





## Online trainings offered globally

Technology Trainings	Language	Provider
1. Fundamentals of Pneumatics	(English)	F-ZA
2. Basic Hydraulics	(English)	F-ZA
3. Introduction to PLC (CoDeSys or SIMATIC S7)	(English)	F-ZA
4. Electro Pneumatics	(English)	F-ZA
5. How to Integrate Festo Equipment with Siemens PLC	(English)	F-ZA
Organizational Trainings  6. Introduction to Project Management – Managing projects for success	(English, Italian)	F-IT
7. Design FMEA – the Key to product reliability	(English, Italian)	F-IT
8. Design for Manufacturing DFMA – Design efficiency from the beginning	(English, Italian)	F-IT
9. SCRUM for Managers	(English, Italian)	F-IT
10. Kanban: an Agile method for knowledge workers	(English, Italian)	F-IT
11. Fundamentals of Effective Maintenance	(English, German)	F-DE
12. Targeted Selection of Maintenance Strategies	(English, German)	F-DE
13. Structured Problem Solving	(English, German)	F-DE



## Online trainings offered globally

Supply Chain	Language	Provider
14. Mastering the fundamentals of the Supply Chain	(English, French)	F-FR
15. e-CPIM part 1 - Basics of Supply Chain Management	(English, French)	F-FR

**Registration & Pricing** 

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### **Fundamentals of Pneumatics**



#### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



#### Language:

English

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### **Training Outcomes:**

After completing this training course, the participants:

- can identify and describe the design, features and operation of pneumatic components
- can identify and explain symbols for pneumatic components
- are able to interpret technical specifications and data relating to pneumatic components



#### **Training Contents:**

- Basic Circuit levels Symbology Other basics
- Direct Control Indirect Control Speed Controls Roller Limit Valves
- Cylinders variations AND/OR valves
- Pressure Valves Magnetic Limit Valves Manual/Auto AND/OR Valves Timers
- Cascade system design

All Exercises are done on FluidSIM by the participants



## **Basic Hydraulics**



#### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



#### Language:

English

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### **Training Outcomes:**

After completing this online course, the participants:

- can interpret technical specifications and data relating to hydraulic components and systems
- · can interpret safety measures
- are familiar with graphical symbols for hydraulic components
- · can perform simple calculations of pressure, flow and force



#### **Training Contents:**

- Basic hydraulic principals
- Pump Test
- Pressure relief valve test
- · Resistance to flow from load and line
- Single acting cylinder control, bypass control and using a 3/2way valve
- Double acting cylinder control with counter balancing
- Control and positioning of a double acting cylinder using a 4/3-way valve and pilot operated non-return valve
- · Speed control, metering in and metering out
- · Speed control metering in and counter balancing
- Speed control using a pressure compensated flow control valve
- Speed increase of a double acting cylinder through regeneration
- Limiting and controlling the force on a cylinder through a pressure regulator

All Exercises are done on FluidSIM by the participants



### **Introduction to PLC**



#### **Target Audience:**

Maintenance staff, engineers and designers



#### **Duration:**

8 hours:

4 sessions (2 hours each)



#### Language:

English

**Register now** 



#### **Training Outcomes:**

After completing this training course, the participant will:

- know how to setup a project in CoDeSys 3.5
- know how to setup a interface between the program device and PLC
- understand OR FUNCTION, ST-Structure(IF,THEN)
   LDD-Ladder diagram NO,NC,COIL
- understand AND FUNCTION, ST-Structure, LDD-Ladder diagram
- understand NEGATING, ST-Structure, LDD-Ladder diagram
- understand SET and RESET, ST-Structure, LDD-Ladder diagram
- understand EDGE TRIGGER / RISING- and FALLING EDGE ST-Structure, LDD-Ladder diagram
- understand TIMERS, ST-Structure, LDD-Ladder diagram
- understand CASE INSTRUCTION, ST-Structure
- understand CASE INSTRUCTION and COUNTERS, ST-Structure



#### **Training Contents:**

- Create a Project: Exercise 1
- Warning Lamp
- Exercise 2: Change of conveyor direction
- Exercise 3: Pneumatic Press
- Exercise 4: Belt Sander
- Exercise 5: Swivel Bridge
- Exercise 6: Rachet Conveyor
- Exercise 7: Labelling Device
- Exercise 8: Embossing Machine
- Exercise 9: Packaging of Spark Plugs

All Exercises are done on CoDeSys simulation by the participants

**Note:** This training could be offered based on SIMATIC S7 per request using PLCSIM



### **Electro Pneumatics**



#### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



#### Language:

English



#### **Training Outcomes:**

After completing this training course, the participants:

- can describe the functional relationship between pneumatic and electrical components
- can identify and describe the design, features and operation of electropneumatic and electrical components
- can identify and explain symbols for electropneumatic and electrical components
- can read and interpret electropneumatic circuit diagrams



#### **Training Contents:**

- Electrical principles
- Electrical and pneumatic symbols and standards
- Interaction of electrical control section and pneumatic power section
- Function of signal generators (push buttons, switches and relays)
- Components of power section control section
- Electronic sensors (inductive, capacitive and infrared)
- Systematic production and reading of electrical circuit diagrams
- · Operating modes of electro pneumatic control systems
- Coordinated sequence controls
- Safety regulations and valid standards for electrical engineering and pneumatics
- Typical Industrial circuits

**Register now** 



## **How to Integrate Festo Equipment with Siemens PLC**



### **Target Audience:**

Maintenance staff, engineers and designers
Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



#### Language:

English

**Register now** 



### **Training Outcomes:**

After completing this training course, the participant will:

- know how to setup a interface between the program device and PLC
- understand OR FUNCTION, ST-Structure(IF,THEN)
   LDD-Ladder diagram NO,NC,COIL
- understand AND FUNCTION, ST-Structure, LDD-Ladder diagram
- understand NEGATING, ST-Structure, LDD-Ladder diagram
- understand SET and RESET, ST-Structure, LDD-Ladder diagram
- understand EDGE TRIGGER / RISING- and FALLING EDGE ST-Structure, LDD-Ladder diagram
- understand TIMERS, ST-Structure, LDD-Ladder diagram



#### **Training Contents:**

- Create a Project : Exercise 1
- Warning Lamp
- Exercise 2: Change of conveyor direction
- Exercise 3: Pneumatic Press
- Exercise 4: Belt Sander
- Exercise 5: Swivel Bridge
- Exercise 6: Rachet Conveyor
- Exercise 7: Labelling Device
- Exercise 8: Embossing Machine
- Exercise 9: Packaging of Spark Plugs

All Exercises are done on PLCSIM simulation by the participants



## Introduction to Project Management - Managing projects for success

## Course Topic: Project Management Methodologies



#### **Target Audience:**

- Project Managers and Project Leaders
- Functional Managers and Directors
- Senior Executives
- Portfolio Managers
- Program Managers
- Operations directors

Number of participants: 4 - 10



#### **Duration:**

16 hours: 4 sessions (4 hours each)



#### Language:

English



#### **Training Outcomes:**

After completing this training course, the participant will:

- Acquire a broad and flexible toolkit of techniques
- Acquire broad vision on projects and processes
- Improve their planning and execution skills
- Improve their leadership skills



#### **Training Contents:**

**Register now** 

- Principles of Project Management
- Project success and failure factors
- Organizational influences on Project Management
- Project Stakeholders and governance
- Project integration management
- Project life cycle
- Project scope definition
- · Project Charter
- Project Stakeholders and governance
- WBS Work Breakdown Schedule
- Activity and resource planning
- Project management team
- Time and cost estimates
- Activity sequencing and CPM -

- · Critical Path Method
- · Project scheduling
- Project budget
- · Communications plan
- Risk Management
- Project status key indicators
- Variance analysis
- Project reporting
- Follow-up and re-planning
- EVM Earned Value Management
- Project closing activities
- · Lessons learned

#### Lab:

Exercises on project management, charter, planning, execution and closing Participants' case studies optional



## Design FMEA – the Key to product reliability

Course Topic: Product development methodologies – Failure mode & Effect Analysis



#### **Target Audience:**

- Designers
- Research & Development
- Portfolio Managers
- Production Planners
- Program Managers
- Project Managers and Project Leaders

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



#### Language:

English



#### **Training Outcomes:**

After completing this training course, the participant will:

- Use this effective methodology as a tool for anticipating risks and mistakes during product development preventing problems in the life cycle
- Apply the Design FMEA tool in the correct context



#### **Training Contents:**

**Register now** 

- F.M.E.A. as a prevention tool
- Formalize information to prevent
- · Impact on quality and reliability
- · Analysis of possible failures
- Identification/Classification of the corrective actions
- Living document: real-time design change risk management
- Preparing for analysis
- · Defining the problem
- Function Analysis
- Creating the Failure Modes List
- The documentation required for the development of F.M.E.A. works

- F.M.E.A. Indices: Probability, Severity, Detectability
- Index evaluation criteria (P, S, D)
- R.P.N. index calculation (Risk Priority Number) in comparison with the new AIAG VDA approach
- How to classify the RISK level
- · When to take corrective action
- Impact of DFMEA on validation activities and the production process

#### Lab:

- FMEA exercises step by step
- Use your own product for exercises
- Analysis and discussion on cases



## Design for Manufacturing DFMA – Design efficiency from the beginning

Course Topic: Product development methodologies – Design Methods



#### **Target Audience:**

- Designers
- Research & Development
- Portfolio Managers
- Production Planners
- Program Managers
- Project Managers and Project Leaders

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



#### Language:

English



#### **Training Outcomes:**

After completing this training course, the participant will:

- Use this effective methodology as a tool for anticipating risks and mistakes during product development preventing problems in the life cycle
- Apply the Design FMEA tool in the correct context



#### **Training Contents**

## **Register now**

## Design for assembly: general principles

- Fewer Components, Less Connections
- Product Design and DFMA
- •The 3 Key Questions to Reduce the Number of Parts
- •Trimming for component aggregation modifying functions
- •The role of symmetry, how to calculate it
- •Estimating the ideal manual assembly time and its costs from the geometric characteristics of the components
- •The DFA index
- •How to reduce assembly time by intervening on part geometry
- Automatic assembly, peculiar features
- •Estimating the cost of automatic assembly from the geometric characteristics of the parts

- Reduce the variety of parts and processes Standardize
- •Simplify assemblies
- Facilitating handling
- •The role of gravity and "top down" assemblies
- •What makes a part difficult to assemble?
- Simplifying Methods

#### **Design for manufacturing**

- •General Principles
- •Choosing the optimal combination of material and production process, selection matrices
- •Parameter cost estimation techniques

#### Labs

Exercises on assembly components design

Exercises on self cases – send / present your own case to learn



## **SCRUM** for Managers



#### **Target Audience:**

- Entrepreneurs, Executives
- Managers, leaders and anyone with responsibilities in the company
- Program manager, HR manager, R&D manager
- Scrum master, Product owner and Agile coach



#### **Duration:**

8 hours: 2 sessions (4 hours each)



#### Language:

English



#### **Training Outcomes:**

After completing this training course, the participant will:

- Know the areas of application of the Agile approach within the industrial context
- Understand the potential of the Agile method and application fields
- Know the Scrum method and the typical tools of the approach
- Seize ideas and tips for immediate application



