Didactic Webinars

Program, Fall 2020

FESTO

Last update: 2020-09-14

Concept

Our webinars demonstrate how our learning solutions support skill building in many hot technical education topics.

- Aimed at vocational and technical education teachers or instructors
- Hosted by our international training specialists, in several languages
- One-hour, free sessions with live demonstrations and lab exercises, followed by an interactive Q&A session
- Join online sessions using the URL provided upon registration: no software to install on your computer

Program

Date	**Webinar** (click on the title for details)	Language
Sept 22, 2020	Build Essential, Universal Dimensional Metrology Skills	English
Sept 23, 2020	Imparting Knowledge Required by Renewable Energy Integration *	English
Sept 24, 2020	Build Essential, Universal Dimensional Metrology Skills	French
Sept 29, 2020	Build Essential, Universal Dimensional Metrology Skills	Spanish
Oct 6, 2020	Build Proficiency in Smart Sensor Technology for Industry 4.0	English
Oct 7, 2020	Develop sound universal skills for the process industry *	English
Oct 8, 2020	Build Proficiency in Smart Sensor Technology for Industry 4.0	French
Oct 13, 2020	Build Proficiency in Smart Sensor Technology for Industry 4.0	Spanish
Oct 20, 2020	Convey Fundamental Knowledge for Integrating Renewables in the Grid	English
Oct 21, 2020	Foster Advanced Skills in PLC Programming and HMI Integration *	English
Oct 22, 2020	Convey Fundamental Knowledge for Integrating Renewables in the Grid	French

***** European teachers: please note that the products featured in this webinar are not yet aligned to CE regulations and are not available in Europe.

Program (continued)

Date	**Webinar** (click on the title for details)	Language
Oct 27, 2020	Convey Fundamental Knowledge for Integrating Renewables in the Grid	Spanish
Nov 3, 2020	Electric Vehicle Charging Stations: Training for Electricians and Automotive Workers	English
Nov 4, 2020	Get Future Energy Workers Ready for the Smart Grid *	English
Nov 5, 2020	Electric Vehicle Charging Stations: Training for Electricians and Automotive Workers	French
Nov 17, 2020	Develop and Sharpen the Expertise of Radar Specialists	English
Nov 18, 2020	Build Proficiency in Smart Sensor Technology for Industry 4.0	English
Nov 19, 2020	Develop and Sharpen the Expertise of Radar Specialists	French
Nov 24, 2020	Develop and Sharpen the Expertise of Radar Specialists	Spanish
Dec 1, 2020	Prepare Skilled Workers to Master the Oil Separation Process	English
Dec 3, 2020	Prepare Skilled Workers to Master the Oil Separation Process	French
Dec 8, 2020	Prepare Skilled Workers to Master the Oil Separation Process	Spanish

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FESTO

Industrial Trades

Build Essential, Universal Dimensional Metrology Skills

Accurate measurement of product dimensions is critical to allow quality control at various stages of the manufacturing process. Many types of trade workers require sound measurement skills, as errors can be costly and impact on productivity. To build expertise in dimensional metrology and be ready for the workplace, students need extensive hands-on experimentation, yet creating a wide variety of learning activities with measurable objectives, based on standardized hardware, can be challenging for teachers.

This webinar will introduce a unique learning solution that provides a structured, systematic introduction to concepts, instruments, and techniques related to dimensional metrology. The course material will be presented, as well as the hardware, and exercises will be performed live.

Who should attend? Teachers of future machinists, CNC machine operators, millwrights, and quality assurance technicians.

Register to this webinar!

September 22nd, 2020 @ 9 am (EST, New York Time) Click here to register [English]
September 24th, 2020 @ 9 am (EST, New York Time) Click here to register [French]
September 29th, 2020 @ 10 am (EST, New York Time) Click here to register [Spanish]

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FESTO

Electrical Engineering

Imparting Knowledge Required by Renewable Energy Integration

Decarbonization of the planet requires a significant change in each country's energy mix – the combination of the various primary energy sources used to meet energy needs. As we increasingly move towards greater energy production from clean, renewable sources and integration into electrical grids, new knowledge is required for the future workers. Replicating power grids in the classroom and designing learning activities to build relevant knowledge and skills is challenging.

Through live performance of selected lab exercises using the Electromechanical training system (EMS), discover a way to provide in-depth coverage of renewable energy systems, from the principles behind the production of electrical energy from both solar power and wind power, to energy storage for future consumption.

