



2022-23

**Standard Electric
University**

Standard Electric University Course Catalog 2022 - 2023

Standard Electric University: Class is now in Session!

Standard Electric Supply Co. continues to offer technical information and training tailored to our customers' needs. Since 2018, Standard Electric University continues to guide customers with building and shaping their knowledge about the latest technologies and innovations.

Our hands-on classroom style trainings are held in our local offices, making it easy to attend. Remote learning more your speed? Webinars allow you to receive training and vital information without needing to leave the office.

Classes at Standard Electric University cover a wide array of topics. Ranging from the latest electrical safety updates to electrical codes, automation innovation, The Industrial Internet of Things, and everything in-between. Whether you're a veteran in the electrical industry or just starting out, our classes at Standard Electric University will offer accurate in-depth information to meet your needs.

Do you have suggestions for a new class? Let us know what you have in mind, and we will do our best to meet your needs.

If you have any interest in our classes or you would like a class customized to meet your specific needs, contact Nathan Amonett at (317)- 813-1076.



Standard Electric University Course Schedule 2022 - 2023

All classes and webinars are presented by our Technical Solutions Team (TST) and our valued suppliers.

APL = Appleton | CHI = Chicago | INDY = Indianapolis | MKE = Milwaukee | OL = Online

CLASSES*

Date	Description	Location
2022		
September 22	Motor Failure? Protect Your Critical Equipment	MKE
October 12	Prevalent and Deadly: Electrical Shock Prevention Needs a Jolt of Change	APL
October 13	Prevalent and Deadly: Electrical Shock Prevention Needs a Jolt of Change	MKE
October 13	Prevalent and Deadly: Electrical Shock Prevention Needs a Jolt of Change	CHI
November 16	IO-Link Core Benefits and IoT Applications	MKE
2023		
January 31	Best Practices for VFD Cable Grounding and Shield Termination	MKE
February 22	VFDs & Power Quality: Protecting your Assets	APL
March 1	VFDs & Power Quality: Protecting your Assets	CHI
March 8	VFDs & Power Quality: Protecting your Assets	MKE
March 14	Industrial Internet of Things 101	MKE
March 15	Motor Failure? Protect Your Critical Equipment	APL
March 22	Motor Failure? Protect Your Critical Equipment	CHI
April 12	Applying IEEE-519 for Harmonic Mitigation and System Reliability	MKE
April 19	Applying IEEE-519 for Harmonic Mitigation and System Reliability	APL

*Classes will be conducted in accordance to the state and local social distancing and assembly guidelines. All classes and webinars are subject to change. New classes and webinars are often offered after the catalog has been printed.

Visit <https://www.standardelectricsupply.com/training-seminars/> for the most up-to-date information.



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3111 East Capitol Dr.
Appleton, WI 54911
920-730-8800

Chicago Office
1055 Stevenson Ct.
Roselle, IL 60172
630-860-0236

Indianapolis Office
9900 Westpoint Dr. Ste 142
Indianapolis, IN 46256
317-773-0400

Milwaukee Office
222 N. Emmber Ln
Milwaukee, WI 53233
414-272-8100

Standard Electric University Course Schedule 2022 - 2023

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WEBINARS

Description	Location
Available Now	
Finding Your Remote IO Solutions for Hard to Solve Applications	OL
How To Establish A Remote Connection For An HMS Ewon Cosy or Flexy In 3 Easy Steps	OL
How to Stay OSHA Compliant with Arc Flash and Lockout/Tagout Services	OL
How Wireless Pushbuttons and Wireless Limit Switches Can Lower Your Total Cost of Ownership	OL
IO Link - What is It and How Can It Increase My Productivity?	OL
Reduce Assembly Labor, Gain Space, and Improve Thermal Efficiency in Your Panel Design	OL
Solve Multiple Protocol Conversion and Gateway Needs With One Platform	OL
Structured Programming Fundamentals - The Foundation For Engineering Efficiency	OL
The 10 Commandments of PLC Programming - Thou Shall Not Use Timers for Idol Tasks	OL
The Benefits of Using VMware With Automation Software	OL
What is Active Front End Technology and How Does it Potentially Help My Design?	OL
Why Do I Need a Purge and Pressure System?	OL
GFCI and Electrical Safety Standards that Impact Plant Operations	OL
Advanced Structured Programming	OL
Easy to Deploy Email Messaging From Remote Sites	OL
Establishing a Secure Connection to a Cloud Server for IIoT Machine Data Visualization	OL





Motor Failure? Protect Your Critical Equipment // September 22nd, 2022

Your motor is under attack, Common mode voltage and current voltage can have a critical impact on your motor. How you can protect your system and mitigate future problems.