#### **Training Contents:**

#### Scrum manufacturing

· How to apply Scrum in an industrial context

**Register now** 

- Roles and events
- Scrum and Lean continuous improvement
- Apply Extreme Programming in Hardware Engineering
- Create user stories to get the correct specifications
- Pairing and swarming: a cohesive team that responds to change
- Test driven development right the first time

#### Scrum

 How to implement the process of developing a product / service with Scrum

The limits of traditional management

software and back

the fields of elective use

Overview on Agile applications in

How to respond to the complexity in the

development and management of Agile

Overview of the main methodologies

Manufacturing and IT development

and Lean projects: from manufacturing to

The limits of the waterfall approaches and

- What are the key roles in Scrum and how to identify the most suitable people
- What are the events of Scrum: Sprint planning, Sprint review, Retrospective, Daily Scrum, Backlog refinement
- What are the artifacts, tools and metrics in Scrum
- · How to create a close-knit team
- · The power of visual planning
- How to organize and manage daily standup meetings

#### Object oriented architecture

- Exploit the logic of object-oriented programming of software design for manufacturing
- How to innovate manufacturing with software design patterns
- Modular components
- Define the interfaces first, then the system
- · Rapid prototyping and incremental evolution

Cases and operational exercises Scrum simulator - a high impact game to prove the effectiveness of the method Case history analysis Labs



## Kanban: an Agile method for knowledge workers



#### **Target Audience:**

- Project Manager, Scrum Master
- R&D managers who manage projects with high innovative and technological content
- Business unit and process owner managers
- Managers of companies that have ongoing programs to extend the Agile methodology and want to ensure adequate professional figures
- The realities that are not satisfied with the performance of the Project Management systems currently in use



#### **Duration:**

16 hours: 4 sessions (4 hours each)



#### Language:

English



#### **Training Outcomes:**

- A lightweight framework to manage complexity in a knowledge-based work environment
- An incremental, evolutionary and changing approach to processes and systems for organizations
- The application of the agile and lean approach within office contexts
- Balancing customer demand and business capabilities
- Reduce waste and non-value activities during project management
- Reduce time to market by reducing incoming changes
- Continuous improvement and risk management through feedback loops



#### **Training Contents:**

- Principles and practices of the Kanban methodology in the field of Project Management
- · An always applicable workflow management method
- · How to build your own Kanban framework
- What are the tools
- Build the boards and define the cards
- Metrics and Graphs
- The applicable performance indicators
- The online tools to use the method at pilot level or at company management level
- Programs and portfolio management with the Kanban approach
- · Cost of delay and risk management
- Examples of real cases
- Cases and operational exercises
- Case history analysis

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## **Fundamentals of Effective Maintenance (IW-OPT)**



#### **Target Audience:**

- Maintenance Managers
- · Lean Managers
- · Production Managers
- · Industrial Engineering Managers

Number of participants: 4 - 10



#### **Duration:**

12 hours: 6 sessions (2 hours each)



#### Language:

English



### **Training Outcomes:**

After completing this training course, the participant is:

- familiar with the different areas and roles of maintenance
- able to identify the six typical kinds of losses on machine and systems and improve these in a systematic way
- familiar with typical maintenance documents and be able to use them in their daily work
- capable of integrating and optimizing their own work in the processes of the maintenance area

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#### **Training Contents:**

- Role of maintenance and technical service
- The six typical sources of loss in machines and systems
- · Maintenance, inspection and repair
- · Key indicators for maintenance:
- OEE (Overall Equipment Effectiveness), TEEP (Total Equipment
- Effectiveness Productivity), MTBF (Mean Time Between Failures),
- MTTR (Mean Time To Repair)
- · Structure and design of systematic fault detection
- Creating maintenance and inspection plans
- Analysis of weak spots and targeted improvement of machines
- and systems
- Spare parts management
- · Maintenance organization
- Evaluation of maintenance work
- Practical examples and exercises



## **Targeted Selection of Maintenance Strategies (IW-ST)**



#### **Target Audience:**

- · Maintenance Managers
- Lean Managers
- · Production Managers



#### **Duration:**

12 hours: 6 sessions (2 hours each)



#### Language:

English



### **Training Outcomes:**

After this seminar the participants know typical maintenance strategies and their influence on production systems. They will be able to select these depending on their machines and will be able to plan the process of introducing maintenance strategies. Furthermore, participants can use selected key figures to measure the success of maintenance strategies.

**Register now** 



#### **Training Contents:**

- Production systems and their influence on maintenance
- · Six typical sources of loss in machines and systems
- Roles and self-image of maintenance
- · Forms of organization of maintenance
- Maintenance strategies in comparison:
- · Event-based maintenance
- · Regular maintenance
- Total Productive Maintenance (TPM®)
- Reliability Centred Maintenance (RCM)
- Risk-based maintenance Risk Based Maintenance (RBM)
- Methods for selecting maintenance strategies
- Key figures for entering the maintenance service
- The process of introducing maintenance strategies
- Examples and practical exercises



## **Structured Problem Solving (PLT)**



#### **Target Audience:**

- Maintenance Technicians
- Lean Consultants
- Team leaders
- Operators



#### **Duration:**

12 hours: 6 sessions (2 hours each)



#### Language:

English



#### **Training Outcomes:**

After this seminar the participants are able to identify the causes and characteristics of the problems in a targeted manner. They learn about the six phases in the problem-solving cycle and can apply them. The participants use appropriate techniques to develop suitable solutions and to present their advantages and disadvantages.

**Register now** 



#### **Training Contents:**

- · Typical problem situations in everyday working life
- The six phases in the problem-solving cycle
- · Checklists for problem identification
- The 5 times why technique
- The cause-effect diagram
- · The brainstorming method
- The multipoint technology
- The action plan
- Working with fault and error documentation
- Practical examples for training the methods and tools



## Mastering the fundamentals of the Supply Chain

### Certification in French



#### **Target Audience:**

- Supply Chain Managers, Employees, Planners, Auditors
- Production Managers
- Purchasing Managers and Employees



#### **Duration:**

Total 45 hours:

- 19 hrs E-learning
- 23 hrs Web class (live)
- 3 hrs exam



### **Training Outcomes:**

The training is completed by an exam. The success to the exam yields to the Certification that below objectives and competencies are acquired

After completing this training course, the participant will:

 See "contents" as the framework for the competencies being developed – details are given in French though.

**Register now** 



#### **Training Contents:**

- Introduction to Supply Chain
- The planning System
- Inventory Management
- Excellence in operations
- Demand Management
- Master Planning
- · Material Requirements Planning
- Execution and Control of Operation
- Capacity Management
- Buying and procurement
- Distribution (Channel configuration, transport modes, warehousing)



#### Language:

English



## e-CPIM part 1 - Basics of Supply Chain Management

## Dual Certification French (Festo) / English (APICS)



#### **Target Audience:**

- Supply Chain Managers, Employees, Planners, Auditors
- Production Managers
- Purchasing Managers and Employees



#### **Duration:**

Total 50 hours: 19 hrs E-learning 25 hrs Web class (live) 3 hrs Exam (in French – Festo) 3.5 hrs APICS Exam in English



#### **Training Outcomes:**

The training is in 2 phases completed by each by an exam. The success to the exams yields to the Certification that below objectives and competencies are acquired:

 See "contents" as the framework for the competencies being developed – details are given in French though.





#### **Training Contents:**

- Introduction to Supply Chain
- The planning System
- Inventory Management
- Excellence in operations
- Demand Management
- Master Planning
- · Material Requirements Planning
- Execution and Control of Operation
- Capacity Management
- Buying and procurement
- Distribution (Channel configuration, transport modes, warehousing)



#### Language:

English



We look forward to hearing from you!

**Registration & Pricing** 

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Your Festo Didactic Team.









## Entrenamientos en línea ofrecidos globalmente

Entrenamientos tecnológicos	Idioma	fornecido por
1. Neumática Básica	(Español)	F-MX
2. Electroneumática Básica	(Español)	F-MX
3. Neumática Avanzada	(Español)	F-MX
4. Seminario Programación de PLC con CoDeSyS	(Español)	F-MX
5. Hidráulica Básica	(Español)	F-MX
6. Industria 4.0 Un camino hacia la implementación	(Español)	F-MX
Comunicación y ventas		
7. Comunicación efectiva con clientes internos y externo	(Español o Portugués)	F-ES
8. Comunicación efectiva del servicio técnico con los clientes	(Español o Portugués)	F-ES
9. Venta de asesoramiento profesional	(Español o Portugués)	F-ES
10. Presentaciones efectivas	(Español o Portugués)	F-ES
11. Comunicación y ventas	(Español o Portugués)	F-ES

Registro

Email: tac.global@festo.com



### Neumática Básica

## Entrenamientos tecnológicos



#### Público objetivo:

Técnicos de mantenimiento, supervisores de mantenimiento, estudiantes de escuelas vocacionales y de ingeniería, profesores y personas interesadas en mejorar sus conocimientos y habilidades en neumática.

Máximo 80 participantes



# Duración (número de sesiones e intervalos):

10 horas: 5 sesiones de 2 horas



#### **Idioma:**

Español



## Resultados de entrenamiento:

#### El participante:

- Serán capaces de identificar, describir las características y el funcionamiento de los componentes neumáticos.
- Podrán identificar y explicar símbolos para componentes neumáticos.
- Serán capaces de interpreta y comprender el funcionamiento de circuitos neumáticos básicos.

Registro



#### Contenidos de entrenamiento:

- o Generación y alimentación de aire comprimido.
- Elementos de trabajo neumáticos: Simbología, funcionamiento y aplicaciones.
- Elementos de control neumático: Simbología, funcionamiento y aplicaciones.
- Válvulas de cierre, de caudal y de presión.
- Desarrollo, simulación, conexión y puesta en marcha de sistemas neumáticos.

Las sesiones en vivo serán grabadas y se tendrán acceso a través de un portal durante 1 semana después de las sesiones. Oportunidad de aclaración de dudas en línea, vía transmisión y/o Chat



### Electroneumática Básica

### Entrenamientos tecnológicos



#### Público objetivo:

Técnicos de mantenimiento, supervisores de mantenimiento, estudiantes de escuelas vocacionales y de ingeniería, profesores y personas interesadas en mejorar sus conocimientos y habilidades en electroneumática.

Máximo 80 participantes



# Duración (número de sesiones e intervalos):

10 horas: 5 sesiones de 2 horas



#### **Idioma:**

Español



## Resultados de entrenamiento:

#### El participante:

- Serán capaces de identificar, describir las características y el funcionamiento de los componentes electroneumáticos y eléctricos
- Podrán identificar y explicar símbolos para componentes electroneumáticos.
- Serán capaces de analizar, interpretar y comprender el funcionamiento de circuitos electroneumáticos básicos.

Registro



#### **Contenidos de entrenamiento:**

- Introducción
- o La energía eléctrica y sus características.
- o Las electroválvulas.
- $\circ\;$  Interruptores, relevadores y sensores de proximidad.
- o Convertidor neumático-eléctrico y temporizador.
- Sistemas combinatorios y secuenciales.
- o Desarrollo y simulación de sistemas electroneumáticos.

