



# Who We Are

Since 1945, the International Society of Automation (ISA) has worked to create a better world through automation. As a non-profit professional association, we connect our global community of technicians, engineers and other automation professionals through standards-based technical resources, networking and career development opportunities.



### ISA by the Numbers





Product & System Certifications



Personnel Credentials



Professionals Trained (2023)

### ISA Can Help You Achieve Your Goals

ISA offers a wide-range of programs and products that provide the automation community with vital resources:

- Industry standards
- · Certification and certificate programs
- Education and training
- Conformity assessment

- Publications and technical content
- Conferences and exhibits
- Networking and career development opportunities

### Major Automation Topics We Cover



**Digital Transformation**What the cool kids are doing



**Automation and Control** *Running the plant* 



**Operations and Management** *Managing the business* 



**Enterprise Architecture and Networks** *How things fit and talk to each other* 



**Safety and Cybersecurity** *Protecting people, plants and environment* 

### ISA Content Addresses Multiple Industries

- Agriculture
- · Aircraft, Aerospace
- Automotive, Transportation Vehicles/Systems
- · Chemicals and Allied Products
- Communications/Networking/ Data Services
- Computers, Electronics and Semiconductors
- Consumer
- · Education and Training
- Engineering Consulting/EPC
- Ethanol Production
- Fabricated Metal Products

- Facilities/Building Management
- Consumer Packaged Goods, Food, Beverage
- Glass, Concrete, Stone and Clay Products
- Government and Military
- Industrial Machinery and Equipment
- Instrumentation, Control, Test, Measurement Systems
- · Marine, Maritime
- Medical Devices/Equipment
- Metal Processing
- · Mining and Minerals

- · Oil, Gas, and Petroleum
- Paper, Wood and Allied Products
- · Pharmaceuticals, Life Sciences
- · Plastics and Rubber
- Power Generation/Distribution
- Smart Cities/Building Automation
- Systems Integration/ Value-Added Resellers
- · Textiles, Apparel, and Leather
- Warehouse/Distribution, Logistics, Ports
- Water/Wastewater

16,100+ members in 104 countries



### Membership

ISA is the professional home for engineers, technicians, leaders and students in the industrial automation industry. We are creating the future of automation, and we need your skills, perspective and insight to make it happen. Join us!



#### Connect

- Engage in technical discussions on ISA Connect.
- Network with automation professionals through geographic sections.
- Build connections through conferences, webinars and online discussions.



#### Grow

- Explore opportunities and build your resume with ISA Career Center.
- Post job openings and access over 50,000 automation professionals.
- · Serve on a standards committee.
- Connect with and inspire others through the ISA Mentor program.



#### Learn

- Access over 138 standards that reflect leading industry expertise.
- Read the latest in industry information through our online news sources.
- Take training designed to build technical knowledge and career skills, including the ISA Business Academy, a mini-MBA program offering leadership training.
- Earn professional credentials that document your skills and set you apart.
- Access a wealth of ISA content in our Pub Hub library.

### Mimo<sup>sm</sup>

### A Large Language Model Trained on ISA Content



Mimo is an Al-powered large language model educated on ISA content: standards, training, reports, articles, presentations and so much more. Ask Mimo all of your questions about industrial automation!

Anyone can use Mimo, but ISA members receive a more in-depth answer and can directly access source material available on Pub Hub, the society's one-stop content portal for members. Since it can access files and information that are normally not widely or publicly available, Mimo is a richer and more relevant resource for automation professionals than ChatGPT or similar services.

### **Standards**

ISA consensus-based industry standards make automation safer and more efficient. We have over 138 standards that reflect the expertise of more than 3,500 industry experts from around the world.

Our ISA/IEC 62443 series of standards are the world's only consensus-based automation and control systems cybersecurity standards. They have been adopted by the United Nations, government organizations and manufacturing sectors worldwide.

ISA standards are developed and reviewed by thousands of automation professionals worldwide, focusing on cybersecurity, safety, batch control and enterprise integration.

Our ISA/IEC 62443 series of standards has been adopted by the United Nations, government organizations, and manufacturing sectors worldwide.

