Au2mate ACADEMY

Au2mate
PROCESS AUTOMATION PARTNER

Au2mate Academy

WELCOME TO AU2MATE ACADEMY PROGRAM FOR 2021

WELCOME TO AU2MATE ACADEMY

Au2mate Academy is a knowledge centre for dairy automation & IT that offers education and training of managers, operators and technicians.

The 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

These courses are standard training courses designed for Au2mate customers. Furthermore, Au2mate Academy offers customised training by appointment. E.g. fault finding for plant operators in order to reduce downtime.

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TRAINING PROGRAM FOR
ARLA FOODS 2021

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** 13-14/01 and 15-16/09 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** 26-28/01 and 22-24/09 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** 02-04/02 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** 17-19/03 and 29-30/09 and 01/10 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** 19/01 and 06/10 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** 20/01 or by agreement

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DAIRY CONTROL COURSES - PROGRAM 2021

COURSE	GENERAL DAIRY CONTROL COURSES - OPEN COURSES - SHORT DESCRIPTION	DURATION & DATES
No. 10 Dairy control - System design	**General introduction to the design of a dairy 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** 21/01 and 26/08 or by agreement
No. 11 Dairy control - International standards	**General introduction to leading international standards applied in the dairy 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** 11/02 and 06/09 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** 03-05/03 and 01-03/09 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** 21-23/04 or by agreement

DAIRY CONTROL COURSES
- PROGRAM 2021

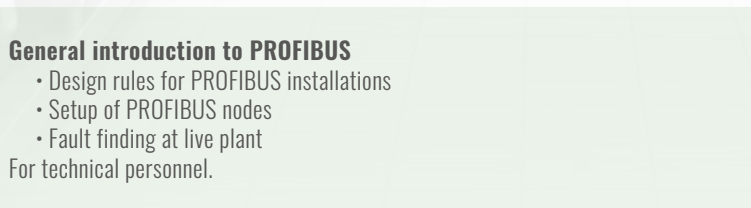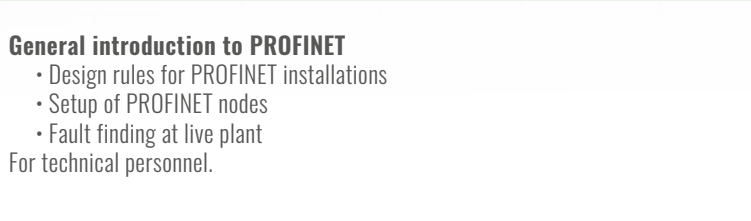| COURSE	GENERAL DAIRY CONTROL COURSES - OPEN COURSES - SHORT DESCRIPTION	DURATION & DATES
No. 14 ASi-bus Design & installation	**General introduction to ASi-bus** • Design rules for ASi installations • Setup of ASi slaves • Fault finding at live plant For technical personnel.	**1 DAY** 25/03 and 07/09 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** 05-06/05 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** 18-19/05 or by agreement

CONTACT: Eva Stanell, Service & Training Manager · est@au2mate.dk · Tel. +45 8720 5061

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COURSE	GENERAL DAIRY CONTROL COURSES - OPEN COURSES - SHORT DESCRIPTION	DURATION & DATES
No. 17 Get familiar with your dairy plant	**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.	**1 DAY** 25/05 and 13/10 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** 26/05 and 14/10 or by agreement

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DAIRY CONTROL COURSES
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COURSE	GENERAL DAIRY CONTROL COURSES - OPEN COURSES - SHORT DESCRIPTION	DURATION & DATES

| **No. 19** Digitalisation & Industry 4.0 in the dairy industry | **General introduction to how Digitalisation & Industry 4.0 can be utilised in the dairy industry**
 • General introduction to Digitalisation & Industry 4.0
 • Examples of implementations in the dairy industry
 • How to get started with Digitalisation
 • Hands-on examples of Industry 4.0 technique at Au2mate Academy process plant – E.g. Cloud based data storage and analysis.
 For project managers and others who need a general overview and introduction to Digitalisation and Industry 4.0 in the dairy industry. | **1 DAY** 01/06 and 27/10 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. | **1 DAY** 03/06 and 02/11 or by agreement |

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DAIRY CONTROL COURSES - PROGRAM 2021

COURSE	GENERAL DAIRY CONTROL COURSES - OPEN COURSES - SHORT DESCRIPTION	DURATION & DATES

Au2mate and NIRAS have developed this training course in order to show the dairy and food industries how they can predict valuable production optimisation by use of a Digital Twin.

Instructor:
Christian Wordenskjold Nørregaard,
Process Simulation Specialist at NIRAS.

When full, the raw milk silo feeds the UHT plant and yoghurt milk treatment

No. 21 Production optimisation by use of digital twin to simulate operations	**In this course, the attendees will use a FlexSim simulation model to examine and optimise production** **The model will be able to quantify the effects of:** • Production planning changes • Equipment quantities • Equipment capacities • CIP durations The simulation model will be used as a Digital Twin to validate the production setup. For production planners, process designers and logistics/supply chain managers looking to expand their range of industry 4.0 tools and thereby increase efficiency in their plants.	**1 DAY** 08/06 and 09/11 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** 15/06 and 23/11 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. 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 control system and in fault finding in their own dairy. 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 Eva Stanell for individual courses. See contact information below.	**By agreement**

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Au2mate Academy centre
for dairy automation & IT.

FOR MORE INFORMATION:
For more information about Au2mate Academy
please visit our web page: www.au2mate.com
For detailed information about the individual
courses please contact Eva Stanell, see below
contact information.

CONTACT: Eva Stanell, Service & Training Manager · est@au2mate.dk · Tel. +45 8720 5061

We are certified at the following strategic partners:

Solution Partner
Automation Drives
SIEMENS

AVEVA
System Integrator

RA **Recognised System Integrator**
A ROCKWELL AUTOMATION PARTNER

ABB
VALUE PROVIDER

Au2mate
PROCESS AUTOMATION PARTNER

4 QUICK FACTS ABOUT AU2MATE A/S:

· Founded in Denmark in 2001. Today an international company with offices in several countries
· Growth company – delivers high value for our customers through better, cheaper and faster premium quality automation and IT solutions
· Project oriented – has delivered more than 2000 projects: PLC, SCADA, MES and ERP integration for process plants worldwide
· Supplies solutions based on open standard platforms and internationally recognised methods for software development and project management