

Free Guide

CCT: Certified Calibration Technician



Skills management software
for frontline workers

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What is a Certified Calibration Technician?

A CCT is able to test, calibrate, maintain, and repair equipment and instruments that measure, record, or indicate information related to the following systems:

- Electrical
- Mechanical
- Electromechanical
- Analytical
- Electronic

CCT certifications are issued by the American Society for Quality (ASQ). For the full list of CCT-related duties, read the CCT Body of Knowledge, which is linked below.

Who needs a Certified Calibration Technician certification?

A CCT certification is not mandatory, but is beneficial for employees who fill calibration technician roles, as well as engineers, metrologists, inspectors, and consultants. Common industries for CCT-certified individuals include:

- Aerospace
- Electrical
- Manufacturing
- Medical Device
- Pharmaceutical

How to become a Certified Calibration Technician?

Candidates for CCT certifications need five years of work experience in one of the following areas:

- General metrology
- Measurement systems
- Calibration systems
- Measurement uncertainty and applied math
- Quality systems and standards

Candidates who hold degrees from colleges, universities, or technical schools can have two years of required experience waived.

Should they be eligible for CCT certification, candidates can apply and register with the ASQ for the CCT exam. The exam costs USD \$447. Retakes cost \$247.

When taken digitally, the CCT exam consists of 135 questions. Candidates are given four hours and 18 minutes to complete it. The pencil and paper version of the exam is a 125-question, four-hour exam.

Renewal requirements for CCT certification

CCT certifications are valid for three years. During this time, certification holders must earn 18 “recertification units” through the ASQ by attending courses, conferences, or other forms of professional development.

The benefits of a CCT certification

CCT-certified employees offers several benefits to individuals and organizations. Some key advantages include the following.



Enhanced precision

A CCT-certified technician can ensure that instruments meet industry standards, which will help minimize measurement errors and achieve precise results.



Regulatory compliance

CCTs help their organizations adhere to ISO, FDA, or NIST requirements, reducing the mitigating risks of fines or product recalls due to faulty measurements, as well as mproving workplace safety.



Improved efficiency

CCT can reduce operational downtime by swiftly calibrating equipment, optimizing processes in industries that rely on precision tools or instruments.

Challenges in getting a CCT certification

Earning a CCT certification may pose several challenges to individuals and organizations. They include the following.



Instrument complexity

The instruments and equipment CCTs must calibrate are often complex and intricate, demanding advanced knowledge and expertise.



Changing standards

Staying current with evolving industry standards and technological advancements requires continuous learning and improvement, which may cause time-management challenges for individuals and organizations.



Cost constraints

Acquiring and maintaining calibration equipment, coupled with the expenses of CCT certification itself, can pose financial challenges for individuals and organizations.

Tips and strategies for preparing for a Certified Calibration Technician

Here are a few tips for preparing for CCT certification:

- Download and familiarize yourself with the [CCT Body of Knowledge](#)
- Read the [CCT Fact Sheet](#)
- Purchase and study the [ASQ Metrology Handbook](#)
- Take a [CCT certification preparation course](#)
- Practice for the CCT exam with the [CCT question bank](#)

Resources for Certified Calibration Technician (CCT) certification

For more information and guidance on CCT certification, refer to the following sources:

American Society for Quality. The [ASQ is the official certification body for CCT certification](#). Its website offers a wealth of resources, including exam information and preparation courses, the CCT Body of Knowledge, and the CCT Fact Sheet, all of which will be valuable for those seeking certification.

Industry skills matrices. AG5 offers [free, industry-specific skills matrices](#) dedicated to manufacturing, healthcare, engineering, and many other areas. You can use them to identify, track, and manage skills related to CCT certifications in your organization.

ISO 17025 skills matrix. The [ISO 17025](#) standard focuses on testing and calibration for laboratories. The standard and CCT certifications are often complementary, which means our free ISO 17025 skills matrix may be valuable to you when tracking or managing skills related to Certified Calibration Technicians.

Skills management for Certified Calibration Technicians

AG5 stores all certifications in the cloud, providing all authorized personnel with access to the right version of approved certifications. This helps you easily keep track of all data and documentation related to CCT certifications across your organization.

Using [AG5's skills management software](#), you can monitor the status of any type of certification that is relevant to your workforce, leveraging intuitive dashboards that provide you with a clear understanding of exactly what is needed to keep your employees skilled and safe.

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Frequently asked questions

What is the scope of a CCT certification?

A CCT certification focuses on the calibration of measurement devices used in a variety of industries that ensure adherence to accuracy and reliability standards.

Is CCT certification mandatory?

CCT certification is not mandatory.

How long does it take to obtain a CCT certification?

Preparation times will vary, depending on the candidate. However, all candidates are given approximately four hours to complete the exam.

What are the cost considerations for CCT certifications?

The cost considerations for CCT certification include exam fees (USD \$447) study materials, training courses, and potential retake fees (USD \$247).

What is the validity period of a CCT certification?

CCT certifications are valid for three years.

Can CCT integrated with any management systems?

CCT certifications are compatible with management systems such as ISO 17025, which focuses on quality management for testing and calibration laboratories.

How can you learn more about CCT certification?

Visit the [American Society of Quality's website](#).

Sources

- [American Society for Quality](#)
- [CCT Body of Knowledge](#)
- [CCT Fact Sheet](#)

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