ISA is accredited to develop standards by the American National Standards Institute (ANSI). ISA standards are published as American National Standards, and many are submitted through the International Electrotechnical Commission (IEC) and receive international adoption.

#### ISA Standards Topics of Focus Alarm Management for the Intelligent Device **Process Industries (ISA18)** Management (ISA108) Batch Process Control (ISA88) Loop Checks, Calibration, Commissioning Cybersecurity for Industrial and FAT/SAT (ISA105) **Automation and Control** Systems (ISA99 / 62443) · Power Plants, Fossil and Nuclear (ISA77 and ISA67) Enterprise-Control System Integration (ISA95) Procedure Automation for Continuous Process Functional Safety – Safety Operations (ISA106) **Instrumented Systems** Valves / Valve Actuators (ISA84 / 61511) (ISA75 and ISA96) • Human-Machine Interfaces (ISA101) Wireless Systems for **Industrial Automation** Instrumentation Symbols (ISA100) and Documentation (ISA5, ISA20 and ISA51) Additional Topics (ISA7, ISA12, ISA37, ISA60, ISA71, ISA76, ISA92)

# Education and Training

Developed by real-world experts in the automation and control field, ISA training covers relevant topics and vital technologies.

ISA
training
is always
unbiased
and vendor
neutral.



### **Critical Course Topics**

ISA training courses and programs are designed to cover the complex operational and technical systems that industrial automation and control engineers and technicians design, operate and/or maintain.

# Developed and Delivered by Subject-Matter Experts

ISA training developers and instructors are subject-matter experts who bring years of real-world experience to the table and are dedicated to our mission of creating a better world through automation.

Many ISA courses are based on ISA consensus industry standards — developed by thousands of experienced professionals from around the world.

### **Unbiased/Vendor Neutral**

ISA training courses are intentionally vendor neutral — exercises and hands-on equipment are sourced from a variety of suppliers.

### **Documented Credibility**



ISA is accredited by the International Accreditors for Continuing Education and Training (IACET) and offers IACET CEUs for its learning events.

### **Continuing Education Credits**

ISA facilitates development, maintenance and documentation of individuals' professional development in the form of CEUs, digital credentials and PDHs.

### Certification

ISA certification programs provide an objective, third-party assessment and confirmation of skills and experience. With two different programs catering to engineers and technicians, earning an ISA certification demonstrates your mastery of automation knowledge.

Individuals certified by ISA programs must meet rigorous standards, including:

- Mandatory education and/or work experience requirements
- Passing certification exam
- Committing to the ISA Code of Ethics

### Certified Automation Professional® (CAP)®

CAPs are engineers and professionals who work in process and manufacturing automation. They are responsible for direction, definition, design, development/application, deployment, documentation and support of software and equipment systems.



### Certified Control System Technicians® (CCST®)

CCSTs are automation and control technicians who calibrate, document, troubleshoot and repair/replace instrumentation for systems that measure and control level, temperature, pressure, flow and other process variables.



### **Certificate Programs**

ISA offers certificate programs that are designed to increase knowledge and skills across a broad range of topics. Our certificate programs include:

Gain recognition by getting your name listed in the ISA Credential Directory, used by employers, customers and others to verify a credential holder's certification or certificate.





Fire and Gas Mapping Specialist



Automation Project Management Specialist



**CAP Associate** 



ST Associate



















**Cybersecurity Certificate Program** 

**Safety Certificate Program** 

### **Publications**

ISA is the authoritative publisher of technical resources covering the automation profession. Written and reviewed by experts, these publications will keep you fully informed about the latest technological developments, applications, trends and standards within the automation industry.

#### Automation.com

### **AUTOMATION** COM

ISA's Automation.com is your continuous source for industry news, new

products, articles and trends from our own editors and subject matter experts. News is published daily on the website, and e-books come out six times per year to address the latest insights on essential automation topics. Automation.com also offers topical newsletters forty times per year, as well as special educational webinars on products and services.

