





# **EDUCATION & TRAINING COURSE PROGRAM 2024**



#### **KNOWLEDGE CENTRE FOR DAIRY AND FOOD PROCESS AUTOMATION & IT**

Au2mate Academy offers education and training of managers, operators, and technicians.

Au2mate Academy is established in modern facilities at our headquarters in Silkeborg, Denmark and holds a **class room** and a **live pilot process plant** consisting of: reception, raw material storage, pasteurisation, buffer tanks and dispatch as well as a CIP plant.

#### STANDARD COURSES AND CUSTOMISED COURSES

Au2mate Academy offers both standard training courses for Au2mate customers as well as customized training by appointment e.g fault finding for plants operators to help reduce downtime.



Our Remote Academy option makes it possible to join our courses through our local offices in Sweden, Norway, Portugal, Germany, Dubai, and two sites in the UK.

Our instructors will conduct the training from our Academy in Denmark, and you will receive training and complete exercises via video link in our local offices.

Our Remote Academy option applies to courses that do not involve hands-on exercises with our live plant hardware.









## TRAINING PROGRAM FOR **ARLA FOODS 2024**

#### COURSE

#### PROGRAM FOR ARLA FOODS ONLY - SHORT DESCRIPTION

#### **DURATION & DATES**

#### No. 2

Operator training Arla Foods

- Automation standard v1

#### Training in the Arla Foods

- Automation standard v1 operator interface
  - Picture hierarchy
  - Navigation & general icons
  - Manual operation of plant items
  - Alarms/alarm handling

For operators and others who are involved in operating a plant.

#### 2 DAYS

10-11/01 and 11-12/09

or by agreement

#### No. 3

PLC starter package Siemens Arla Foods

- Automation standard v1

#### Hands-on training in PLC part of the Arla Foods - Automation standard v1 (Siemens based)

- Introduction to PLC system/PLC blocks
- Programming of small applications
- · Download & test

For technical personnel.



#### 3 DAYS

15-17/01 and 16-18/09 or by agreement

#### No. 4

PLC starter package Allen Bradley Arla Foods

- Automation standard v1

#### Hands-on training in PLC part of the Arla Foods

- Automation standard v1 (Allen Bradley based) • Introduction to PLC system/PLC blocks
  - · Programming of small applications
  - · Download & test

For technical personnel.



#### 3 DAYS

22-24/01 and 25-27/09 or by agreement

#### No. 5

SCADA starter package Arla Foods

- Automation standard v1

#### Hands-on training in SCADA part of the Arla Foods - Automation standard v1 (Wonderware based)

- Introduction to SCADA system/object templates/graphics
- Programming of small applications
- · Download & test

For technical personnel.



#### 3 DAYS

29-31/01 30/09 +01-02/10 or by agreement

#### No. 6

RMS Arla Recipe Management System

#### Hands-on training in Arla Recipe Management System part of the Arla Foods - Automation standard v1

- General introduction to RMS (Contents, structure, versions etc.)
- Material definition, process segments, product recipes
- New CIP recipe, creation of CIP plant

For operators and technical personnel.



#### 1 DAY

11/03 and 10/10 or by agreement

#### No. 7

**EMS** Effectiveness Management System Arla OEE module

#### The OEE (Overall Equipment Efficiency) package from Arla Foods

- A wide range of OEE KPI figures, reports etc.
- 2-way communication tool between shop floor and management teams
- Quick configuration and logging OEE on new equipment
- Easy changing the list of downtime reasons etc.
- · Easy changing the individual mini dashboards or info screen dashboards

For technical personnel who is responsible for configuring and maintaining the Arla OEE package.



#### 1 DAY

13/03 and 14/10 or by agreement





# DAIRY AND FOOD CONTROL COURSES - PROGRAM 2024

#### **COURSE**

## GENERAL CONTROL COURSES - OPEN COURSES - SHORT DESCRIPTION

#### **DURATION & DATES**

#### No. 10

Dairy and food control - System design

#### General introduction to the design of a dairy/food control system

- Control elements (PLC, HMI, MES etc.)
- Central/distributed solutions
- · Network/Fieldbus
- Standards

For project managers and others who need a general overview of concepts and solutions in automation and industrial IT.