Las sesiones en vivo serán grabadas y se tendrán acceso a través de un portal durante 1 semana después de las sesiones. Oportunidad de aclaración de dudas en línea, vía transmisión y/o Chat



### Neumática Avanzada

## Entrenamientos tecnológicos



#### Público objetivo:

Técnicos de mantenimiento, supervisores de mantenimiento, estudiantes de escuelas vocacionales y de ingeniería, profesores y personas interesadas en mejorar sus conocimientos y habilidades en neumática.

Máximo 80 participantes



# Duración (número de sesiones e intervalos):

10 horas: 5 sesiones de 2 horas



#### **Idioma:**

Español



## Resultados de entrenamiento:

#### El participante:

- Conocerán y comprenderán los métodos de diseño para circuitos neumáticos.
- Podrán comprender el funcionamiento de mandos secuenciales neumáticos con el diagrama neumático.
- Serán capaces de interpreta y comprender el funcionamiento de circuitos neumáticos avanzados.

Registro



#### Contenidos de entrenamiento:

- o Repaso breve del seminario básico.
- Mandos secuenciales.
- o El método cascada.
- o El método paso a paso: Mínimo y máximo.
- Aplicación de las Cadenas secuenciales en el diseño de sistemas neumáticos.
- Incorporación de condiciones adicionales de servicio:
   Manual/automático, Paro de emergencia, etc.

Las sesiones en vivo serán grabadas y se tendrán acceso a través de un portal durante 1 semana después de las sesiones. Oportunidad de aclaración de dudas en línea, vía transmisión y/o Chat



## Seminario Programación de PLC con CoDeSyS

## Entrenamientos tecnológicos



#### Público objetivo:

Técnicos de mantenimiento, supervisores de mantenimiento, estudiantes de escuelas vocacionales y de ingeniería, profesores y personas interesadas en mejorar sus conocimientos y habilidades en programación de PLC.

Máximo 80 participantes



# Duración (número de sesiones e intervalos):

10 horas: 5 sesiones de 2 horas



#### **Idioma:**

Español



## Resultados de entrenamiento:

#### El participante:

- Sabrán cómo configurar un proyecto en CoDeSys 3.5
- Sabrán cómo configurar una interfaz entre el dispositivo del programa y el PLC
- Podrán Instalar, conectar y poner en marcha sistemas controlados por PLC.
- Podrán programar contadores y temporizadores



#### **Contenidos de entrenamiento:**

- Fundamentos.
- o CoDeSys y el estándar IEC 61131.
- o Diseño y modo de funcionamiento de un PLC.
- o Simulación de un PLC.
- o Visualización.
- o Método para el diseño de programas para un PLC.
- o Sistemas de control lógico combinatorio.
- o Elementos de memoria y detectores de flancos.
- o Programación de temporizadores.
- o Programación de contadores.
- Sistemas de control secuencial.

Las sesiones en vivo serán grabadas y se tendrán acceso a través de un portal durante 1 semana después de las sesiones. Oportunidad de aclaración de dudas en línea, vía transmisión y/o Chat

Registro



### Hidráulica Básica

## Entrenamientos tecnológicos



#### Público objetivo:

Técnicos de mantenimiento, supervisores de mantenimiento, estudiantes de escuelas vocacionales y de ingeniería, profesores y personas interesadas en mejorar sus conocimientos y habilidades en hidráulica.

Máximo 80 participantes



# Duración (número de sesiones e intervalos):

10 horas: 5 sesiones de 2 horas



#### **Idioma:**

Español



## Resultados de entrenamiento:

#### El participante:

- Serán capaces de identificar, describir las características y el funcionamiento de los componentes hidráulicos.
- Podrán identificar y explicar símbolos para componentes hidráulicos.
- Serán capaces de interpretar y comprender el funcionamiento de circuitos hidráulicos básicos.
- Podrán comprender las aplicaciones de los sistemas hidráulicos



#### **Contenidos de entrenamiento:**

- o Introducción.
- o Conceptos básicos de la hidráulica.
- o Forma básica de un sistema hidráulico.
- o Fuente de energía hidráulica.
- o Elementos de trabajo.
- o Elementos de mando.
- Diseño, desarrollo y puesta en marcha de aplicaciones de sistemas hidráulicos.
- o Prevención de fallas.

Las sesiones en vivo serán grabadas y se tendrán acceso a través de un portal durante 1 semana después de las sesiones. Oportunidad de aclaración de dudas en línea, vía transmisión y/o Chat

Registro



## Industria 4.0 Un camino hacia la implementación

## Entrenamientos tecnológicos



#### Público objetivo:

Dirección, Tomadores de decisiones, Ejecutivos de departamentos de estrategia e innovación.

Máximo 20 participantes



# Duración (número de sesiones e intervalos):

10 horas: 5 sesiones de 2 horas



#### **Idioma:**

Español



## Resultados de entrenamiento:

#### El participante:

- o Tendrá una visión única de la Industria 4.0
- Identificará beneficios en términos de producción, producto y toda la cadena de valor.
- Identificará oportunidades de desarrollo de nuevos modelos de negocio.
- Estará a la vanguardia en el proceso de transición y transformación de la Industria



#### **Contenidos de entrenamiento:**

- o Introducción a Industria 4.0.-Conference.
- o Propuesta de valor de negocio.
- o Conceptos fundamentales.
- o Parte 2.- conceptos SMART FACTORY
- o Tool box: Producto
- o Tool box: Producción
- o Modelos de negocio: Estrategias: TOP DOWN
- Sesión de preguntas y respuestas

Las sesiones en vivo serán grabadas y se tendrán acceso a través de un portal durante 1 semana después de las sesiones. Oportunidad de aclaración de dudas en línea, vía transmisión y/o Chat

Registro



## Comunicación efectiva con clientes internos y externo

## Comunicación y ventas



#### Público objetivo:

El objetivo principal de este programa de formación en servicio al cliente es proporcionar a los participantes ideas y acciones basadas en su propio rol de trabajo.

Número máximo de participantes: 12

## Registro



Duración (número de sesiones e intervalos):

8 horas: 4 sesiones de 2 horas



#### Idioma:

Español o Portugués



## Resultados de entrenamiento:

#### El participante:

- Identificará claramente lo que se debe y lo que no se debe hacer con relación a dar un servicio excelente al cliente, y auto evaluarse con respecto a su situación actual.
- Entenderá la importancia que tiene el enfoque de ofrecer excelencia al cliente y el impacto que tiene en el éxito de la organización.
- Construirá su marca personal hacia el cliente, cubrir faltas en el servicio y desarrollar métodos que proporcionarán una gran experiencia al cliente.
- Conocerá técnicas efectivas para ayudar a manejar problemas difíciles con los clientes y técnicas para conseguir evitarlos.



#### **Contenidos de entrenamiento:**

- o Ejercicios de brainstorming para romper el hielo.
- o Evaluación del servicio al cliente.
- o Establecer mi marca personal de servicio al cliente.
- o Organización y servicio al cliente.
- o Administrar las expectativas del cliente.
- o Reclamaciones o quejas.
- o Clientes difíciles.
- o Problemas frecuentes.
- Acciones excelentes.

Utilizamos la plataforma en línea REHEARSAL para juegos de roles.



### Comunicación efectiva del servicio técnico con los clientes

### Comunicación y ventas



#### Público objetivo:

Técnicos

Número máximo de participantes: 12

## Registro



# Duración (número de sesiones e intervalos):

8 horas: 4 sesiones de 2 horas



#### Idioma:

Español o Portugués



## Resultados de entrenamiento:

#### El participante:

- Desarrollará e incrementará la capacidad de captación de las percepciones del cliente.
- Será capaz de aplicar el 'ciclo de comunicación' con el cliente.
- Mejorará sus habilidades de comunicación enfocadas al cliente.
- Desarrollará habilidades que le ayudarán a identificar las necesidades y expectativas del cliente.
- Podrá identificar formas de mejorar la opinión del propio cliente y de su empresa.
- Podrá desarrollar un plan de acción personal para ayudar a implementar las ventajas alcanzadas en el trabajo cotidiano.



#### Contenidos de entrenamiento:

- o Identificación de los 'factores ambientales'.
- Las competencias esenciales de un ingeniero o técnico de servicios profesional y con éxito.
- o El ciclo de la comunicación.
- o Habilidades clave para 'establecer el escenario'.
- o Habilidades para formular preguntas estratégicas.
- o Habilidades de escucha y barreras para una escucha efectiva.
- o Identificación de las necesidades y expectativas del cliente.
- o 'Entrega del resultado' enfoque hacia el cliente.
- o Conseguir la satisfacción del cliente y futuros compromisos

Utilizamos la plataforma en línea REHEARSAL para juegos de roles.



## Venta de asesoramiento profesional

## Comunicación y ventas



#### Público objetivo:

Fuerza de venta

Número máximo de participantes: 12

## Registro



# Duración (número de sesiones e intervalos):

12 horas: 6 sesiones de 2 horas



#### Idioma:

Español o Portugués



## Resultados de entrenamiento:

#### El participante:

- o Conocerá los principios de la venta.
- o Conocerá el ciclo de la venta.
- Sabrá realizar aperturas positivas.
- Será capaz de usar preguntas abiertas y cerradas.
- Podrá utilizar los fundamentos de la escucha activa.
- Será capaz de diferenciar oportunidades y necesidades.
- Podrá utilizar el PCB (Producto/Características/Beneficio).
- o Podrá reconocer señales de compra.



#### **Contenidos de entrenamiento:**

- o Actitud, conocimiento o habilidad.
- o Preparar el escenario.
- o Preguntar y escuchar estratégicamente.
- Oportunidades y necesidades.
- o Producto, Características y Beneficio (PCB).



### **Presentaciones efectivas**

## Comunicación y ventas



#### Público objetivo:

Todos

Número máximo de participantes: 12

Registro



# Duración (número de sesiones e intervalos):

8 horas: 4 sesiones de 2 horas



#### **Idioma:**

Español o Portugués



## Resultados de entrenamiento:

#### El participante:

- Crear un ambiente positivo a través de una comunicación efectiva.
- Inspirar a su público y lograr los objetivos de las presentaciones.
- Realizar presentaciones que ayuden a conseguir una venta, hagan ganar influencia o promuevan un negocio.
- Comparar y estructurar sus propias presentaciones con ejemplos y consejos reales.
- Explicar cómo la audiencia escucha y responde a las presentaciones.
- Crear un ambiente positivo a través de una comunicación efectiva.



#### **Contenidos de entrenamiento:**

- Los cinco tipos diferentes de presentación.
- o Errores comunes de presentación.
- o Planificación Tú y tu audiencia.
- o Redacción de contenido estructurado.
- o Modelo de persuasión AIDA para mover a su audiencia a la acción.
- Ayudas visuales.
- Técnicas claras para asegurar la reducción de los nervios y evitar el estrés.
- o Estilo de presentación y hablar en público.



## **Comunicación y ventas**

## Comunicación y ventas



#### Público objetivo:

Todos

Número máximo de participantes: 12

Registro



# Duración (número de sesiones e intervalos):

8 horas: 4 sesiones de 2 horas



#### Idioma:

Español o Portugués



## Resultados de entrenamiento:

#### El participante:

- Aprender a negociar con el objetivo de lograr resultados mutuamente beneficiosos.
- Adquirir las herramientas necesarias para prepararse de forma efectiva antes de comenzar a negociar.
- Establecer un rango (horquilla) de negociación en el que poder trabajar.
- Conocer una estructura clara en las negociaciones que ayudará a conseguir el enfoque correcto en la negociación y lograr resultados.



