

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	Domain	Level 1	Specialist Level 2	Master Level 3
I	Calibration, Maintenance, Repair, and Troubleshooting	75%	64%	20%
II	Project Planning, Start-up, and Commissioning	15%	19%	14%
III	Documentation	10%	11%	17%
IV	Supervision, Management, and Administration	0%	6%	49%

Code	Task	Level I	Level II	Level III
0100	Calibration, Maintenance, Repair, and Troubleshooting			
0101	Calibrate a device by using appropriate test standards, recommended procedures, and manufacturer's specifications on instrument data sheets in order to record as-found readings, evaluate as-found readings against specified tolerance, make calibration adjustments as required, and record as-left.	X	X	X
	• Test/calibration equipment • Electrical test equipment • Calibration procedures • Calibration sheets • Mathematics • Safety hazards • Safety practices • Operating manuals and procedures • Methods for instrument identification			
0102	Assess the condition of a device through documentation review, inspection, and testing in order to make adjustments to maintain device performance and within specifications to determine the need for any repairs or replacement.	X	X	X
	• Operating manuals and procedures • Instrument repair/replace procedures • Instrument manufacturer specifications			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• Data sheets • Electrical test equipment • Pneumatic test equipment • Function of each loop component			
0103	Apply predictive, preventive, and corrective maintenance methods for instruments and devices to minimize device failures and process downtime.	X	X	
	• Function of each loop component • Operating manuals and procedures • Maintenance techniques • Mechanical fundamentals • Electrical fundamentals • Calibration procedures • Normal and abnormal operating conditions • Instrument manufacturer specifications • Test/calibration equipment • Data analysis			
0104	Obtain applicable documents required to perform device calibration, testing, troubleshooting, and maintenance, and review the documents for accuracy and completeness.	X	X	
	• Calibration sheets • Calibration procedures • Data sheets • Function of each loop component • Operating manuals and procedures • P&IDs • Methods for instrument identification • Test/calibration equipment • Site documentation procedures • Site loop check procedures			
0105	Perform repairs on instruments and devices by following proper industry standards, appropriate safety and operating procedures, and manufacturer's recommendations in order to return the devices to service.	X	X	
	• Calibration procedures • Calibration sheets • Instrument repair/replacement procedures • Instrument manufacturer specifications			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• Methods for instrument identification • Data sheets • Operating manuals and procedures • Mechanical fundamentals • Safety hazards • Safety practices			
0106	Prepare for removal and possible decontamination of a device from operational service by reviewing the safety data sheets (SDS), appropriate personal protective equipment (PPE), and ensure applicable safety procedures/practices are followed.	X	X	
	• Operating manuals and procedures • Decontamination procedures • Instrument repair/replacement procedures • P&IDs • Lock out/tag out • Safety hazards • Safety practices • Safety data sheets (SDS)			
0107	Select the correct testing equipment by using existing documentation, appropriate calibration procedures, and visual inspection in order to calibrate the device.	X	X	
	• Calibration procedures • Calibration sheets • Loop diagrams • Test/calibration equipment • Instrument repair/replacement procedures • Operating manuals and procedures • Instrument manufacturer specifications			
0108	Use documentation and field inspection to verify that utilities and equipment are available and operational in order to safely and effectively perform device testing.	X	X	
	• Electrical systems • Electrical fundamentals • Mechanical fundamentals • Operating manuals and procedures • Instrument manufacturer specifications • Mechanical drawings • Electrical drawings			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• Safety practices • Fundamentals of schematic diagrams • Electrical test equipment • P&IDs • Loop sheets			
0109	Apply the proper fittings, terminations, and electrical barriers for instruments and devices by utilizing the required procedures in accordance with local regulatory codes and standards to maintain safety in hazardous environments.	X	X	
	• Safety hazards • Safety practices • Mechanical fundamentals • Instrument repair/replacement procedures • Standards and regulatory codes			
0110	Use appropriate testing equipment to measure and detect electrical and/or process values to ensure proper loop installation and control loop performance.	X	X	
	• Calibration sheets • Electrical fundamentals • Function of each loop component • Fundamentals of schematic diagrams • Operating manuals and procedures • Instrument manufacturer specifications • Methods for instrument identification • Normal and abnormal operating conditions • P&IDs • Site loop check procedures • Electrical test equipment			
0111	Perform multistep troubleshooting methodology while performing testing of equipment or processes.	X	X	
	• Electrical fundamentals • Electrical systems • Electronic fundamentals • Function of each loop component • Fundamentals of schematic diagrams • Operating manuals and procedures • Instrument manufacturer specifications • Normal and abnormal operating conditions			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• P&IDs • Troubleshooting techniques			
0112	Evaluate control system tuning by observing system response to changes in process variable or the set point and adjust proportional integral derivative control (PID) tuning parameters to provide stable control system response.		X	X
	• Function of each loop component • Fundamentals of schematic diagrams • Operating manuals and procedures • Instrument manufacturer specifications • Normal and abnormal operating conditions • P&IDs • Industrial control/process control system fundamentals • Troubleshooting techniques • Control tuning principles and practices • Fundamentals of loop diagrams • Data analysis			
0113	Isolate a process component from an operational system by following maintenance documentation and appropriate safety and operating procedures in order to perform maintenance functions.	X	X	
	• Mechanical fundamentals • Electrical fundamentals • Function of each loop component • Fundamentals of schematic diagrams • Operating manuals and procedures • Instrument manufacturer specifications • P&IDs • Electrical test equipment • Instrument repair/replacement procedures • Safety hazards • Safety practices			
0114	Evaluate industrial data highway devices by using network diagnostic tools to ensure proper performance.		X	X
	• Electrical test equipment • Troubleshooting techniques • Networking fundamentals			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• Network diagnostic tools			
0115	Review and coordinate a plan of corrective action for control systems that are causing observed discrepancies.		X	X
	• Industrial control/process control system fundamentals • Normal and abnormal operating conditions • Implementation of action plans • Maintenance techniques • Organizational planning and scheduling techniques • Troubleshooting techniques • P&IDs • Control charts • Supervisory techniques • Data analysis			
0116	Identify basic networking devices to effectively troubleshoot communication problems by using standard networking techniques.	X	X	
	• Electrical systems • Fundamentals of schematic diagrams • Electrical drawings • Site documentation procedures • Troubleshooting techniques • Networking fundamentals			
0117	Configure network device addresses by using network addressing tools to ensure proper systems communications.			X
	• Operating manuals and procedures • Fundamentals of schematic diagrams • Site documentation procedures • Networking fundamentals			
0118	Apply basic cybersecurity practices and principles to protect industrial control systems.	X	X	X
	• Cybersecurity fundamentals • Standards and regulatory codes • Networking fundamentals			
0119	Configure, maintain, troubleshoot, repair, and replace existing wireless systems to ensure proper communications.	X	X	X