#### 1 DAY

18/01 and 19/08 or by agreement

#### No. 11

Dairy and food control - International standards

### General introduction to leading international standards applied in the dairy/food industry

- ISA S88 Batch control
- ISA S95 Enterprise Control System Integration
- ISA S101/S18 HMI/Alarm management
- PackML Packaging Machine Language

For technical personnel.



#### 1 DAY

08/02 and 21/08 or by agreement

#### No. 12

Basic introduction to Siemens PLC/HMI

#### Basic introduction to Siemens PLC/HMI equipment and programming tools, incl. programming and download of small applications

- Siemens S7-400 or S7-1500 PLC
- Siemens TP panel

For technical personnel.



#### 3 DAYS

26-28/02 and 26-28/08 or by agreement

#### No. 13

Basic introduction to Allen Bradley PLC/HMI

# Basic introduction to Allen Bradley PLC/HMI equipment and programming tools including programming and download of small applications

- Allen Bradley CompactLogix
- · Allen Bradley Panelview plus panel

For technical personnel.



#### 3 DAYS

15-17/04 and 07-09/10 or by agreement







# DESIGN AND INSTALLATION COURSES - PROGRAM 2024

**COURSE** 

**GENERAL CONTROL COURSES - ALL INDUSTRIES** - OPEN COURSES - SHORT DESCRIPTION

**DURATION & DATES** 







**No. 14**ASi-bus
Design & installation

#### **General introduction to ASi-bus**

- Design rules for ASi installations
- Setup of ASi slaves
- Fault finding at live plant

For technical personnel.

#### 1 DAY

04/03 and

22/08

or by agreement

No. 15

PROFIBUS

Design & installation

#### **General introduction to PROFIBUS**

- Design rules for PROFIBUS installations
- Setup of PROFIBUS nodes
- Fault finding at live plant

For technical personnel.

#### 2 DAYS

03-04/04

and

23-24/09

or by agreement

No. 16

PROFINET
Design & installation

#### **General introduction to PROFINET**

- Design rules for PROFINET installations
- Setup of PROFINET nodes
- Fault finding at live plant

For technical personnel.

**2 DAYS** 08-09/04

and

04-05/09

or by agreement







# DAIRY CONTROL COURSES - PROGRAM 2024

#### COURSE

**No. 17**Get familiar with your dairy plant

# **GENERAL DAIRY CONTROL COURSES**- OPEN COURSES - SHORT DESCRIPTION

### Get familiar with the components and process flows in a dairy plant

- · How to read a PI-diagram
- Theoretical and physical introduction to the process sections and the process flow in a dairy (Academy)
- Theoretical and physical introduction to the components in a dairy
- How the components are connected to the control system and how to operate the components from the HMI

For operators and others who are involved in operating a plant.

#### **DURATION & DATES**

#### 1 DAY

13/05 and 28/10

or by agreement



No. 18
Get familiar with
your control system

#### Get familiar with how to operate a control system in a dairy plant

- Introduction to the international S88 standard
- PI-diagrams
- Control system structure
- Program description
- · How to operate the control system
- Fault finding

For operators and others who are involved in operating a plant.