Who should attend? College or university electrical engineering teachers.

Register to this webinar!

September 23rd, 2020 @ 2 pm (EST, New York Time) Click here to register * [English]

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FESTO

Electric Power Technology

Convey Fundamental Knowledge for Integrating Renewables in the Grid

The energy transition we are currently living is guided by sustainability; the process of decarbonization of the planet can be accelerated by producing energy from renewable sources. As solar panels and wind turbines play an important role in increasingly decentralized electrical power grids, future engineers and technicians require new knowledge about such systems, on top of fundamental electrical concepts. Practical study and experimentation are an integral part of the learning process yet replicating realistic power systems in the classroom can be costly and space-consuming.

This webinar will show how modular hardware, accompanying software, and rich courseware coalesce into efficient training packages. The concept behind our solution will be explained and selected exercises from the workbooks (solar/wind power, AC/DC circuits and power transformers) will be performed.

Who should attend? Electrical engineering, electrical trades, and building systems technology teachers

Register to this webinar!

October 20th, 2020 @ 9 am (EST, New York Time) Click here to register [English]
October 22nd, 2020 @ 9 am (EST, New York Time) Click here to register [French]
October 27th, 2020 @ 10 am (EST, New York Time) Click here to register [Spanish]

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FESTO

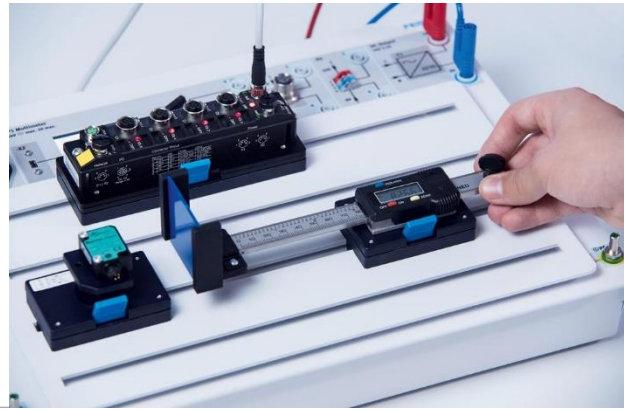
Factory Automation, Mechatronics

Build Proficiency in Smart Sensor Technology for Industry 4.0

Smart sensors are quickly spreading into the manufacturing world. They provide plant workers with live information about the status of systems and processes so that they can perform predictive maintenance and make improvements. With smart sensors come new skills requirements, mainly related to IT, such as sensor configuration and parameterization, IO-Link communication setup, integration with PLCs, data analysis, and more. Smart sensors are often integrated into I4.0 learning systems; however, this does not always allow in-depth and systematic study of the topic to build specialized expertise.

This webinar will present an overview of the main topics to teach related to the most common smart sensors and the IO-Link communication infrastructure in the manufacturing industry. Exercises from our curriculum will be performed live using the smart sensors training package.

Who should attend? Teachers in manufacturing or factory automation programs.



Register to this webinar!

October 6th, 2020 @ 9 am (EST, New York Time) Click here to register [English]
October 8th, 2020 @ 9 am (EST, New York Time) Click here to register [French]
October 13th, 2020 @ 10 am (EST, New York Time) Click here to register [Spanish]
November 18th, 2020 @ 2 pm (EST, New York Time) Click here to register [English]

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FESTO

Process Automation

Develop Sound, Universal Skills for the Process Industry

The process automation industry offers a wealth of varied job opportunities. Regardless of career focus, a common core of knowledge and skills must be mastered. The challenges faced by industry requires highly qualified, specialized personnel. Since it is prohibitively expensive to shut down an industrial system or to build a functional system solely for learning purposes. However, few process automation training systems are truly industrial while simultaneously being flexible enough to be used for education, training, or research purposes.

This webinar will present a flexible training platform that delivers the process plant directly to your lab for in-depth exploration of the main processes: level, flow, pressure, and temperature. After discussing its hardware concept and the underlying course program, demonstrations and live experiments will be performed.

Who should attend? Process automation, control and instrumentation instructors.

Register to this webinar!

October 7th, 2020 @ 2 pm (EST, New York Time) Click here to register * [English]

* **European teachers**: please note that the products featured in this webinar are not yet fully aligned to CE regulations and are not available in Europe.

