

The Oregon Department of Transportation Materials & Inspection Quality Assurance Unit

# ODOT Technician Certification Program

Updated 7/21/2025

## Overview

The ODOT Technician Certification Program is designed to develop and maintain a pool of well-trained material technicians. These material technicians perform material field tests for both quality assurance and quality control purposes. All technician certification programs must be approved by the Certification Advisory Committee. ODOT's Quality Assurance Program requires all personnel and laboratories performing materials testing to be certified. This requirement applies to project personnel who work on ODOT projects as a technician for the state, contractors or consultants.

ODOT is a member of the [Western Alliance for Quality Transportation Construction \(WAQTC\)](#). WAQTC consists of 9 western states and the Western and Central Federal Lands Highway Division (WFLHD and CFLHD) of the Federal Highway Administration. The WAQTC organization is dedicated to improving the quality of transportation products and services through membership collaboration and innovative training techniques. WAQTC has developed a technician training program designed to educate and train material testing technicians on the measurement of construction material properties. Instructional and student modules are used to train material field-tested procedures and processes. ODOT has adopted most of the WAQTC training program, except for ODOT-specific certifications or requirements such as:

- Certified Asphalt Technician, Level II (Asphalt Concrete Pavement (ACP) Troubleshooting)
- Concrete Control Technician, Concrete Mix Design (ACI 211)
- Concrete Mix Design Technician, ACP Mix Design (Superpave)
- Quality Control Technician, Addition to ACI Grade Level I Certification

For more information on the Technician Certification Program or test procedures used in Oregon, refer to the [Manual of Field Test Procedures](#).

## Technician Certification Program

Technicians must pass a written and/or practical test to demonstrate their knowledge and understanding of how to perform the specific tests. They must also use the specifications that apply to the material being tested for the desired certification. All tests are administered and assessed by evaluators approved by the Certification Advisory Committee Chair, or their designated representative.

## Technician Certifications

**Certified Aggregate Technician (CAgT) or WAQTC Equivalent (AgTT):** Performs tests on aggregates including sieve analysis, fracture, and sand equivalency, as well as other duties required by current specifications for aggregate materials. [Training through APAO](#)

**Certified Asphalt Technician I (CAT-I) or WAQTC Equivalent (AsTT II):** Performs sampling and testing for ACP and EAC mixtures, such as AC content, maximum specific gravity, sieve analysis, and other tests and duties required by current specifications. [Training through APAO](#)

**Certified Asphalt Technician II (CAT-II):** Manages the volumetric properties of asphalt mixes by controlling plant operations, troubleshoots ACP sampling and testing processes, and makes adjustments to ACP production and laydown procedures. (**Prerequisite** - Completion of the CAT-I certification at least once.) [Training through APAO](#)

**Certified Density Technician (CDT) or WAQTC Equivalent (DTT):** Performs in-place density testing of soils, aggregates and asphalt mixtures as well as determining percentages of coarse and fine material. (**Additional Requirement** - CDT must possess a current radiation safety certification card issued by an approved source.) [Training through APAO](#)

**Certified Embankment and Base Technician (CEBT) or Western Alliance for Quality Transportation Construction (WAQTC) Equivalent (EBTT):** Performs compaction testing of subgrade soils and aggregate bases and determines the specific gravities of aggregate.

**Certified Mix Design Technician (CMDT):** Prepares ACP and EAC mix designs, including all material testing and data analysis necessary to properly complete a design, and prepares designs for both dense and open-graded ACP mixtures. [Training through APAO](#)

**Concrete Control Technician (CCT):** Manages the proportioning and adjusting of concrete mixtures to meet job requirements for quality as required by specifications. [Training through OCAPA](#)