#### Contenidos de entrenamiento:

- o ¿Qué significa negociar?
- o Posibles negociaciones.
- o Alternativas y Estructura de la negociación.
- o Planificación.
- o Trabajar la base de la negociación.
- o Desarrollar la negociación.
- o Finalización.
- o Prácticas y dinámicas.
- o Trabajo en equipo.



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## Online trainings offered globally

Technology Trainings	Language	Provider
1. Machine elements	(English, Turkish)	F-TR
2. Bearing technique	(English, Turkish)	F-TR
3. Fundamentals of pneumatics	(English, Turkish)	F-TR
4. Electro pneumatics	(English, Turkish)	F-TR
5. Energy efficiency and energy saving in pneumatic systems	(English, Turkish)	F-TR
6. Safety in pneumatic systems	(English, Turkish)	F-TR
7. Basics of FluidSIM pneumatics	(English, Turkish)	F-TR
8. Basic hydraulics	(English, Turkish)	F-TR
9. Proportional hydraulics	(English, Turkish)	F-TR
10. Energy saving and safety in hydraulic systems	(English, Turkish)	F-TR
11. Basic principles of electrical engineering and electronics	(English, Turkish)	F-TR
12. Industrial electricity	(English, Turkish)	F-TR
13. Sensor technologies	(English, Turkish)	F-TR
14. Maintenance and repair of industrial electrical systems	(English, Turkish)	F-TR
15. DC/AC motors and testing	(English, Turkish)	F-TR
16. Programming with TIA Portal S7-1500 PLC and CIROS applications	(English, Turkish)	F-TR
17. Bus technologies and connections of several equipment through bus systems	(English, Turkish)	F-TR



## Online trainings offered globally

Technology Trainings	Language	Provider
18. Fundamentals of Industry 4.0	(English, Turkish)	F-TR
19. Basics of process control	_(English, Turkish)	F-TR



# Online trainings offered globally

Organizational Trainings	Language	Provide
1. Measurement system analyse (MSA)	(English, Turkish)	F-TR
2. AIAG&VDA process FMEA (P-FMEA)	(English, Turkish)	F-TR
3. Layered process audit (LPA)	(English, Turkish)	F-TR
4. Innovation	(English, Turkish)	F-TR
5. Survey design and analysis	(English, Turkish)	F-TR
6. Machine risk analyses	(English, Turkish)	F-TR
7. Society 5.0 and industry 4.0 components	(English, Turkish)	F-TR
8. Process management	(English, Turkish)	F-TR
9. Business ethics and professional ethics	(English, Turkish)	F-TR
10. Waste (Muda)	(English, Turkish)	F-TR
11. Problem solving's methods	(English, Turkish)	F-TR
12. Work study (time & method) and standardisation	(English, Turkish)	F-TR
13. Suggestion management system integration	(English, Turkish)	F-TR
14. Management with key performance indicators (KPI)	(English, Turkish)	F-TR
15. Investment planning system implementation	(English, Turkish)	F-TR
16. Ergonomics	(English, Turkish)	F-TR
17. Strategic planning	(English, Turkish)	F-TR



# Online trainings offered globally

Organizational Trainings	Language	Provider
18. Productivity management	(English, Turkish)	F-TR
19. <u>Personal mastery</u>	(English, Turkish)	F-TR
20. Delegation	(English, Turkish)	F-TR
21. Balanced score card	(English, Turkish)	F-TR
22. Coaching leadership	(English, Turkish)	F-TR
23. Occupational health and safety	(English, Turkish)	F-TR



# TENTS

## Online trainings offered globally

Su	pply Chain Management	Language	Provider
1.	Measurement of service quality (Servqual)	(English, Turkish)	F-TR
2.	Customer relationship management (CRM)	(English, Turkish)	F-TR
3.	Analytical approach to marketing and sales	(English, Turkish)	F-TR
4.	Warehouse and inventory management	(English, Turkish)	F-TR
5.	Material requirements planning (MRP)	(English, Turkish)	F-TR

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## Online trainings offered globally

Lea	n Manufacturing and Lean Management	Language	Provider
1.	Design of experiment (DoE)	(English, Turkish)	F-TR
2.	Lean six sigma	(English, Turkish)	F-TR
3.	Lean management and techniques	(English, Turkish)	F-TR
4.	<u>5S</u>	(English, Turkish)	F-TR
5.	Total productive maintenance (TPM)	(English, Turkish)	F-TR
6.	Overall equipment effectiveness (OEE)	(English, Turkish)	F-TR
7.	Single minute exchange of die (SMED)	(English, Turkish)	F-TR
8.	Visual factory management	(English, Turkish)	F-TR
9.	Poka Yoke & Jidoka	(English, Turkish)	F-TR
10.	Autonomous maintenance system implementation	(English, Turkish)	F-TR
11.	Planned maintenance system implementation	(English, Turkish)	F-TR
12.	Kanban & Milkrun	(English, Turkish)	F-TR
13.	Value stream mapping – design	(English, Turkish)	F-TR
14.	Hoshin Kanri	(English, Turkish)	F-TR

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### **Machine elements**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- can identify primarily machines used in the factory environment
- can identify the basic mechanisms of the machines
- can identify the machine elements



### **Training schedule:**

On-demand



- Machines and mechanisms (1 hour)
- Shafts, journals and axles (1 hour)
- Bolts and nuts (2 x 1 hour)
- Pin joints and wedges (1 hour)
- Gears, gear wheels (1 hour)
- Belts and pulleys (2 x 1 hour)



### **Bearing technique**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- understand the tolerances in the bearing technology
- know how to disassembly and assembly the bearings
- know how much lubrication is needed for a bearing
- can identify the faults on bearings



### **Training schedule:**

On-demand



- Bearing types and bearing labelling system (1 hour)
- Bearing response against the force, bearing storage (1 hour)
- Bearing tolerances (1 hour)
- Assembling and disassembling the bearings (2 x 1 hour)
- Lubrication process of bearings (2 x 1 hour)
- Roller bearing faults (1 hour)



### **Fundamentals of pneumatics**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- can identify and describe the design, features and operation of pneumatic components
- can identify and explain symbols of pneumatic components
- can build the logic of control circuits in pneumatics
- are able to design pneumatic power stage circuits



### **Training schedule:**

On-demand



- Producing of pneumatical energy and physical parameters (1 hour)
- Introduction of pneumatic circuit elements and symbols (1 hour)
- Directional control valves, continuous movement of the actuators, FluidSIM applications (1 hour)
- Flow control valves, where and how to use, FluidSIM applications (1 hour)
- And / or and other logic circuits in pneumatics (1 hour)
- Time depended control in pneumatics(1 hour)
- Counting control in pneumatics (1 hour)
- Pressure control valves and FluidSIM applications (1 hour)



### **Electro pneumatics**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- can identify and describe the design, features and operation of electro pneumatic components
- can identify and explain symbols for electro pneumatic components
- know the differences between direct controlled solenoid valves and internal and external pilot controlled solenoid directional control valves



### **Training schedule:**

On-demand



- Introduction into electrotechnics (contacts, solenoids, relays and sensors) (1 hour)
- Electropneumatic valves and symbols (1 hour)
- FluidSIM basic applications with several type of electrical directional control valves and observing their differences (1 hour)
- FluidSIM applications using timer (1 hour)
- FluidSIM applications using the counter (1 hour)
- Pressure-dependent control and FluidSIM applications in Electropneumatics (1 hour)
- Sequential control, building the pneumatic circuit and FluidSIM applications in electropneumatics-1 (1 hour)
- Sequential control and systematically building the electrical control circuit, FluidSIM applications in electropneumatics-2 (1 hour)



## **Energy efficiency and energy saving in pneumatic systems**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- can identify and describe features of design to have efficiency in the compressed air process from compressed air production stage till to power stage where the work is realized
- can identify improve design quality and optimize system sizing using software AirCS possibilities
- are able to apply main features of corrective maintenance
- will be able to detect and prevent energy losses in pneumatic systems



### **Training schedule:**

On-demand



### **Training Contents:**

- Compressed air production cost and leakage costs (1 hour)
- · Prevention of leaks (1 hour)
- Inefficient connections and setup (1 hour)
- Applications with FluidLab Air CS software and Air Control System experiment set (1 hour)
- Correct sizing (diameter, length, stroke) (1 hour)
- Reducing pressure losses (1 hour)
- Circuits that reduce air consumption (1 hour)
- Using different pressures in forward and reverse strokes (1 hour)

NOTE: Applications will be shown using FluidSIM, FluidLab AirCS software and AirCS experiment set and the necessary accessories



### Safety in pneumatic systems



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- can identify most important standards for the safety of a machine
- can identify risk assessment for a simple machine
- · are able to reduce risk by regulating speed
- are able to set up a 2-channel pneumatic emergency stop function
- are able to integrate a safety mushroom actuator into the electrical controls



### **Training schedule:**

On-demand



- Safety in pneumatic systems, safety related directives and dimensioning system components (1 hour)
- Operating modes and risk analyses of a package lifting unit (1 hour)
- Technical safety such as speed reduction, pressure reduction, applications with FluidSIM (1 hour)
- Mid position closed 5/3 directional control valves, piloted non-return valves, end position locks, applications using FluidSIM(1 hour)
- Setting up an emergency stop function (1 hour)
- Building the necessary electrical control circuit to support emergency situations (1 hour)
- Emergency stop applications using PILZ safety relay (1 hour)
- Safety switching device as a door monitoring (1 hour)



### **Basics of FluidSIM pneumatics**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this training course, the participants:

- will be able to use the features of menu of FluidSIM program
- understand the features of different pneumatic, electropneumatic, electrical and digital components and configure them
- can identify the symbols of pneumatic components depend on ISO1219 standard
- can design pneumatical circuits, run, test and trace the behaviour of the circuits
- can manage and connect the field through EasyPort via USB port to FluidSIM program



### **Training schedule:**

On-demand



### **Training Contents:**

#### Through

- Technical requirements and the important menus of FluidSIM program (1 hour)
- Pneumatical circuit design and menus of pneumatic components (2 hours)
- Electro pneumatical circuit design and menus of electrical components (2 hours)
- Digital circuit design and menus of digital components (2 hours)
- The duty of EasyPort and creating communication between the design in FluidSIM and the field via EasyPort (1 hour)



### **Basic hydraulics**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

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### **Training Outcomes:**

After completing this online course, the participants:

- understand technical specifications and data relating to hydraulic components and systems
- understand the terms pressure and flow on a hydraulic system
- know how to calculate force and speed parameter of a hydraulic system
- know how to show the symbols of hydraulic components
- are familiar with several types of valves of hydraulic systems



### **Training schedule:**

On-demand



- Producing of hydraulic energy, physical parameters and calculations in hydraulic systems (1 hour)
- Elements and symbols of a hydraulic system, hydraulic pumps (1 hour)
- Hydraulic oils, tanks, filters and type of actuators (1 hour)
- Directional control valves, although having a low flow type pump, increasing the speed of a cylinder, applications in FluidSIM (1 hour)
- Directional control valves, lifting and lowering the load, using the pilot operated non-return valve, using counterbalance valve, applications in FluidSIM (1 hour)
- Flow control valves, lifting an unbalanced load with two cylinders, using a flow divider valve, applications in FluidSIM (1 hour)
- Flow control valves, having constant speed independent from the load, applications in FluidSIM (1 hour)
- Pressure control valves, limiting processes the forces on a cylinder, using pressure relief valve and pressure reducing valve, applications in FluidSIM (1 hour)