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FESTO

Factory Automation, Mechatronics

Foster Advanced Skills in PLC Programming and HMI Integration

Programmable logic controllers (PLCs) are at the center of a multitude of automated systems in many industries. Many types of workers must be versed in PLC programming and HMI integration in order to create PLC routines in ladder, sequential function chart, function block, and structured text, and develop operator interfaces. To develop such IT skills, hands-on programming practice is key; using high-end programming software and PLCs that are popular in the industry increase relevance of the training.

This webinar will introduce you to a complete course designed to convey theoretical and hands-on knowledge required to work in the automation industry. Exercises will be performed live using our suitcase training system that features an HMI and an industrial PLC (Siemens or Rockwell Automation).

Who should attend? PLC, mechatronics, automation, robotics technicians, as well as engineering teachers.

Register to this webinar!

October 21st, 2020 @ 2 pm (EST, New York Time) Click here to register * [English]

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eMobility, Building System Technology

Electric Vehicle Charging Station: Practical Training for Electricians and Automotive Workers

Technological developments, environmental concerns, and government incentives have made electric vehicles more attractive and charging infrastructure is developing. Like all permanently-wired electrical installations, charging stations are required to meet stringent regulations to ensure proper operation and user safety, creating a demand for competent personnel for installation, commissioning, and service. Lab training using real hardware provides limited pedagogical opportunities and can be dangerous.

This webinar will show how to emulate different system configurations to allow students grasps the fundamental concepts and gain practical experience through lab experimentation. Exercises from the courseware will be performed using our dedicated training package that integrates commercial-grade equipment.

Who should attend? Teachers/instructors in electrical engineering, automotive technology, and building systems.

Register to this webinar!

November 3rd, 2020 @ 9 am (EST, New York Time) Click here to register [English]
November 5th, 2020 @ 9 am (EST, New York Time) Click here to register [French]

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FESTO

Electrical Engineering

Get Future Energy Workers Ready for the Smart Grid

Thanks to digitalization, electric power grids are getting smarter to allow bidirectional communication between the electricity producers and consumers. This is achieved by updating the grid infrastructure with advanced communication, control, and sensor technology. Transformations make grids more efficient, resilient, reliable, and economic. Key to training skilled engineers and technicians is hands-on experimentation that allows for thorough study of the topic on a system that emulates the characteristics and topology of a smart power system.

Through live performance of selected lab exercises using the Electromechanical training system (EMS), discover a way to provide in-depth coverage of smart grids, from the principles behind the concept of smart grids, to upgrading and operating an electric power substation in today's smart grid, transmission lines, SVC, STATCOM, HVDC, and more.

Who should attend? College or university electrical engineering teachers.

Register to this webinar!

November 4th, 2020 @ 2 pm (EST, New York Time) Click here to register * [English]

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Radar Technology

Develop and Sharpen the Expertise of Radar Specialists

Radars are used to detect and track objects in the presence of noise and clutter. This technology is applied in an increasing number of commercial areas such as weather monitoring, automotive sector, building security, medical devices, surveillance, and more. Radar operators and technicians, as well as radar system designers and integrators must develop highly specialized skills, ideally through practical lab experimentation on real radar systems. However, such training systems must be realistic and guarantee students' safety.

This webinar will introduce the learning concept behind a unique radar learning solution, its computer-based tools, and the extensive courseware that provides an in-depth topic coverage. A live demonstration of the system will be performed to show its main functionalities.

Who should attend? Telecommunications and radar technology, and electronics teachers.

Register to this webinar!

November 17th, 2020 @ 9 am (EST, New York Time) Click here to register [English]
November 19th, 2020 @ 9 am (EST, New York Time) Click here to register [French]
November 24th, 2020 @ 10 am (EST, New York Time) Click here to register [Spanish]

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Process Automation

Prepare Skilled Workers to Master the Oil Separation Process

Oil is used in a plethora of consumer goods and as feedstock for several primary products in the chemical industry. Oil separation is a critical process that directly impacts on production efficiency of on- and off-shore upstream operations, that require specialized personnel to operate and troubleshoot oil separators. Hands-on training is essential yet finding an experimentation platform suitable for the classroom is not easy: most industrial separators are huge and costly while offering limited experimentation possibilities.

