Certification recognizes the knowledge, experience, and education you possess.
Benefits of the ISA Certified Automation Professional® (CAP®) Program

ISA’s Certified Automation Professional (CAP) program benefits employers and automation professionals by promoting career development and recognition for individuals, providing measurable hiring qualifications for managers.

The CAP program recognizes and documents an individual's experience, knowledge, and education—and provides an objective, third-party assessment of skill level.

Employers value the CAP program for its development of a better trained workforce, promotion of safe work practices, use as a qualification tool for hiring and advancement decisions, and enhancement of their company image with internal and external customers. Industry managers and leaders in the field recognize that employing CAPs demonstrates a commitment to a safer and more productive workplace.

For individuals, CAP:
- Enhances professional credibility
- Serves as portable proof of ability
- Enriches self-image
- Improves career opportunities—promotion, pay increases, job portability
- Encourages life-long learning and professional development

For employers, CAP:
- Provides third party endorsement of employees’ knowledge, experience, and understanding of automation and control systems
- Achieves greater levels of efficiency, safety, productivity, and throughputs
- Increases value and company ROI

Did you know that passing the CAP Associate certificate program exam counts as one year of work experience towards earning your CAP certification? Learn more about our CAP Associate certificate program.

CAP Eligibility Requirements

To become an ISA CAP, you must apply and meet the education and work experience requirements, as well as pass the exam.

There are two ways to meet CAP education and work experience requirements:
- If you hold a four-year technical degree, you must also have a minimum of five years of work in the automation field
- If you hold a two-year degree or do not have a degree, you must also have a minimum of ten years of work in the automation field, with two of those years in a position of responsible charge

To view more details about CAP education and work experience requirements, please visit our site.
ISA Certified Automation Professional (CAP)

CAPs are responsible for the direction, definition, design, development/application, deployment, documentation, and support of systems, software, and equipment used in control systems, manufacturing information systems, systems integration, and operational consulting. CAPs work in process automation and manufacturing automation industries around the globe.

Technical Topic Categories

Basic Continuous Control
Process Instrumentation • Analytical Instrumentation • Continuous Control • Control Valves • Analog Communications • Control System Documentation • Control Equipment

Basic Discrete, Sequencing, and Manufacturing Control
Discrete Input/Output Devices and General Manufacturing Measurements • Discrete and Sequencing Control • Motor and Drive Control • Motion Control

Advanced Control Topics
Process Modeling • Advanced Process Control • Control of Batch Processes • Environmental • Environmental Monitoring • Building Automation

Reliability, Safety, and Electrical
Alarm Management • Reliability • Process Safety and Safety Instrumented Systems • Electrical Installations • Safe Use and Application of Electrical Apparatus

Integration and Software
Digital Communications • Industrial Networks • Manufacturing Execution Systems and Business Integration • System and Network Security • Operator Interface • Data Management • Software • Custom Software

Deployment and Maintenance
Operator Training • Checkout, System Testing, and Startup • Troubleshooting • Maintenance • Long-Term Support and System Management

Work Structure
Automation Benefits and Project Justifications • Project Management and Execution • Interpersonal Skills

How to Apply

There is no application form for CAP certification. The process involves confirming that you meet the following requirements and then taking an exam:

1. Commit to the ISA Code of Conduct.
2. Be fully compliant with CAP certification criteria, qualifications, and conditions.
3. Acknowledge that you are subject to a random application verification audit, and you fully agree to provide the supporting documents proving your qualifications.

By paying the application fee, you are confirming that you are aware, have met, and can document that you meet the requirements for the certification.

Apply now for CAP certification.

You can take the CAP exam online from your office or home if the testing environment meets the requirements and your computer meets the specifications. You can also take the exam at a testing center. The CAP exam has 150 multiple-choice questions and is four hours long.

Learn more about our certification exams and testing.

If you have any further questions, please contact certifications@isa.org.
ISA's Certified Automation Professional (CAP) Program Makes a Difference

Greg Lehmann, CAP, is a controls systems specialist at Washington Division of URS Corporation. Lehmann states “The CAP program benefits the professional, their employer, and the end-user. The benefits to the professional may be a promotion, a raise, job portability, and an increased feeling of self-worth. The company benefits from the CAP program by being provided a platform by which they are able to validate an employee’s qualifications. Hiring companies with CAP-certified employees benefit end-users by improving the quality of service that they are contracting.”

“[It] gives you an edge. You know that you are among the best engineers in the world.”—Hamad Balhareth, CAP, Engineer III, Saudi Aramco

“The changing landscape in American corporations and so much work shifting offshore creates a very competitive environment,” states Andy Mobley, CAP, a systems safety engineer with 3M (retired) with over thirty years in instrumentation, controls, and automation. Mr. Mobley recommends the CAP as a means for automation professionals to distinguish themselves in the industry.

“It gives you an edge. You know that you are among the best engineers in the world.”—Hamad Balhareth, CAP, Engineer III, Saudi Aramco

“I think certifications in technical areas are one of the ways that I can keep up with developments in my field,” said Judith Lesslie, CAP, ISA84 SFS, CFSE, a process safety engineer at BP. “I absolutely recommend that anyone working in a full-time role in the automation field should consider this certification [CAP] to gain a competitive edge and to make sure they are current in the field.”

“This is an elite group that truly gets the full picture. And that’s really what CAP is all about.”—Dean Ford, CAP, Director of Enterprise Application Integration, Maverick Technologies

Note: Job titles listed were at the time quote was provided.

Join this group of industry leaders—get certified!

- Sets the standard for the automation professional
- Promotes safety and improves productivity
- Establishes your professional credentials
- Prepares you for additional job responsibilities
- Improves ROI by impacting mission-critical decisions
- Proves that you are an automation leader

Get started on your path today!