### **Proportional hydraulics**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 



### **Training Outcomes:**

After completing this online course, the participants:

- can identify the terms basic current, jump current, max current and dither frequency
- are familiar with relationship between voltage/current changes and pressure and speed characteristics on related proportional valves
- can perform the controls through PLC instead of setpoint card
- can perform the controls through analogue output signals of a PLC



### **Training schedule:**

On-demand



### **Training Contents:**

- Differences between Electrohydraulics and proportional hydraulics, shown through FluidSIM program using status diagram (1 hour)
- The terms and components used in proportional hydraulics (1 hour)
- Proportional pressure control valve, amplifier electronics and setpoint electronics (1 hour)
- Proportional directional control valves, amplifier electronics and setpoint card (1 hour)
- Proportional pressure control valve controlled through PLC outputs of FluidSIM (1 hour)
- Proportional directional control valve controlled through PLC outputs of FluidSIM(1 hour)
- Proportional pressure control valve controlled through real PLC digital and analogue outputs (1 hour)
- Proportional directional control valve controlled through real PLC digital and analogue outputs (1 hour)

Most of the applications will be done via FluidSIM



### **Energy saving and safety in hydraulic systems**



### **Target Audience:**

Maintenance staff, engineers and designers
Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 



### **Training Outcomes:**

After completing this online course, the participants:

- understand the source of heat in hydraulic systems
- know how to reduce heat problems in hydraulic systems
- are familiar with pressure compensated flow control components to reduce energy usage
- can define the correct sizing of hydraulic systems
- are familiar with hydraulic accumulators and variable displacement pumps
- · can define several types of safety
- can connect an emergency relay to build a safe circuit
- can connect a hydraulic accumulator safely into the circuit and remove it safely from the circuit



### **Training schedule:**

On-demand



### **Training Contents:**

- Energy losses in hydraulic systems and sizing the hydraulic system (1 hour)
- Energy saving via reducing heat energy 1 hour)
- Hydraulic accumulators and variable displacement pumps used for energy saving (1 hour)
- Potential hazarding points on hydraulic systems, stop categories, emergency stop applications using PILZ safety relay (1 hour)
- Personal safety, machine safety, material safety, environment safety, safety related components with samples (1 hour)
- Criteria for a safe hydraulic circuit (1 hour)
  - Unexpected movement
  - Stopping and revers movement
  - Two hand control
- Safe pressurizing and depressurisation of hydraulic actuators and accumulators (1 hour)
- Braking and locking with mid position 4/3 directional control valves, piloted non-return valves, end position locks, applications using FluidSIM (1 hour)

All exercises are done on FluidSIM



### Basic principles of electrical engineering and electronics



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish





### **Training Outcomes:**

After completing this online course, the participants:

- · are familiar with basic electrical terms and calculations
- can perform electrical measurements and interpret the measured values
- are familiar with electromechanical components
- Can identify phase shift
- are familiar with semiconductors and logic circuits



### **Training schedule:**

On-demand



### **Training Contents:**

- Basic terms of electricity, current, voltage, resistance, ohms low, electrical energy, power, work (1 hour)
- Kinds of the electrical current, serial and parallel connections and measuring instruments (1 hour)
- Avoidable and unavoidable measuring failures and effect of a capacitor and a coil on an electrical circuit (1 hour)
- Relays used in control technology (1 hour)
- Conductors and semiconductors (1 hour)
- Diodes and transistors (1 hour)
- Logic components (1 hour)

All Exercises are done on FluidSIM by the participants



### **Industrial electricity**



### **Target Audience:**

Maintenance staff, engineers and designers
Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 

### **Training Outcomes:**



leting this online course, the participants:

- know how to produce electricity
- are familiar with the terms pole and phase and know the relationship between motor revolution, pole pair and frequency
- are familiar with DC and AC voltages
- · can turn a DC motor right and left
- can turn an AC motor right and left and are familiar with protection components
- know how to build star and delta connections on an AC motor and how to control these connections
- can interpret and build electrical power and control circuit diagram
- know how to connect PLC and sensors electrically



### **Training schedule:**

On-demand



- Basic electrical concepts and producing of electricity (1 hour)
- Electrical components, relays, contactors (1 hour)
- · Thermal magnetic circuit breaker
- · Connection types in three-phase systems
- Electrical circuit diagram drawing-1 (Control Diagram)
- Electrical circuit diagram drawing-2 (Power Scheme)
- Flectrical connections of PLCs
- · Electrical connections of sensors



### **Sensor technologies**



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 



### **Training Outcomes:**

After completing this online course, the participants:

- will know how to define and classify the sensors
- are aware of different type of sensors and aware of their various features
- can perform electrical connections of sensors
- can measure the values of analogue sensors
- · will know how pneumatical sensors are working
- are familiar with protection classes
- can differentiate the broken sensors and wrong connected sensors



### **Training schedule:**

On-demand



### **Training Contents:**

- Sensor definition and sensor classifications, differences between PNP and NPN type of sensors (1 hour)
- Kinds of proximity sensors, magnetic, inductive, capacitive and ultrasonic sensors and applications (1 hour)
- Optical proximity sensors, colour sensors and their applications (1 hour)
- Sensors of pneumatic technology, magnetic, pressure, backpressure, vacuum and flow sensors (1 hour)
- Analog sensors, distance measurement and applications (1 hour)
- Strain gages, force measurement and applications (1 hour)
- Protection classes and selection appropriate sensor depend on applications (1 hour)
- Faulty connections and broken sensors (1 hour)

All exercises are done on FluidSIM



### Maintenance and repair of industrial electrical systems



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 



### **Training Outcomes:**

After completing this online course, the participants:

- can define colour codes of cables on three phase system
- · can perform insulation test
- are familiar with two hand control relays and emergency relays
- can perform min, max test on electrical systems
- Can choose correct fuse for the application



### **Training schedule:**

On-demand



### **Training Contents:**

- Single/three phase concepts, measurement, direction determination and new colour codes of cables, test of single/three phase products (heaters/motors etc.) and use of insulation tester, the basics of grounding, safety in electricity (1 hour)
- · Use of relays and contactors, test of relays and contactors (1 hour)
- Two-hand control relays (1 hour)
- Emergency stop relays (1 hour)
- Effective use of measuring instruments (Avometer, clamp meter etc.). Min, Max functions (1 hour)
- Project, circuit reading and fault monitoring, choosing the right fuse value (1 hour)
- Sensors; Inductive, magnetic, capacitive, optical, ultrasonic, pressure, flow sensors and their weak points and failures, hysteresis, operating frequency in sensors, connections and uses of PNP and NPN sensors (1 hour)
- Reverse voltage problem caused by inductive loads and their solutions (1 hour)

All Exercises are done on FluidSIM by the participants



### DC/AC motors and testing



### **Target Audience:**

Maintenance staff, engineers and designers Max. 20 participants per session



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 



### **Training Outcomes:**

After completing this online course, the participants:

- can interpret armature winding and excitation winding resistances, currents and voltages on DC machines
- can interpret speed, current consumption, output power and efficiency on DC machines
- are familiar with power factor, apparent power, reactive power and efficiency on single phase motors
- can perform star and delta connection on 3 phase machines
- can calculate effective power for 3 phase motor
- · understand motor protection switch



### **Training schedule:**

On-demand



### **Training Contents:**

- Overview of direct current, alternating current machines, basic principles of the direct current shunt motor, basic principles of the direct current series motor (1 hour)
- Basic principles of the single-phase AC motor with squirrel-cage rotor (capacitor motor) (1 hour)
- Single-phase AC motor with squirrel-cage rotor (capacitor motor) with different loads, motor test bench and drive lab software(1 hour)
- Basic principles of universal motor and universal motor with different loads (1 hour)
- 3-phase asynchronous motor with squirrel-cage rotor (1 hour)
- 3-phase asynchronous motor with squirrel-cage rotor measurements and calculations with various loads (1 hour)
- Basic principles of the 3-phase synchronous motor (1 hour)
- 3-phase synchronous motor in no-load operation and with various loads (1 hour)

All exercises are done on motor test bench with help of drive lab software

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### **Programming with TIA Portal S7-1500 PLC and CIROS applications**



### **Target Audience:**

Maintenance staff, engineers and designers



#### **Duration:**

8 hours: 4 sessions (2 hours each)



#### Language:

English, Turkish

**Register now** 



### **Training Outcomes:**

After completing this training course, the participant will:

- understand PLC structures and number systems
- know how to configure a PLC
- know how to setup the communication between the programming device and PLC
- know how to setup a project in TIA Portal
- understand the requirements of a simulation
- know how to work with simulations
- know how to work with CIROS virtual production systems
- know how to build a tag table
- understand the logic functions used in a PLC such as AND, OR, NOT, EDGE TRIGGERING etc.
- understand the SET-RESET, TIMER and COUNTER functions,
- understand how to write a sequential movement program

NOTE: All programmes will be written in LAD language



### **Training schedule:**

On-demand



- PLC structures overview, number systems and Bit, Byte, Word, Double Word concepts (1 hour)
- PLC configuration and communication with the computer and building a tag table (1 hour)
- Writing, downloading and running the first program using virtual TIA Portal S7-1500 PLC and virtual MPS systems of CIROS simulation (1 hour)
- Program writing and implementation with logic functions of TIA Portal S7-1500 PLC using CIROS application (1 hour)
- Program writing and application with memory functions of S7-1500 using CIROS application (1 hour)
- Program writing and application with timers and counters of S7-1500 using CIROS application (1 hour)
- Writing a sequential movement program using virtual s7-1500 PLC using CIROS application (1 hour)
- Writing a sequential movement program using virtual s7-1500 PLC using CIROS application (1 hour)



## BUS technologies and connections of several equipment through bus systems



### **Target Audience:**

Maintenance staff, engineers and designers



#### **Duration:**

8 hours:

4 sessions (2 hours each)



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- understand network topologies such as ring, star, mesh, bus, line, tree, fully connected, advantages and disadvantages
- understand main concept of a Profibus system
- know how to connect an equipment to PLC via Profibus
- know how to define addresses on Profibus technology and DIP (dual in-line package) switches
- · understand the GSD files
- understand main concepts of a Profinet system
- know how to match TCP-IP addresses
- · know how to connect an equipment to PLC via Profinet





### **Training schedule:**

On-demand



### **Training Contents:**

- Fieldbus basics and terms of bus systems (1 hour)
- Different bus systems and Profibus system and master and slave term (1 hour)
- Connection of a second PLC into the system, connection of a Siemens unit into the system (1 hour)
- Connection of a Festo valve island and input modules into the PLC system via Profibus (1 hour)
- Profinet system and TCP-IP addresses (1 hour)
- Connection of a second PLC into the system via Profinet (1 hour)
- Connection of a Siemens unit into the Profinet system (1 hour)
- Connection of a Festo valve island, input and output modules into the PLC system via Profinet (1 hour)