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	- Networking fundamentals - Instrument manufacturer specifications - Normal and abnormal operating conditions - Radio frequency principles			
0120	Wear appropriate PPE required for each hazard risk category, consistent with arc flash ratings, to avoid bodily harm or death.	X	X	X
	- Electrical fundamentals - Fundamentals of schematic diagrams - Safety hazards - Safety practices - Standards and regulatory codes such as (NFPA70E, IEC60947-9-2) - Arc flash labeling as available			
0121	Troubleshoot and repair industrial network systems.	X	X	
	- Networking fundamentals - Instrument manufacturer specifications - Normal and abnormal operating conditions - Troubleshooting techniques - Networking tools			
0200	Project Planning, Start-up, and Commissioning			
0201	Verify all drawings are compatible with as-built control systems.		X	X
	- Schematics - P&IDs - Electrical fundamentals - Mechanical fundamentals - Drawing techniques - Loop drawings - Loop checking - Industrial networks - Control system fundamentals			
0202	Field verify the as-built condition of the newly installed control system through visual observation and comparison with applicable project documentation.	X	X	
	Industrial control/process control system fundamentals			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	- Electrical fundamentals - Fundamentals of schematic diagrams - Instrument manufacturer specifications - Mechanical drawings - Electrical drawings - Site documentation procedures - Site loop check procedures			
0203	Use appropriate test equipment to verify proper loop functionality by simulating a controller's process variable value.	X	X	X
	- Industrial control/process control system fundamentals - Mathematics - Electrical test equipment - Pneumatic test equipment - Function of each loop component - Instrument manufacturer specifications - Operating manuals and procedures - Site documentation procedures - Site loop check procedures - Electrical test equipment - Traceability (NIST)			
0204	Manage site personnel during start-up to identify and correct problems that might arise during the commissioning of control systems.		X	X
	4-20 mA current loops - Instrument communication troubleshooting - Basic knowledge of PLC/DCS terminology - Fundamentals of fiber optics - Network communication protocols - Site loop check procedures - Electrical test equipment - Pneumatic test equipment - Fundamentals of pneumatics - Electronic fundamentals - Fundamentals of schematic diagrams - Implementation of action plans - Operating manuals and procedures - Instrument manufacturer specifications - Mechanical drawings			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	- Electrical drawings - P&IDs - Industrial control/process control system fundamentals - Site documentation procedures - Supervisory techniques - Troubleshooting techniques			
0205	Verify final control element functionality by changing the values of the manipulated variables using the controller mode and output functions.	X	X	X
	- PID Tuning - Basic knowledge of PLC/DCS - Industrial control/process control system fundamentals - Control charts - Final control elements - Primary control elements - Function of each loop component - Instrument manufacturer specifications - Mechanical fundamentals - Normal and abnormal operating conditions - Electrical/controls drawings - Operator interface - P&IDs - Site loop check procedures - Process control systems			
0206	Review all relevant documentation to determine the correct operation of the control system and devices, establishing a baseline for evaluating potential issues.		X	X
	- P&IDs - Instrument loop drawing (ILD) - Control charts - Mathematics - Calibration sheets - Data sheets - Fundamentals of schematic diagrams - Instrument manufacturer specifications - Mechanical drawings - Fundamentals of pneumatics - Electrical/controls drawings			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• Normal and abnormal operating conditions • Physical sciences • Operating manuals and procedures • Site documentation procedures • Site loop check procedures • Electrical test equipment			
0207	Inspect the control system/loop components through observation to verify that the components are correctly installed in accordance with applicable documentation to ensure safe and efficient device operation.	X	X	X
	• Instrument loop drawings • P&IDs • Hazardous area classification drawings • Data sheets • Fundamentals of schematic diagrams • Fundamentals of pneumatics • Mechanical drawings • Electrical/controls drawings • Methods for instrument identification • Instrument manufacturer specifications • Mechanical fundamentals • Primary control elements • Final control elements • Industrial control/process control system fundamentals • Site documentation procedures			
0208	Specify networks and associated hardware to provide optimal functionality required by an application.			X
	• Industrial control/process control system fundamentals • Network communication protocols • Fundamentals of fiber optics • Electronic fundamentals • Network elements • Fundamentals of schematic diagrams • Instrument manufacturer specifications • Standards and regulatory codes • Site documentation procedures • Networking fundamentals			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