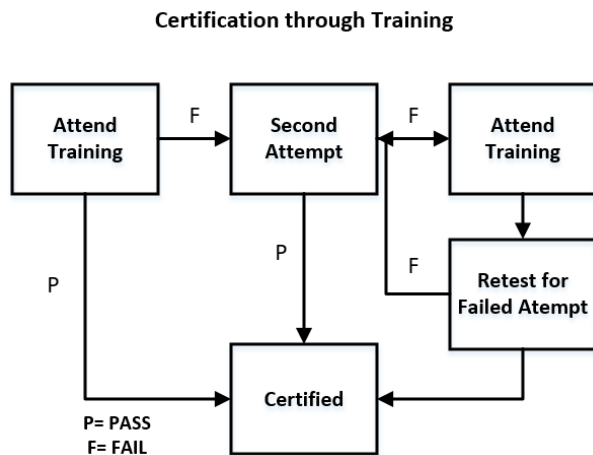
**Concrete Strength Testing Technician (CSTT):** Responsibilities include testing the compressive flexural strength of hardened concrete cylinders or beams, proper capping of specimens (bonded and unbonded), visual evaluation of broken specimens, and ensuring proper handling of field fabricated samples upon arrival at testing laboratories. [Training through ACI Oregon](#)

**Quality Control Technician (QCT):** Performs testing of fresh Portland cement concrete including sampling, temperature, slump, unit weight, air content, and fabrication of specimens for strength testing, and performs other duties as required by specifications. [Training through OCAPA](#)

## Certification Process

To become certified, you are required to demonstrate minimum competency of testing processes by passing an examination. In-class training is available through the approved training service providers. The exam will be administered as part of the class, or you may apply to challenge the exam. Experienced technicians may choose to challenge the certification examination without attending in-class training. If you fail an exam phase (phase one – WAQTC written exam, phase two - the ODOT written exam and phase three – combined ODOT and WAQTC performance exam) from the training class, you will be allowed to retake the failed element as outlined in the Manual of Field Test Procedures, Section 2, under the ‘Technician Certification Program’. If you do not pass the second time, you must retake the training class before being allowed to retake the exam element(s).

The following chart shows the certification process for certification through a training class.



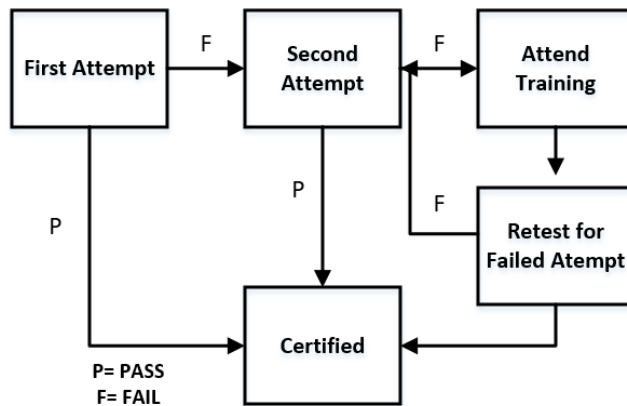
## Challenge Exams

Applications to challenge an exam will be submitted through the approved training program to facilitate scheduling. See Technician Certifications on page 2 that summarizes the training program for specific certifications.

Appropriate fees will be charged for the challenge exams to cover scheduling, overhead and facility use. Applicants will be scheduled for examination through a cooperative effort between ODOT and the appropriate training program service provider.

If you do not pass a challenge exam and have never been certified in the desired certification discipline, you must attend training before you are allowed to attempt the exam process again.

#### Certification through Challenge Process



\*If you have never had a certification, then each exam element is graded. If you pass, you may go onto the next element. If you fail any elements, you must attend training.

### Recertification Process

You must recertify prior to the expiration date of an existing certification to maintain their credential. Recertification is obtained by passing the written and/or practical test required for a given certification.

You are responsible for scheduling your own recertification exam.

Should you fail a certification renewal in a specialty area, you will be considered disqualified in that area until the requirements have been met.

### Rights and Responsibilities Agreement

All certifications shall be contingent upon the technicians signing a rights and responsibilities agreement.

This agreement details the expectations for you to fulfil along with the potential consequences of the abuse and or neglect of these responsibilities. Signed agreements are due at the time you take the certification exam and are required for each certification discipline.

A certification extension may be provided upon written request to the State Quality Assurance Engineer. The request should contain the reason for the extension, desired certification and proof of future class attendance or challenge process through a registration of the training provider.

Note: Extensions aren't allowed for the QCT and CSTT certifications, which are governed by American Concrete Institute (ACI).

## Documentation of Certification

Upon the successful completion of the current examination(s), your results will be entered into the official certification registry database. The registry is maintained by the ODOT Construction Section and can be accessed on the [Inspector/Technician Cert Page](#). This web page is your official record of ODOT construction certifications. Results will be emailed to you within two weeks of the exam date.