All exercises are done on PLC S7-1200 TIA Portal



### **Fundamentals of industry 4.0**



### **Target Audience:**

Maintenance staff, engineers and designers



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- understand the terms in daily life such as big data, data security, cloud, business models etc.
- understand the terms in business life such as RFID, QR, VR, AR, MES, Artificial intelligence, Digital Twin, IoT etc.
- know the differences between traditional factory and I4.0 applied factory
- know how to solve some problems of a factory via industry 4.0 technologies



### **Training Contents:**

- Definition of industry 4.0, industrial revolutions, some terms of industry 4.0 and expectations from industry 4.0 (1 hour)
- Digitalization in daily life and some extra terms (1 hour)
- Digitalization in business life and some extra terms (1 hour)
- Some technical infrastructures which are related with industry 4.0, RFID, MES, AR (1 hour)
- Traditional factory (1 hour)
- Industry 4.0 applied factory (1 hour)
- Problems of a traditional factory (1 hour)
- Fixing the problems and solving the problems of the traditional factory applying industry 4.0 solutions (1 hour)

NOTE: There will be some teamwork during this training





### **Training schedule:**

On-demand



### **Basics of process control**



### **Target Audience:**

Maintenance staff, engineers and designers



#### **Duration:**

8 hours: 4 sessions (2 hours each)



### Language:

English, Turkish

**Register now** 



# <u>u</u>

### Training schedule:

On-demand



### **Training Outcomes:**

After completing this training course, the participant:

- understand the terms open and closed loop
- know how to build a process control schematic with symbols
- understand the digital and analogue inputs and outputs
- know how to evaluate analogue inputs and how to create analogue outputs
- understand the resolution of a process control system
- understand PID function and the parameters of PID
- can perform a PID function on S7-1500 PLC



### **Training Contents:**

- Open loop and closed loop control systems, terms used on a process control system, components of a process control system (1 hour)
- Symbols of P&ID (piping and instrumentation diagram) and digital and analogue input and output addresses of EduKit system (1 hour)
- Container volume calculation and capacity of the pump as an analogue output, application with help of \$7-1500 PLC (1 hour)
- Analog flow sensor and analogue pressure sensor, application with help of S7-1500 PLC (1 hour)
- Analog ultrasonic level sensor, application with help of S7-1500 PLC (1 hour)
- Resolution of a process control system (1 hour)
- PID basics (1 hour)
- PID operation to keep the fluid level in a predefined setpoint (1 hour)

All exercises are done on S7-1500 TIA Portal PLC



### **Measurement System Analyse (MSA)**



### **Target Audience:**

- R&D manager
- · Engineers and designers
- Production Managers
- Operators
- Quality department staffs
- Calibration responsible

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will earn below knowledge:

- To explain various sources of measurement system uncertainty.
- To define ways to improve measurement systems.
- · Statistical perspective
- Statistical Process Control and Process capability
- The concept of variability
- · Measurement system variability



### **Training schedule:**

On-demand

**Register now** 



- Introduce the Minitab usage
- What is the Measurement System?
- What is Statistical Process control?
- What is Process Adequacy?
- What is Variability?
- What are the Sources of Variability?
- · What is MSA?
- What is a Quantitative and Qualitative Measurement System?

- How to Perform and Interpret Measurement System Analysis
- MSA Application Case Study



### **AIAG&VDA Process FMEA (P-FMEA)**



### **Target Audience:**

- Engineers
- Production Planners
- Program Managers
- Project Managers and Project Leaders
- Production Managers
- · Operations directors

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will earn below knowledge:

- Use this effective methodology as a tool for anticipating risks and mistakes during process improvement preventing problems in the life cycle
- Apply the Process FMEA tool in the correct context



### **Training schedule:**

On-demand

**Register now** 



- F.M.E.A. as a prevention tool
- Formalize information to prevent .
- Impact on quality and reliability
- Analysis of possible failures
- Identification/Classification of the corrective actions
- Living document: real-time design change risk management
- · Preparing for analysis
- · Defining the problem
- · Creating the Failure Modes List
- The documentation required for the development of F.M.E.A. works

- F.M.E.A. Indices: Probability, Severity, Detectability
- Action Priority (AP)with the new AIAG VDA approach
- How to classify the RISK level
- · When to take corrective action



### **Layered Process Audit (LPA)**



### **Target Audience:**

- Engineers
- Production Planners
- Production Managers
- Lean Managers
- Program Managers
- Project Managers and Project Leaders
- Blue collars

Number of participants: 4 - 10



#### **Duration:**

4 hours:



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will:

- Elimination of bottlenecks in selected areas
- Ensuring participation of various levels of management in the production area.
- Encouraging participation for management and supervision in the field
- Strengthening the bi-directional managerial relationship between managers and employees



### **Training schedule:**

On-demand

**Register now** 



- What is I PA?
- · Principles and Definitions
- LPA Earnings
- Roles of Different Actors
- Understanding Standardization at Workstations
- Implementation of LPA,
   Monitoring and Management
- Tracking of LPA Actions
- Extending LPA to Other Areas
- Changes of LPA Principles
   According to Company Culture
- A Practical Application Example



### **Innovation**



### **Target Audience:**

- Engineers and designers
- · R&D manager
- · Research & Development
- · Product and Services Designer
- Program Managers
- Project Managers and Project Leaders
- · Operation Managers

Number of participants: 4 - 10



#### **Duration:**

4 hours:



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will:

- Providing innovative and exploring thinking skills to employees at all levels
- Raising awareness of the strategy of innovation and the realization of the change process
- Developing different and new ideas and encouraging their implementation in the company



### **Training schedule:**

On-demand

**Register now** 



- What is Innovation and Innovation Education Purpose
- Contribution of Innovative Thinking to Success
- · Innovation in All of Life
- Innovation Journey with Creative Thinking Techniques
- New Product and Idea Management
- Innovation Education & Project Management Relationship
- - Innovation and Team Work

- · Competition and Innovation
- Innovative Thinking in Individual and Institutional Development
- Innovation and Application Areas
- Elements That Prevent Creativity and Innovation Development
- Supporting Innovation
- Creative Thought and Brainstorming
- Innovation Examples



### **Survey Design and Analysis**



### **Target Audience:**

- Statistician
- Business unit and process ownermanagers
- Project Managers and Project Leaders
- CRM Responsible
- · Services and Product Managers

Number of participants: 4 - 10



#### **Duration:**

12 hours:
3 sessions (4 hours each)



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will:

- Learning the statistical methods required for the design and effective implementation of a survey
- To gain the skill of interpretation of survey results



### **Training schedule:**

On-demand

**Register now** 



- What is the Survey?
- Survey Design
- Using SPSS (data entry, SPSS descriptive statistics etc.)
- Pre-test
- Reliability Analysis
- Final Test
- Factor Analysis
- Interpretation of Survey Results
- · Reporting of Results
- Sample Application



### **Machine Risk Analyses**



### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- · Engineers and designers
- Operation Managers
- Production Managers
- Project Managers and Project Leaders

Number of participants: 4 - 10



#### **Duration:**

16 hours: 4 sessions (4 hours each)



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

 Acquisition of risk analysis and risk reduction design principles that personnel working in machinery manufacturing, design or production stages will need in product development or realization steps



### **Training schedule:**

On-demand

**Register now** 



- Risk assessment and sample applications
- Safety solutions in machine safety and automation
- Machine acceptance and CE requirements
- ISG applications for caregivers (Lock / Tag)
- EU technical legislation harmonization studies
- EU Conformity Assessment Process for Machinery and Safety Equipment
- Causes of Machine-Related Work Accidents
- Machine Protective Systems
- Machine Safety Standards
- Field work



### **Society 5.0 and Industry 4.0 Components**



### **Target Audience:**

Managers, leaders and anyone with responsibilities in the company

Number of participants: 4 - 10



#### **Duration:**

8 hours: 2 sessions (4 hours each)



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will:

- Understanding the needs of change in society, applying Industry 4.0 components to social life and industry.
- Evaluation of the usage areas of Industry 4.0 components
- Evaluation of UN Sustainable development goals



### **Training schedule:**

On-demand

**Register now** 



### **Training Contents:**

- The need for change
- Change phases
- Society 5.0
- Community 5.0 and UN sustainable development goals
- Community 5.0 and Industry 4.0
- UN sustainability goals and Community 5.0
- Industry 4.0

Industry 4.0 components

- Big Data Technologies
- Artificial Intelligence and Machine Learning
- Augmented Reality and Virtualization
- Automation and Sensor Technologies
- Internet of Things and Industrial Communication Systems
- Simulation Systems
- · Cloud Information Systems
- Additive Manufacturing (3D Printing) Systems
- · Security Systems
- Industry 4.0 application examples



### **Process Management**



### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- Production Planners
- Program Managers
- Project Managers and Project Leaders
- Service Managers

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



### Language:

Turkish, English



### **Training Outcomes:**

After completing this training course, the participant will:

- It ensures that efforts are directed to the optimization of their processes.
- With systematic management, efficiency and effectiveness are increased.
- The awareness of creating a process improvement methodology that works effectively and efficiently has the ability of simple and operational applications, is gained to companies.



### **Training schedule:**

On-demand

**Register now** 



- Process concept and features of the process
- · Classification of processes
- Process hierarchy
- Process effectiveness and efficiency
- Process management
- Process Management stages
- Application reasons of Process Management (internal reasons, external reasons)
- Achievements of Process Management
- Comparison of Process
   Management and other management approaches
- Process Management stages
- Organizational structure in processes

- Creating process improvement teams
- Critical success factors in Process Management
- Qualitative process analysis
- Qualitative process analysis
- Data management in processes (process performance)
- Total Quality Management and Process Management
- Process improvement and methods
- Creating the process map
- Redesign of the process
- Automation of the process
- Example applications



### **Business Ethics And Professional Ethics**



### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- · HR Management

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



### Language:

Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- Bringing appropriate behaviours to the employees for professional ethics.
- To gain merit, accuracy, legality, competence, reliability and commitment to the profession in business life.



### **Training schedule:**

On-demand

**Register now** 



### **Training Contents:**

- Profession concept
- The concept of ethics
- Main ethical theories
- Professional ethics and ethical codes
- Ethical trial of behaviour.
- Business ethics in the world and Turkey
- The increasing importance of business ethics, resources and causes of business ethics problems
- Business ethics problems
- Attitudes and behaviours

contrary to business ethics

- Ahi and business ethics
- · Business and social work ethics
- The relationship between religion and moral concepts in business ethics (Islam, Christianity, Judaism)
- Moral relationship with other religions and beliefs
- Merit, accuracy, legality, competence, reliability in business life
- - Commitment to the profession
- Differences in business life (religion, language, race, gender, etc.)



### Waste (Muda)



### **Target Audience:**

Managers, leaders and anyone with responsibilities in the company

Number of participants: 4 - 10



### **Duration:**

4 hours:



Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

Current waste (loss) without any expenditure

- · eliminating,
- · higher efficiency,
- lower costs and
- sustainability be provided.