- » Learn the function of a 6-pulse VFD, their benefits, and power quality issues they create
- » Discover common solutions to protect your motor from failure
- » Understand how combining standard cable with motor protection solutions can provide overall cost savings

This class is perfect for those wanting to learn how harmful harmonics generated by VFDs can have on a motor and what are your options for a complete motor protection solution.



Prevalent and Deadly: Electrical Shock Prevention Needs a Jolt of Change

// October 13th, 2022

Electrical shocks cause more than 90% of electrical fatalities in the United States. Cases of injury or death due to electric shock are on the rise; what can you do to curb this dangerous trend?

- » Learn about electric shock prevention, and how staying vigilant can contribute to a safer workspace.
- » Discover common sources of electrical shock, and how to reduce or eliminate these hazards
- » Understand the challenges of safety professionals who strive to keep workers safe

Recommended for electricians, safety personnel, and operation managers with an interest in electrical safety.



IO-Link Core Benefits and IoT Applications // November 16th, 2022

IO-Link's wide range of technical capabilities shape the way data is sensed and processed. Vast options for both configuration and interchangeable components make IO-Link a vital piece of the puzzle for your build. Is your team not utilizing IO-Link to the fullest? "IO-Link Core Benefits and IoT Applications", is the perfect place to start!

- » Discuss the technology and fundamental features of an IO-Link system
- » Expand upon your IO-Link knowledge and get the most out of your set-up
- » Address hurdles users commonly face with IO-Link

This course is perfect for end-users, OEM's, integrators, electrical/controls/process engineers, maintenance, PLC/HMI/SCADA and offers vital information for new and old users alike.

To access webinars please click on the title of the class and fill out the form.



- Classes



- Webinars

Standard Electric University Class & Webinar Descriptions 2022-2023



Best Practices for VFD Cable Grounding and Shield Termination

// January 31st, 2023

Solid grounding and cable installations are crucial to ensure your VFD system is running optimally. Mistakes during installation can result in improper grounding and excess noise that both negatively impact your VFD system.

- » Discover how to handle cable shields with the correct methods on preparation and termination
- » Learn how to maximize noise mitigation through grounding and bonding
- » Recognize common installation mistakes and learn how to avoid them

Suited for anyone looking to increase their knowledge in the design and installation of VFD systems.



VFDs & Power Quality: Protecting your Assets // February 16th 2023

VFDs are an essential piece of equipment in today's automation industry. This session will highlight the types of power quality problems associated with VFDs, the impact they have on your plant and equipment, and some simple solutions to remedy power quality issues.

- » Discover the harmful effects that harmonics generated by VFDs can have on a system
- » Understand different power quality concerns associated with VFDs
- » Learn simple solutions you can use to remedy power quality issues

This class is suited for those who specialize in the selling, installing and maintaining VFD systems.



Industrial Internet of Things 101 // March 14th, 2023

The last 200 years has brought us more innovation than in any other period throughout human history. At the heart of this movement is the Industrial Internet of Things (IIoT) which connects machines, people, and information in ways like never before.

- » Understand the major milestones that have allowed rapid advances in the way we manufacture goods and how this impacts our daily lives
- » Discover how 'Industry 4.0' is changing the way we manufacture products and bring them to market
- » Observe an in-person demonstration of a basic IIoT application that highlights how data can be collected and viewed in real time around the world

This class is perfect for those looking to build a foundational understanding of IIoT, and how it impacts your company.

To access webinars please click on the title of the class and fill out the form.