#### InTech



Written for engineers, technicians, industrial managers and automation business professionals, ISA's *InTech* magazine is your source of in-depth technical articles on leading automation topics,

including digital transformation, cybersecurity, process automation and much more.

#### Books



Authored by subject-matter experts on current and emerging technologies and applications, ISA provides a variety of titles for engineers, technicians, managers, sales and marketing professionals

and academics. ISA books can help you expand your skills, create a reference library or prepare for a CCST®, CAP® or CSE exam.

# ISA Transactions — the Journal of Automation



Designed for research professionals and academia, *ISA Transactions* is focused on advances in the science and engineering of measurement and automation.

### Look Who's Talking

ISA is proud to be the thought leader on automation, industry 4.0, digital transformation, operational technology cybersecurity and more.

ISA and its subject matter experts have appeared in:



### **Events and Conferences**

ISA offers a variety of events, including technical conferences, webinars and ISA Connect Live technical discussions. These events cover the breadth of information in industrial automation and provide opportunities to:

- Engage in face-to-face experiences with renowned experts and presenters
- Learn about the latest technologies and trends
- Improve your skills with high-value, peer-reviewed technical content
- Share your company's products and services
- Network with peers and colleagues around the world





**Attendees Give ISA Event Content Five Stars** 













### What Do People Think about ISA?



ISA events are where everybody comes together. It's high energy and everybody cares about where the industry is going.

The class was excellent; the program was excellent. The certification programs are some of the best in the industry.

For me, the first thing I think of when you say ISA is 'family.'

In ISA you find mentors across all fields of your profession to help your career take off quickly.

I have met some of the best people in automation by being part of ISA.



### Consortia

ISA leads collaborative forums for leading companies and stakeholders in industrial cybersecurity and interoperability.

### ISA100 Wireless Compliance Institute



ISA100 Wireless Compliance Institute assures interoperability for wireless products conforming to the

ISA100.11a (IEC 62734) international wireless standard. www.isa100wci.org

# ISA Security Compliance Institute



ISA/IEC 62443 cybersecurity

certification of COTS products, supplier development processes and automation at asset owner operating sites. www.isasecure.org

### ISA Global Cybersecurity Alliance



Bridge the gap between ISA/IEC 62443 standards and

market adoption. Lead cybersecurity culture transformation. www.isagca.org

#### **ICS4ICS**





Incident Command System for Industrial Control Systems

establishes a playbook for responding to cyber attacks on automation in critical infrastructure. www.ics4ics.org

### Conformity Assessment

Just as ISA develops many of the world's leading standards for automation and operational technology cybersecurity, ISA is also a leader in the conformity assessment space — offering proper systems and measures to assure compliance with standards.

# ISA operates certification schemes in two important areas:

**ISASecure** offers product and system certifications that assess compliance to the ISA/IEC 62443 series of standards. These include:

- Component Security Assurance (CSA)
- IIoT Component Security Assurance (ICSA)
- System Security Assurance (SSA)
- Security Development Lifecycle Assurance (SDLA)
- ACS Security Assurance (ACSSA)

**ISA100 Wireless** is a plant-wide wireless infrastructure technology that improves plant performance, simplifies wireless operations and reduces costs. ISA100 Wireless certification guarantees interoperability between vendors — delivering end users wireless solutions that are standards-based, resilient and secure. The program offers solutions for device, system and stack-level certifications.

# Why It Matters

ew innovations, increases in efficiency, more robust cybersecurity and more sustainable operations — all of these depend on automation.

#### And automation itself depends on people to make the world a better place.

Automation, robotics, and artificial intelligence — none of these simply eliminate jobs as the headlines might lead you to believe, but rather repurpose existing jobs and create new ones.

Manufacturing and industrial work is no longer as dirty, monotonous or dangerous as it once was. And all that human intelligence, creativity and capacity that used to be at risk can be valued in new ways that make work and life safer and more efficient.

As the leading professional society for automation, ISA is focused on helping industry and policy makers the world over to prepare our workforce to meet the need for qualified engineers and technicians, and have a deep understanding of the standards and conformance programs that support the automation field.



# www.isa.org





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