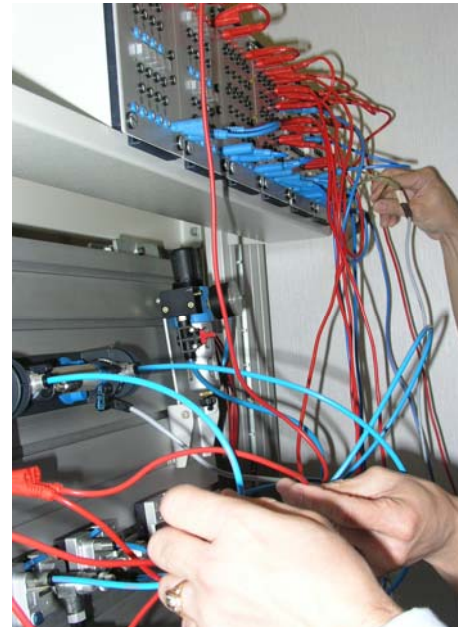
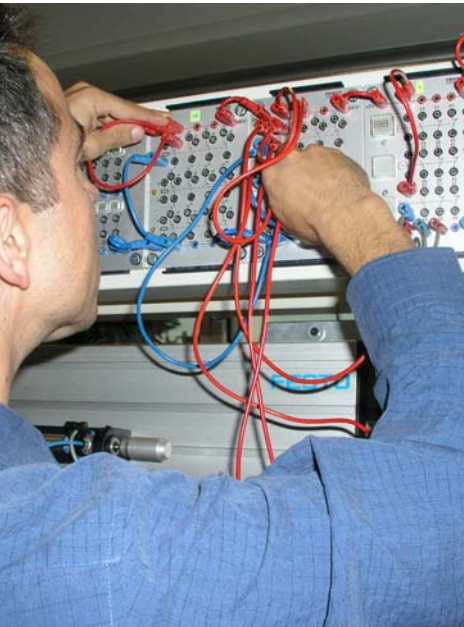
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# EP211 Introduction to Electropneumatics Didactic Course

**FESTO**



## Course objectives and training aims

To familiarize the participant with the function and operation of pneumatic and electrical equipment used in simple electro-pneumatic controls. The course participant shall be able to troubleshoot electro-pneumatic systems and design simple controls.

## Target group

Maintenance and assembly personnel, skilled craftsmen, foremen, designers

## Contents

- Overview of electric and pneumatic symbols
- Electrical contact specifications and logic connections in ladder diagram circuits
- Solenoid valves and relays
- Interfacing electrical control systems and pneumatic power circuit
- Introduction to proximity sensors and switches
- Electro-pneumatic circuit design and assembly
- Discrete relay logic
- Single and continuous cycle
- Sequential and conditional control
- Motion diagram
- Safety issues
- Troubleshooting through circuit analysis
- Practical exercises and hands-on work

## Prerequisites

P111 course (Introduction to Pneumatics) or equivalent

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