0209	Identify electrical classification or other hazards in an area and determine appropriate procedures to be followed for safe and effective operation in that area.	X	X	X
	• Arc Flash/Arc Blast • Pressurization/purge systems • Electrical fundamentals • Safety hazards • Safety practices • Instrument manufacturer specifications • Intrinsically safe equipment/hazardous area classification rated equipment • Standards and regulatory codes			
0300	Documentation			
0301	Support regulatory compliance requirements by providing data, reports, and technical support.		X	X
	• Calibration sheets • Control charts • Systems performance documentation • Normal and abnormal operating conditions • Site documentation procedures • Standards and regulatory codes • Traceability (NIST)			
0302	Document network device addresses and physical layout to ensure that there are no conflicts and that information remains current.			X
	• P&IDs • Drafting techniques • Electrical/controls drawings • SCADA components • Network communication protocols • Site documentation procedures • Networking fundamentals			
0303	Document calibration, maintenance, troubleshooting, and repair by using appropriate forms, calibration labels, and/or electronic records to provide a permanent record of changes and device history.	X	X	
	• Test/uncertainty ratio • Calibration sheets			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	• Calibration procedures • Data sheets • Implementation of action plans • Instrument repair/replacement procedures • Instrument manufacturer specifications • Mechanical drawings • Electrical drawings • Methods for instrument identification • Site documentation procedures • Test/calibration equipment • Maintenance techniques • Traceability (NIST) • Drift/Deviation			
0304	Utilize system documentation and symbology to effectively troubleshoot instrumentation, control loops, and systems.	X	X	X
	• Industrial networks • Instrument symbols • P&ID • Calibration sheets • Electronic fundamentals • Function of each loop component • Fundamentals of schematic diagrams • Instrument manufacturer specifications • Electrical/controls drawings • Mechanical drawings • Normal and abnormal operating conditions • Industrial control/process control system fundamentals • Site documentation procedures • Site loop check procedures • Troubleshooting techniques • Maintenance techniques			
0305	Collect, organize, and maintain industrial network data and manage information to ensure system integrity.		X	X
	• Control charts • Fundamentals of schematic diagrams • Network equipment manufacturer specifications			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	- Mathematics - Normal and abnormal operating conditions - Troubleshooting techniques - Network communication protocols - Fundamentals of fiber optics - Networking fundamentals			
0306	Identify all pertinent documentation required for an addition/modification of a control system, and update if necessary.			X
	- Safety instrumented systems (SIS) - Calibration sheets - Electrical/controls drawings - Site loop check procedures - SCADA components - Drafting - Fundamentals of schematic diagrams - Mechanical drawings - Project management - System Design Documentation (SDD) - Functional Requirement Specifications (FRS) - Management of Change (MOC) - Site documentation procedures			
0307	Review project as-built drawings and redlined documentation to verify the accuracy of current drawings for final approval.		X	X
	- Electrical fundamentals - Drafting techniques - Fundamentals of schematic diagrams - Instrument manufacturer specifications - Mechanical drawings - Electrical drawings - Instrument drawings - Network drawings - Methods for instrument identification - P&IDs - Site documentation procedures			
0400	Supervision, Management, and Administration			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