### **Training schedule:**

On-demand

**Register now** 



- What is Waste?
- What are the types of waste in the industry?
- What are Waste Analysis Methods?
- How Is Waste Eliminated?
- · Case Studies



### **Problem Solving's Methods**



### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- · Engineers and designers
- Production Planners
- Operation Managers
- Project Managers and Project Leaders

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- · Identification of problems
- Providing problem solving habits at all levels
- Reducing pressure on management
- · Systematic approach to problems



### **Training Contents:**

- · What is the Real Problem?
- PDCA (Plan, Do, Check, Act)
   Cycle, 5N1K, Brainstorming, 5W,
   Control Charts, Monitoring
   Diagrams, Histograms, Pareto
   Analysis, SWOT
- · Monitoring and Standardization
- Workshop



### **Training schedule:**

On-demand

**Register now** 



### **Work Study (Time & Method) And Standardization**



### **Target Audience:**

- Business unit and process owner managers
- · Engineers and designers
- · Functional Managers and Directors
- HR manager
- Industrial Engineering Managers
- Lean Consultants
- Lean Managers

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- Extraction of standard times of all processes
- Increased efficiency
- Setting transparent goals
- Realization of development



### **Training schedule:**

On-demand

**Register now** 



- What is Work Study?
- Method Study
- · Time Study
- MTM
- Standardization
- Sample Solutions



### **Suggestion Management System Integration**



### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- Business unit and process owner managers
- Functional Managers and Directors
- HR manager
- Lean Consultants and Managers

Number of participants: 4 - 10



#### **Duration:**

4 hours:



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- Based on the idea of "knowing the business the best, who makes it", evaluating the suggestions from the employees provides increased efficiency, employee satisfaction, and sustainability.
- Establishing a suggestion system specific to companies
- Ensuring that all employees participate in continuous improvement efforts



### **Training schedule:**

On-demand

**Register now** 



- Scope of the Suggestion System
- Establishing the Suggestion System
- Department Responsibilities
- Organization and Coordination
- Tracing



# **Management with Key Performance Indicators (KPI)**



### **Target Audience:**

- Business unit and process owner managers
- HR Managers
- Entrepreneurs
- Functional Managers and Directors
- Industrial Engineering Managers
- · Operations directors
- Team leaders

Number of participants: 4 - 10



#### **Duration:**

4 hours:



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Giving priority to the right jobs
- Defining the right jobs and making good use of time
- Achieving success by setting and monitoring the right goals
- · Ensuring sustainability



## **Training schedule:**

On-demand

**Register now** 



- What are the Right Jobs and How to Determine them
- · What is KPI and How to Create it
- SMART Technique
- Balanced Score Card
- How to Spread Goals
- How to Measure and Monitor Goals
- Demo Work



# **Investment Planning System Implementation**



### **Target Audience:**

- Technical Departments Managers and Employees
- Planners
- Maintenance Managers and Employees

Number of participants: 4 - 10



#### **Duration:**

4 hours:



# Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Right time investment of equipment, machines and Employees
- Right Costs
- Right Quality



# **Training Contents:**

- · Scope of investment planning
- · Connection to Strategic Planning
- Necessities
- Connection to TPM
- · Coordination and Following Up



### **Training schedule:**

On-demand

**Register now** 



# **Ergonomics**



### **Target Audience:**

- Method Engineers
- Work Safety Experts
- Shop floor Managers and Employees

Number of participants: 4 - 10



#### **Duration:**

4 hours:



# Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Comfortable working areas (directindirect)
- More productivity
- Less tiredness and exhaustion
- Less occupational diseases



# **Training schedule:**

On-demand

**Register now** 



- Definition of Ergonomics
- Subjects of Ergonomics (noise, lighting, weight, work place design etc.)
- Ergonomics in Shop floor
- Ergonomics in Offices
- Videos
- Workshop



# **Strategic Planning**



### **Target Audience:**

- · Managers, leaders
- Business unit and process owner managers
- · Operations directors
- HR managers

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Determining the strategic priorities of businesses
- A realistic assessment of environmental conditions
- Building a consistent vision for the future and a bridge between the current situation and the future



# **Training schedule:**

On-demand

**Register now** 



- Strategic Planning as a management tool
- · Main concepts and definitions
- · Strategic Planning steps
  - . Existing situation
  - . Vision situation
  - . How?
- . Situation acc.to the vision
- SMART as a tool for target definition
- SWOT Analysis
- Corporate Road Map
- Balanced Score Card
- Following Up and Measurement
- Workshop



# **Productivity Management**



### **Target Audience:**

- Managers, leaders
- Business unit and process owner managers
- · Operations directors
- Engineers

Number of participants: 4 - 10



#### **Duration:**

8 hours: 2 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- · Clear Productivity definition
- Productivity principles
- · Productivity and Quality connection
- Productivity Management connection with Maintenance, Energy Management, Problem Solving etc.
- Productivity connection with Organizational Learning



## **Training schedule:**

On-demand

**Register now** 



- Productivity, & Efficiency & Effectiveness
- The role of Productivity
- Productivity Analysis
- Productivity increasing factors
- Productivity increasing techniques
- Workshop



# **Personal Mastery**



### **Target Audience:**

All Levels

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



## Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Self determination
- Self management
- Self awareness
- · New perspectives in communication
- · Better team work
- · Healing corporate culture



# **Training schedule:**

On-demand

**Register now** 



- Definition
- Learning and judging mentality
- Mind Models
- Empathy
- Listening Degrees
- · Management with Questions
- Transactional Analysis
- Third Entity in Communication
- Nonviolent Communication (Marshall Rosenberg)
- Workshop with Points of You Coaching Game



# **Delegation**



### **Target Audience:**

· Each management level

Number of participants: 4 - 10



#### **Duration:**

4 hours:



# Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Transferring from doing the job to managing the job
- Sustainable perspective
- Focusing on corporate goals in management levels



# **Training schedule:**

On-demand

**Register now** 



- Definition
- Delegation steps
- Which jobs cannot be delegated
- Authority and Responsibility
- Workshop



# **Balanced Score Card**



### **Target Audience:**

- · Managers, leaders
- Business unit and process owner managers
- Operations directors
- Engineers

Number of participants: 4 - 10



#### **Duration:**

4 hours:



### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Holistic overview to the corporate goals
- Management of overlapping and conflicting targets
- Eliminating of the time waste in order to obtain to the goals



# **Training schedule:**

On-demand

**Register now** 



- Definition
- Perspectives
  - . Financial
  - . Customer
  - . In-house Methods
  - . Learning and Development
- · Cause and Effect Relationship
- Performance Criteria



# **Coaching Leadership**



### **Target Audience:**

- Managers, leaders
- Business unit and process owner managers
- · Operations directors
- Engineers

Number of participants: 4 - 10



#### **Duration:**

4 hours:



### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Realising the gaps for improvement
- Better integration to the corporate culture
- Tolerance for different point of views
- Positive approaches
- · Increasing of empathy and motivation
- Increasing of corporate loyalty



## **Training schedule:**

On-demand

**Register now** 



- Leadership and Management
- Leadership history and models
- Definition of Coaching
- · Coaching approach in management
- Benefits
- Demo



# **Occupational Health and Safety (OHS)**



#### **Target Audience:**

- OHS Representative
- Whole workers
- Management levels
- HR Managers
- Managers, leaders and anyone with responsibilities in the company

Number of participants: 4 - 10



#### **Duration:**

8 hours: 2 sessions (4 hours each)



#### Language:

Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- · Creating a safer working environment
- Increasing OHS awareness
- · Evaluation and identification of new risks



## **Training schedule:**

On-demand

**Register now** 



#### **Training Contents:**

#### **General subjects**

- Information on Working Legislation
- Legal Rights and Responsibilities of Employees
- Workplace Cleaning and Layout
- Legal Consequences From Work Accident and Occupational Disease

#### **Health Issues**

- Causes of Occupational Diseases
- Disease Prevention Principles and Prevention Techniques
- Biological and Psychosocial Risk Factors
- First aid

#### **Technical issues**

- Chemical, Physical and Ergonomic Risk Factors,
- · Manual Lifting and Transport,
- Glare, Explosion, Fire and Fire Protection,
- Safe Use of Work Equipment,
- Working with vehicles which have monitor,
- Electricity, Hazards, Risks and Precautions.
- The Causes, Protection Principles and Techniques of Occupational Accidents,
- · Safety and Health Signs,
- Use of Personal Protective Equipment,
- Occupational Health and Safety General Rules and Safety Culture,
- Evacuation and Rescue



# Measurement of Service Quality (Servqual)



### **Target Audience:**

- Service industry employees
- · Quality Managers
- HR Manager
- Managers, leaders and anyone with responsibilities in the company

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



#### Language:

Turkish, English



# **Training Outcomes:**

After completing this training course, the participant will earn below knowledge:

- Examining whether there is a difference between the quality of service expected and perceived by customers with this method
- Examining whether there is a difference between the quality of service expected and perceived by customers with this method



#### **Training schedule:**

On-demand

**Register now** 



- Introduce to descriptive statistics
- Service Description
- · Concept of Quality
- Service Quality
- · Dimensions of Service Quality
- Expected Quality
- · Perceived Quality
- · Application Example



# **Customer Relationship Management (CRM)**



### **Target Audience:**

- Service industry employees
- Representatives
- · Sales Managers
- Maintenance Managers
- HR Managers
- Operation Managers

Number of participants: 4 - 10



#### **Duration:**

8 hours:

2 sessions (4 hours each)



#### Language:

Turkish, English



# **Training Outcomes:**

After completing this training course, the participant will:

- · Better recognition of the customer
- Increasing the level of customer satisfaction
- Increased customer loyalty



# **Training schedule:**

On-demand

**Register now** 



- What is CRM?
- CRM Concept and Features
- Causes of CRM Exit
- · CRM and One-to-One Marketing
- Basic Functions of CRM
- Types of CRM
- · Phases of CRM
- · CRM's Goals
- Benefits of CRM
- Principles of CRM
- CRM and Technology (e-CRM)
- Returns of CRM
- Reasons for CRM Applications Failing
- CRM Applications



# **Analytical Approach To Marketing and Sales**



## **Target Audience:**

- Marketing Managers and Responsible
- Entrepreneurs
- HR manager
- Purchasing Managers and Employees

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Understanding the strategies of marketing and sales
- Understanding the concepts and importance of market, marketing, domestic and foreign markets
- Providing information about analytical approaches
- Providing information on market analysis, demand measurement and estimation



## **Training schedule:**

On-demand

**Register now** 



- Marketing concept
- · Key Features of Marketing
- Development Process of Marketing
- · Types of Marketing Planning
- Marketing Planning Process
- Tools Used in Marketing Planning.
- Marketing research process stages
- Marketing Sampling Methods
- Special Types of Marketing Research
- · Consumer values and motivation
- Classification of consumer needs
- Consumer attitude functions
- Industrial marketing

- Industrial purchasing process and types
- Market analysis
- Demand measurement and estimation
- · The factors affecting the demand
- Basic marketing tasks
- Product concepts and product classifications
- Brand concept and functions
- Product lifeline
- · Pareto Analysis
- PEST Analysis
- SWOT Analysis
- FAB Analysis



# **Warehouse and Inventory Management**



## **Target Audience:**

- Supply Chain Managers, Employees, Planners, Auditors
- Logistics Managers
- Purchasing Managers and Employees
- Warehouse Managers and Employees

Number of participants: 4 - 10



#### **Duration:**

8 hours: 2 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Faster and more qualified delivery to inner and outer customers
- Productive usage of the warehouse area
- Optimized of the inventory
- · Awareness about the wastes
- Satisfied and conscious employees



#### **Training schedule:**

On-demand

**Register now** 



Workshop

- Wastes
- Warehouse definition and types
- Warehouse operations
- Warehouse equipment
- Barcode systems
- Warehouse costs
- Ergonomics and 5s
- · Inventory definition
- Inventory control systems
- ABC Analysis & Stock Turnover Speed
- FIFO-LIFO
- **Economic Order Quantity**
- Inventory Costs
- Industry 4.0 and Warehouse Application Videos (AGVs, Drones etc.)