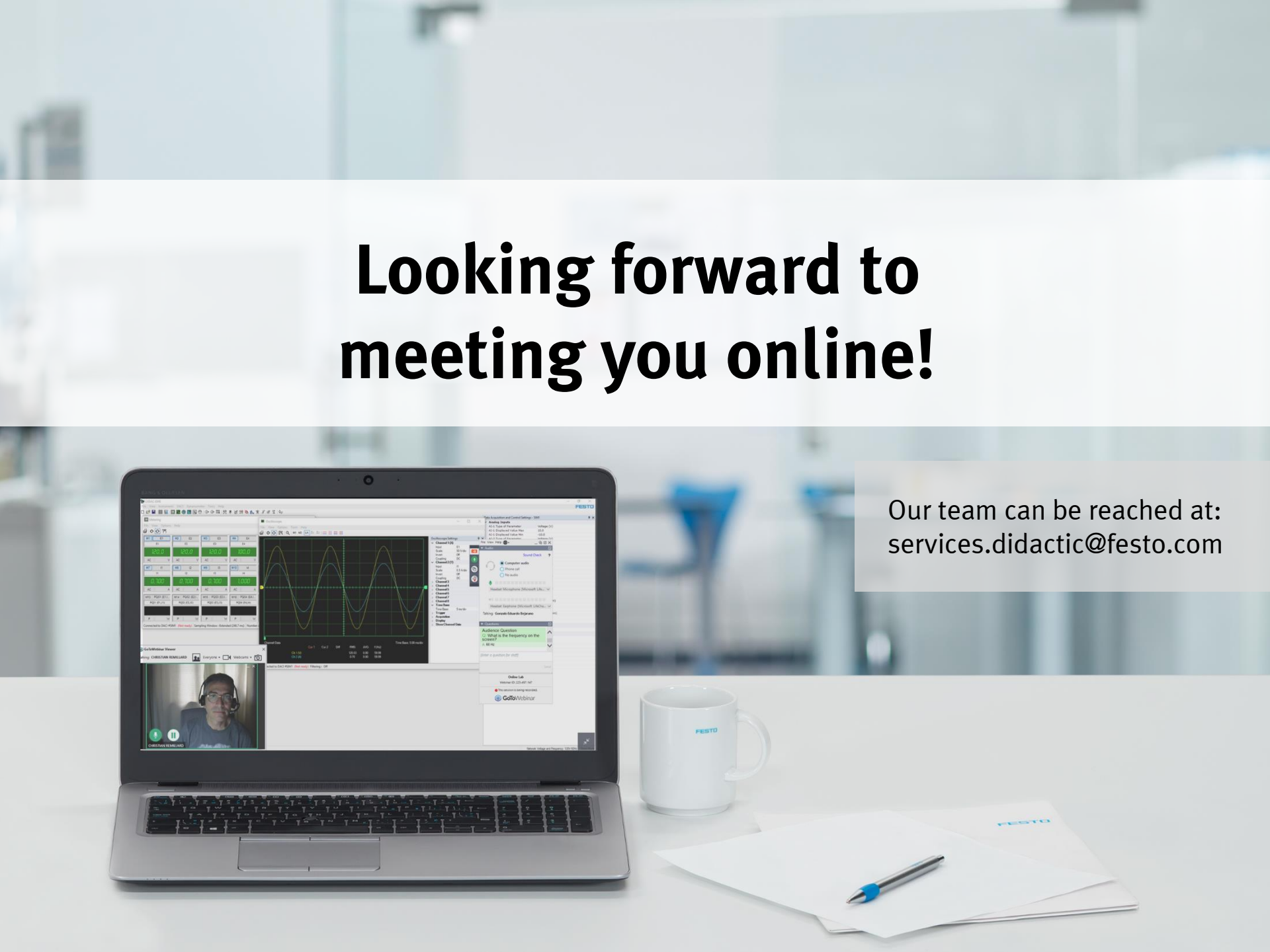
This webinar will introduce you to a three-phase, horizontal oil separator learning system developed in cooperation with Oxy Petroleum. This scaled-down version operates as a production separator with basic level pneumatic controllers or with instrumentation for crude oil characterization. Tour its industrial-grade components, discover more about the course material and see the system live in action to uncover its training potential for future oil and gas industry workers.

Who should attend? Process automation, control and instrumentation instructors.

Register to this webinar!

December 1st, 2020 @ 9 am (EST, New York Time) Click here to register [English]
December 3rd, 2020 @ 9 am (EST, New York Time) Click here to register [French]
December 8th, 2020 @ 10 am (EST, New York Time) Click here to register [Spanish]

Looking forward to meeting you online!



Our team can be reached at:
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