0401	Coordinate work orders to facilitate proper calibration, troubleshooting, repair, and maintenance.			X
	• Calibration procedures • Calibration sheets • Instrument manufacturer specifications • Instrument data sheets • Traceability (NIST) • Test/calibration equipment • Maintenance techniques • Loop sheets • Original equipment manufacturer (OEM) manual • Site loop check procedures • Organizational planning and scheduling techniques			
0402	Coordinate the removal and decontamination of a device from operational service by reviewing the safety data sheets (SDS), appropriate personal protective equipment (PPE), and safety procedures.		X	X
	• Regulatory requirements • Manufactures specific documentation • Decontamination procedures • Safety data sheets (SDS) • Safety hazards • Safety practices • Local and site-specific standards • Implementation of action plans • Operating manuals and procedures			
0403	Coordinate with all affected personnel to isolate a process component from an operational system in order to perform testing or maintenance.		X	X
	• Project management • P&IDs • Instrument manufacturer specifications • Equipment manufacturer specifications • Organizational planning and scheduling techniques • Site safety practices • Site operating procedures • Site maintenance procedures			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

0404	Utilize an existing tracking system for the receipt, storage, and issuing of instruments on-site in order to control resources.			X
	- Organizational planning and scheduling techniques - Methods for instrument identification - Project management			
0405	Develop preventive, predictive, and corrective maintenance procedures for instruments and devices to minimize device failures and process downtime.			X
	- Project management - Maintenance techniques - Instrument manufacturer specifications - Operating manuals and procedures - Traceability (NIST) - Calibration procedures - Calibration sheets - Instrument data sheets			
0406	Develop procedures for the use of test equipment to verify proper loop functionality, calibration, and maintenance.			X
	- Loop drawings - Traceability (NIST) - Maintenance techniques - Operating manuals and procedures - Site loop check procedures - Test/calibration equipment - Instrument manufacturer specifications - Calibration sheets - Site calibration procedures - Site safety practices			
0407	Review and maintain calibration, maintenance, troubleshooting, and repair documents to provide a permanent, accurate, and complete record of change and device history.		X	X
	- Regulatory requirements - Traceability (NIST) - Site documentation procedures - Calibration sheets - Data sheets			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

	Instrument manufacturer specifications			
0408	Ensure that all documents are complete and accurate and that they comply with recommended procedures and practices.			X
	- Site documentation procedures - Site maintenance procedures - Site calibration procedures - Traceability (NIST)			
0409	Ensure that personnel are informed of possible hazards and that applicable safety practices are followed.		X	X
	- Safety hazards - Safety practices - Job safety analysis (JSA) - Safety data sheets (SDS) - Decontamination procedures - Supervisory techniques			
0410	Monitor related project costs, schedules, and resources to identify deviations from a project plan.			X
	- Inventory management - Project management - Organizational planning and scheduling techniques			
0411	Participate in control project planning to coordinate project resources and personnel and ensure that all affected personnel are aware of their responsibilities.			X
	- Project management - Organizational planning and scheduling techniques - Supervisory techniques			
0412	Update and maintain certified testing equipment, documentation, recommended procedures, and out-of-tolerance reporting to facilitate the operation of instruments and devices necessary for safety and quality assurance.		X	X
	- Calibration standards - Calibration sheets - Traceability (NIST) - Test equipment manufacturer specifications - Site documentation procedures			

ISA CCST Exam Content Comparison Document for 2025 Exam Update

0413	Use product quality and process data to evaluate control system performance and make recommendations to optimize process efficiency, reliability, and safety.			X
	• Data analysis • PID Tuning • Control charts • Normal and abnormal operating conditions • Instrument manufacturer specifications • Safety practices • Site documentation procedures			
0414	Verify that training and certifications of relevant personnel are current and appropriately filed in compliance with procedures.			X
	• Site documentation procedures • Site training programs • Supervisory techniques			