Applying IEEE-519 for Harmonic Mitigation and System Reliability

// April 13th, 2023

Voltage and current harmonics can be detrimental to the health, reliability, and cost of equipment and systems.

- Learn the requirements for IEEE-519
- Discover standards to reduce costs and extend equipment and system life
- Utilize IEEE-519 solutions that directly impact your build

This webinar is perfect for programmers or those in maintenance wishing to gain a fundamental understanding of IEEE-519 Harmonic Mitigation.



GFCI and Electrical Safety Standards that Impact Plant Operations // Online

Manufacturing and processing facilities operate in increasingly automated, often highly regulated environments where proper electrical safety practices are essential to help prevent electrical shock and injury.

- » Discover GFCI regulations
- » Study OSHA safety regulations
- » Learn solutions for GFCI, wiring devices, switch-rated connector systems and other electrical connectors

This webinar is perfect for facilities, safety, operations or construction team members responsible for workplace efficiency, safety and compliance.



Advanced Structured Programming // Online

Programming is by no means an easy task. Creating a program that runs correctly and efficiently can be a huge headache if you're not versed in structured programming. In this class you will:

- » Learn how to compare subroutines
- » Discover the anatomy of a structured program
- » Study the use of parameters and get the results you need

This webinar is perfect for programmers or those in maintenance wishing to gain a fundamental understanding of structured programming.

To access webinars please click on the title of the class and fill out the form.



- Classes



- Webinars



Easy to Deploy Email Messaging From Remote Sites // Online

Sending accurate information via email is vital in making sure your job runs smoothly. With that in mind, what are the ways you can send out information more efficiently? Attending this class will help you:

- » Understand the challenges of sending emails behind site firewalls
- » Utilize simple equipment to avoid PLC code modifications
- » Discover how eWon COSY and FLEXY can improve the messages you send

This webinar is recommended for anyone wanting to gain a keen understanding of email messages and alarm configuration from remote sites.



Establishing a Secure Connection to a Cloud Server for IIoT Machine Data // Online

Maintaining a solid network connection is vastly important. Shaky connectivity can hinder your workplace, causing frustration and loss of money. Attend this class to:

- » Learn how to establish a secure connection through the cloud
- » Discover how transfer layer security certificates can be used to verify important information
- » Observe a live example of how to send machine data to a cloud server

This webinar is best suited for those wishing to learn about cloud servers and IIoT machine data visualization.



Finding Your Remote IO Solutions for Hard to Solve Applications // Online

Having trouble finding a remote IO solution to fit your application? WAGO has an IO system that could improve your application and reduce your headache! You will:

- » Discover the WAGO 750 series IO system
- » Learn about the many PLC networks the WAGO 750 works with
- » Build your IO node using WAGO's online configurator

This class is perfect for engineers, industrial electricians, or plant maintenance workers looking to gain foundational knowledge on improved IO remotes.

To access webinars please click on the title of the class and fill out the form.





How To Establish A Remote Connection For An HMS Ewon Cosy or Flexy In 3 Easy Steps // Online

Connectivity between devices is vital to the performance of your workplace. Getting started can be a daunting task, HMS is here to help.

- » Study three simple steps to set up your Cosy
- » Learn how to connect to your remote devices
- » Discover how M2Web monitors your Ewon devices

This webinar is perfect for workers looking to set up remote connections for their HMS Ewon Cosy or Flexy.



How to Stay OSHA Compliant with Arc Flash and Lockout/Tagout Services // Online

Do you know where your company ranks on OSHA's scale of compliance? Properly labeling hazards in your workplace is a great way to encourage safety. This class will help you:

- » Learn how to keep your workplace safe
- » Study OSHA and NFPA 70E guidelines so your company can be compliant
- » Discover safety practices to help keep your workplace safe

This class is designed for workers looking to improve workplace safety within the realm of Lockout/ Tagout and arc flash hazards.



How Wireless Push buttons and Wireless Limit Switches Can Lower Your Total Cost of Ownership // Online

Installing cables takes time, time that is crucial to the operation of your business. What if we told you there was an alternative solution that could lower cost and save time on installation? By attending this class you will:

- » Discover Schneider Electric's XB5R Wireless pushbuttons
- » Understand the fundamentals of wireless mesh technology
- » Compare the strengths and weaknesses of a variety of wireless technology

This Webinar is ideal for those looking to explore the implementation of wireless solutions.