1 DAY

14/05 and

29/10

or by agreement



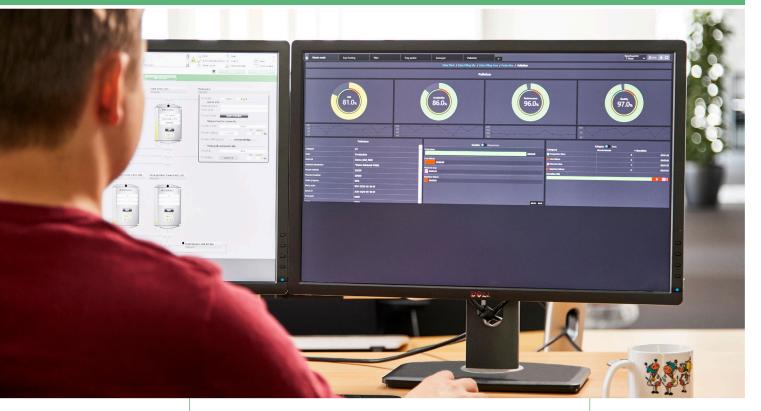


# DAIRY AND FOOD CONTROL COURSES - PROGRAM 2024

**COURSE** 

GENERAL CONTROL COURSES
- OPEN COURSES - SHORT DESCRIPTION

**DURATION & DATES** 



No. 19 I/O Link Design & installation

#### General introduction to I/O Link

- System components and design rules
- Device types and description files (IODD)
- Setup of I/O link master and sensors
- Fault finding at live plant

For technical personnel

#### 1 DAY

16/05 and

31/10

or by agreement

No. 20 Au2mate OEE Module The OEE (Overall Equipment Efficiency) package from Au2mate, provides a standardised and flexible solution for representing the OEE figures on e.g. a process unit or a filling line

- Introduction to both machine & line OEE-calculation
- Material/product database linked to specific equipment/run rates, targets etc.
- Creating user specific dashboards
- Creating user defined OEE reports
- Using standard web browsers

For technical personnel who is responsible for configuring and maintaining the Au2mate OEE package.



18/11

or by agreement





DAIRY AND FOOD CONTROL COURSES

- **PROGRAM 2024** 

**COURSE** 

GENERAL CONTROL COURSES
- OPEN COURSES - SHORT DESCRIPTION



**DURATION & DATES** 

Au2mate and Intelecy have designed this course to showcase the opportunities that artificial intelligence (Al) offers.

The course will focus on how Al can be effectively implemented to optimize production processes and promote sustainability.



UZMATE AC

**No. 21**Optimize production with no-code AI



Learn what AI and Machine Learning (ML) really is and what challenges it can solve. In this hands-on workshop you will learn how to create Machine Learning models in minutes without having to learn how to code leveraging the Intelecy no-code AI platform.

Learn how to average AI to:

- Optimizing processes: Increase efficiency with real-time data.
- Quality control: Use AI to quickly detect defects and create consistent products.
- Energy management: Apply Al for sustainable energy use.
- Predictive maintenance: Anticipate machine failures to save costs.
- Knowledge Gap: Enable data-driven decisions for new industry entrants.

1 DAY 12/06 and 19/11 or by agreement

No. 22

Basic introduction to CIP and optimisation

### Hands-on training in how a CIP plant works and knowledge about what it consists of and optimisation

- Plant design and instrumentation
- How does it work and types of chemicals
- · Parameters, route, program, pulsing
- Optimisation
- Troubleshooting at live plant

For operators and others who are involved in operating a CIP plant.

#### 1 DAY

17/06 and 20/11

or by agreement

### **Customised training** by agreement

E.g. troubleshooting for plant operators

#### Troubleshooting for plant operators in order to reduce downtime

The course lasts two days, where day 1 takes place in the Au2mate Academy and day 2 takes place at the operator's own dairy/food plant.

In the Academy the operators are trained in the basic principles of a control system.

How to operate the control system and how to find faults. The instructor performs real

faults on the pilot plant in the Academy, which the operators must find via the tools they have learned to use.

On day 2, the operators are trained in their own controlsystem and in fault finding in their own dairy/food plant.

After the course, the operator has a greater understanding of how the control system, the components and the process connect and will be able to find the current fault and restart the process => increased up-time => higher margin/better coverage.

Please contact Heidi Ravn for individual courses. See contact information below. By agreement





We are certified at the following strategic partners:













