

The Certified Calibration Technician tests, calibrates, maintains and repairs electrical, mechanical, electromechanical, analytical and electronic measuring, recording and indicating instruments and equipment for conformance to established standards.

## Certification Requirements

Step 1. Is this the right certification for you? Here are the requirements, experience and exam specifics for a Calibration Technician. If you already know this is the certification you want to pursue, move on to exam preparation.

### Education and/or Experience

You must have five years of on-the-job experience in one or more of the areas of the Certified Calibration Technician Body of Knowledge.

If you have completed a degree from a college, university, or technical school with accreditation accepted by ASQ, part of the five-year experience requirement will be waived, as follows (only one of these waivers may be claimed):

Diploma from a technical, military, or trade school—two years waived

Associate degree—two year waived

Bachelor's degree—two years waived

Master's or doctorate—two years waived

Degrees/diplomas from educational institutions outside the United States must be equivalent to degrees from U.S. educational institutions.

### Minimum Expectations of a Certified Calibration Technician

Will be able to distinguish between base and derived SI units and how to apply, convert, and use them, and will be able to use IM&TE to measure various factors. Will understand the principles and hierarchy of standards and the importance of traceability. Will be able to select appropriate standards to use based on measurement requirements, equipment availability, and specifications.

Will be able to use measurement methods, distinguish between measurement characteristics, and correct for various error sources. Will be able to apply IM&TE specifications and their characteristics, and will understand measurement assurance program (MAP) concepts.

Will know the components of calibration procedures and be able to use common calibration methods, both manual and automated, while complying with regulations and industry practices. Will recognize the impact environment can have

on calibration, and will understand calibration and validation processes for IM&TE. Will know how to manage records and maintain document control systems that support calibration and measurement systems.

Will understand basic measurement uncertainty terms and will be able to understand the steps in developing an uncertainty budget to calculate uncertainty. Will be able to apply technical mathematics and basic statistical techniques in support of these systems.

Will be able to distinguish between quality system components and will recognize the methods and tools used to develop, improve, and review a quality management system, as recommended by various quality standards and guidances. Will be able to apply quality control tools, identify nonconformances and assess their potential impact, and understand quality auditing processes and document requirements. Will understand safety requirements, including how to identify potential hazards and when to use personal protective equipment.

## Examination

Each certification candidate is required to pass a written examination that consists of multiple-choice questions that measure comprehension of the Body of Knowledge. The Calibration Technician examination is a one-part, 125-question, four-hour exam and is offered in English.

Examinations are conducted twice a year, in June and December, by local ASQ sections and international organizations. All examinations are open-book. Each participant must bring his or her own reference materials. Use of reference materials and calculators is explained in the seating letter provided to applicants