# Material Requirements Planning (MRP)



### **Target Audience:**

- Supply Chain Managers, Employees, Planners, Auditors
- Logistics Managers
- Purchasing Managers and Employees

Number of participants: 4 - 10



#### **Duration:**

4 hours:



Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- · Effective material planning
- More knowledge about material codes and BOMs
- · Right Inventory planning
- Sustainability



# **Training schedule:**

On-demand

**Register now** 



- · MRP definition and importance
- Pull-Push systems
- MRP principles
- MRP-ERP connection
- Material definition cards
- Master Production Scheduling (MPS)
- Bill of Materials (BOM)
- Workshop



# **Design of Experiment (DoE)**



### **Target Audience:**

- R&D managers and engineers
- Engineers and designers
- Production Managers
- Operators
- · Quality department staffs

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will earn below knowledge:

- Reducing the number and costs of experiments
- · Apply the DoE in the correct context



# Training schedule:

On-demand

**Register now** 



- Basic Statistics
- Hypothesis Tests
- Variance Analysis (ANOVA)
- Full Factorial Design
- Fractional Factorial Experiment Design
- · Taguchi Experiment Design
- What are the Experimental Design Steps?
- Application Study
- · Verification of Results



# **Lean Six Sigma**



#### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- Engineers and designers
- HR manager
- Lean Managers
- Research & Development

Number of participants: 4 - 10



#### **Duration:**

16 hours: 4 sessions (4 hours each)



#### Language:

Turkish, English



# **Training Outcomes:**

After completing this training course, the participant will earn below knowledge:

- · Gaining a statistical perspective
- Usage of DMAIC methodology
- Apply the Lean Six Sigma tool in the correct context
- Detecting waste sources and removing them from the system



## **Training schedule:**

On-demand

**Register now** 



- Six Sigma approach
- Lean Management
- Lean Six Sigma Synergy
- · The history of Six Sigma
- The benefits of Lean Six Sigma
- Roles in Six Sigma Projects
- DMAIC methodology
- · Statistical theory of Six Sigma
- $1.5\sigma$  shift
- · Creating the Project Report
- Dissemination of the project
- Announcing and rewarding the project results



# **Lean Management and Techniques**



#### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- Lean Consultants
- Lean Managers
- Business unit and process owner managers
- HR manager

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

Use lean tools to make all standardized S-QDC improvements for reaching Business Plan targets

- All functions contribute to Business Targets by using lean tools
- Target is to improve all KPI's affecting our S, Q, D & C
- Performance towards customers



## **Training schedule:**

On-demand

**Register now** 



- What is Lean Production?
- Why Will It Be Applied?
- Lean Principles
- What are Lean Manufacturing Techniques?
- 5S and Visual Factory, Kaizen, Andon, TPM, VSM-D, Poka Yoke, Jidoka, Kanban, A3 Problem Solving, Yamazumi, Hoshin Kanri
- Industry 4.0 and Lean Applications
- Case & Workshops



# **5S**



### **Target Audience:**

Managers, leaders and anyone with responsibilities in the company

Number of participants: 4 - 10



#### **Duration:**

4 hours:



# Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- More organized and cleaner work areas
- Happier employees
- Increased productivity in all areas



### **Training Contents:**

- What is 5S?
- Why is it Necessary?
- 5S Steps
- · Standardization and Monitoring
- Workshop



# **Training schedule:**

On-demand

**Register now** 



# **Total Productive Maintenance (TPM)**



#### **Target Audience:**

- Maintenance Managers
- Maintenance staff
- Maintenance Technicians
- Engineers and designers
- Entrepreneurs
- · Lean Consultants
- Lean Managers
- Industrial Engineering Managers

Number of participants: 4 - 10



#### **Duration:**

12 hours:

3 sessions (4 hours each)



### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- · Machines without fault
- · "My machine" understanding
- More participating and trained employees who solve problems at all levels
- Higher quality
- Sustainability



# **Training schedule:**

On-demand

**Register now** 



- Planned Maintenance and Requirements
- Autonomous Maintenance and Requirements
- Kobetsu KAIZEN
- Early Product / Equipment
- · Quality Care
- Office TPM
- Training
- Environment and Occupational Health
- OEE Calculation
- SMED

- MTBF & MTTR
- Single Point Lesson
- Industry 4.0 and TPM
- Videos
- Workshop



# **Overall Equipment Effectiveness (OEE)**



### **Target Audience:**

- Maintenance Managers
- Maintenance staff
- Maintenance Technicians
- Engineers and designers
- Lean Consultants
- Lean Managers
- Industrial Engineering Managers

Number of participants: 4 - 10



#### **Duration:**

2 hours:



### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Recognizing the reasons of stopping and quality errors in the machines.
- Making more effective maintenance plans
- · More efficient machines
- · Providing more efficient production



## **Training schedule:**

On-demand

**Register now** 



- · What is OEE?
- Why is it Important?
- How is OEE Calculated?
- How are OFF Results Evaluated?
- · What Does OEE Affect?
- Workshop (Examples)



# **Single Minute Exchange of Die (SMED)**



### **Target Audience:**

- Engineers and designers
- Production Planners
- Production Managers
- Project Managers and Project Leaders
- · Maintenance Managers
- Maintenance staff
- Maintenance Technicians

Number of participants: 4 - 10



#### **Duration:**

2 hours:



## Language:

English, Turkish



#### **Training Outcomes:**

After completing this training course, the participant will:

- Reduction of type rotation / mould changing times in machines
- · More efficient machines
- · The acceleration of value flow
- · Enabling more efficient production



## **Training schedule:**

On-demand

**Register now** 



- What is SMED (change over)?
- Why is it Important?
- How are SMED Results Evaluated?
- Workshop



# **Visual Factory Management**

Course Topic: Process improvement methodologies – AIAG@VDA Failure mode & Effect Analysis



#### **Target Audience:**

- Engineers and designers
- Production Managers
- Program Managers
- Project Managers and Project Leaders
- Operational Managers

Number of participants: 4 - 10



#### **Duration:**

2 hours:



# Language:

English, Turkish



## **Training Outcomes:**

After completing this training course, the participant will:

- On-site management and performance realized by all employees
- Enables management and transparent information flow with goals



#### **Training Contents:**

- Why is Visual Factory Important?
- On-Site Management (Productivity, 5S, Quality, Problem Solving, Kaizen, Andon, Job Security)
- Workshop



### **Training schedule:**

On-demand

**Register now** 



# Poka Yoke & Jidoka

# Course Topic: Process improvement methodologies – AIAG@VDA Failure mode & Effect Analysis



#### **Target Audience:**

- · Maintenance Managers
- Maintenance staff
- Maintenance Technicians
- Engineers and designers
- · Lean Consultants
- Lean Managers
- Industrial Engineering Managers

Number of participants: 4 - 10



#### **Duration:**

4 hours:



## Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Man, machine or design errors that occur during the production are solved to a simple and permanent solution.
- Increased efficiency
- · Ensuring sustainability



### **Training schedule:**

On-demand

**Register now** 



- The Importance of Error Prevention
- What is Poka Yoke?
- · What Does Poka Yoke Do?
- Where is it used?
- How is Poka Yoke System Applied?
- What is Jidoka? Why is it Important?
- Videos
- Workshop



# **Autonomous Maintenance System Implementation**



### **Target Audience:**

- Maintenance Managers
- Maintenance staff
- Maintenance Technicians
- · Engineers and designers
- Lean Consultants
- Lean Managers
- Industrial Engineering Managers

Number of participants: 4 - 10



#### **Duration:**

2 hours:



### Language:

English, Turkish



### **Training Outcomes:**

After completing this training course, the participant will:

- Increasing machine and production efficiency
- Creating an understanding of my machine in the operator



# **Training schedule:**

On-demand

**Register now** 



- Reducing machine failures
- · The acceleration of value flow
- · Increased efficiency and quality
- Ensuring sustainability
- Workshop



# **Planned Maintenance System Implementation**



### **Target Audience:**

- · Maintenance Managers
- Maintenance staff
- · Maintenance Technicians
- Engineers and designers
- Lean Consultants
- · Lean Managers
- Industrial Engineering Managers

Number of participants: 4 - 10



#### **Duration:**

2 hours:



### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Increasing machine and production efficiency
- Creating an understanding of my machine in the operator



# **Training schedule:**

On-demand

**Register now** 



- What is Autonomous Care?
- Requirements of the Autonomous Maintenance System
- Establishment Steps of Autonomous Maintenance System
- Workshop



# Kanban & Milkrun



### **Target Audience:**

- Managers, leaders
- Supply Chain Managers, Employees, Planners, Auditors
- Industrial Engineering Managers
- Operations directors
- Production Managers

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Providing material flow from supplier to warehouse, from warehouse to production by using Pull System, which is one of the five principles of Lean Philosophy
- Increased productivity with the use of KANBAN in production programming
- · Decreased inventories
- Ensuring clear and accurate information flow



#### **Training schedule:**

On-demand

**Register now** 



- Internal Logistics Definition
- Pull-Push Systems
- Kanban Definition
- Benefits
- Kanban Types
- Carriage Kanban
- Production Kanban
- Supplier Kanban
- · Kanban Card Count Calculator
- Milkrun Definition
- Milkrun Setup
- Sample Application



# **Value Stream Mapping - Design**



### **Target Audience:**

- Managers, leaders and anyone with responsibilities in the company
- Supply Chain Managers, Employees, Planners, Auditors
- Industrial Engineering Managers
- · Operations directors
- Production Managers

Number of participants: 4 - 10



#### **Duration:**

12 hours: 3 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Productivity increase and continuous improvement
- Saving time and cost by identifying and solving problems that cut the value flow by focusing on waste indirect areas(production, warehouse, etc.) and indirect areas (offices)



### **Training schedule:**

On-demand

**Register now** 



- Waste Definition
- Value Stream Mapping Description
- Definitions of Symbols
- Value-Added and Non-Value-Added Business Concepts
- Workshop



# **Hoshin Kanri**



### **Target Audience:**

- · Managers, leaders
- Business unit and process owner managers
- · Operations directors
- HR manager

Number of participants: 4 - 10



#### **Duration:**

8 hours: 2 sessions (4 hours each)



#### Language:

English, Turkish



# **Training Outcomes:**

After completing this training course, the participant will:

- Determining the strategic priorities of businesses
- A realistic assessment of environmental conditions
- Building a consistent vision for the future and a bridge between the current situation and the future



## **Training schedule:**

On-demand

**Register now** 



- Measuring the System as a Whole
- Determining the Main Business Targets
- · Goal and Policy
- Control Elements
- Daily Check
- Functional Management and Business Plans



We look forward to hearing from you!

**Registration & Pricing** 

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