To access webinars please click on the title of the class and fill out the form.



- Classes



- Webinars



IO Link - What is It and How Can It Increase My Productivity? // Online

Configuring your protocol network can be a daunting task. Do you have the tools to get the most out of your network? Attend this class to:

- » Learn the fundamentals of I/O Link
- » Discover Software tools through online resources
- » Understand the benefits granted with I/O Link

This Webinar is perfect for those looking to increase their productivity with I/O Link.



Reduce Assembly Labor, Gain Space, and Improve Thermal Efficiency in Your Panel Design // Online

Keeping your enclosure organized is vital for providing proper maintenance. This course will demonstrate how Lutze AirSTREAM can improve your panel design. In this class you will:

- » Observe how to properly manage your wiring
- » Understand the importance of thermal management
- » Learn how to utilize your enclosure space

Perfect for Electrical Engineers and designers looking to optimize their control panel layout.



Solve Multiple Protocol Conversion and Gateway Needs With One Platform // Online

Having your gateway needs under a single platform is beneficial, Red Lion has the gateways and controllers to help! In this class you will:

- » Discover the benefits of intermediate PLC's
- » Learn about dedicated gateways like ANYBUS and Hilscher
- » Observe the conversion of software protocol to multiple PLC's

This Webinar is perfect for those looking to make the most of their networking needs.

To access webinars please click on the title of the class and fill out the form.





SE Automation
A Standard Electric Supply Co.

Structured Programming Fundamentals - The Foundation For Engineering Efficiency // Online

Building your automation program in a structured format will allow for greater efficiency and faster maintenance. To make the most of your program it is important to start with the basics. Attendees will:

- » Study the building blocks of a structured program through Siemens TIA Portal
- » Discover the benefits of passing variables to a structured subroutine
- » Observe the building of an automation program

Recommended for workers looking to maximize the effectiveness of their automation programming. This course is offered through our sister company, SEO Automation.



The 10 Commandments of PLC Programming - Thou Shall Not Use Timers for Idol Tasks // Online

PLC Programming may be easy to learn but making the most of your application requires digging a little deeper. Attend this class to:

- » Understand how the timer function benefits PLC function
- » Learn the pitfalls of improper timer use
- » Gain knowledge vital to building fundamental PLC knowledge

This Webinar is perfect for those wishing to make the most of their PLC set-up.



The Benefits of Using VMware With Automation Software // Online

Establishing a fantastic network configuration can have a positive impact on your business. You will:

- » Discover the best practical uses for VMware
- » Learn how VMware can support your network
- » Establish vital network settings to get the most out of VMware

Recommended for engineers who work with a multitude of unique software.

To access webinars please click on the title of the class and fill out the form.



- Classes



- Webinars



What is Active Front End Technology and How Does it Potentially Help My Design? // Online

Harmonics is a common issue when it comes to front-end technology, what are some ways you, as a consumer, can combat these issues? Attend this class to:

- » Learn about IEEE 519-204 architecture
- » Discover ways your front-end design can be improved
- » Observe how proper coupling can have a positive impact on your build

This Webinar is perfect for those working with drives and other front-end applications and are looking to troubleshoot some of the issues you may be having.



Why Do I Need a Purge and Pressure System? // Online

Proper usage of a purge and pressure system not only benefits your business but also benefits the health and safety of your employees. You will:

- » Discover the best purge and pressure system for your application
- » Learn the different ratings and classes associated with a purge and pressure system
- » Gain knowledge on how to build a perfect purge and pressure system for yourself

This Webinar is recommended for those in engineering and maintenance looking to gain fundamental knowledge of these systems.

How to Register for Courses

- » To register: Click on the title of the class/webinar you wish to attend and fill out the form.
- » Questions? Call Nathan Amonett at 800-776-8222 x1076 or email at namonett@standardelectricsupply.com
- » Or contact your Standard Electric Supply Co. Account Manager

To access webinars please click on the title of the class and fill out the form.

