



MoDOT Technician Certification Program

Certification Courses

Go to Application
[\(Figure 1\)](#)

Figure 2

TCP Courses Given by State Technical College of Missouri (STC)

Aggregate Technician

Cost: \$550.00 First Time, \$275.00 Renewal*

PDH hours 9

No Prerequisite

2 Days - First Time, ½ Day – Renewal

(First Time Only)

AASHTO T 2/ASTM D 75	Sampling of Aggregates
AASHTO T 248/ASTM C 702	Reducing Samples of Aggregate to Testing Size
AASHTO T 11/ASTM C 117	Materials Finer than No. 200 by Washing
AASHTO T 27/ASTM C 136	Sieve Analysis of Fine and Course Aggregates
AASHTO T 255/ASTM C 566	Total Moisture Content of Aggregates by Drying
MoDOT TM 71	Deleterious Content of Aggregate
ASTM D 4791	Flat Particles, Elongated Particles, or Flat and Elongated Particles in Course Aggregates

Bituminous Technician

Cost: \$275.00 First Time, \$275.00 Renewal*

PDH hours 4

No Prerequisite

1 Day - First Time, ½ Day – Renewal

(First Time Only)

AASHTO T 40/ASTM D 140	Sampling Bituminous Materials
AASHTO T 168/ASTM D 979	Sampling Bituminous Paving Mixtures
AASHTO R 47	Reducing Samples of HMA to Testing Size
AASHTO T 329	Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
MoDOT TM 54	Determining Asphalt Content of a Bituminous Mixture by Nuclear Method
AASHTO T 166 & T 331	Bulk Specific Gravity of Compacted Bituminous Material
AASHTO T 269/ASTM D 3203	Percent Air voids in Compacted Dense and Open Bituminous Paving Mixtures
MoDOT TM 20	Measurement of Air, Surface or Bituminous Mixture Temperature

Soil Density

Cost: \$550.00 First Time, \$275.00 Renewal*

PDH hours 9

No Prerequisite

2 Days - First Time, ½ Day – Renewal

(First Time Only)

AASHTO T 265	Laboratory Determination of Moisture Content of Soils
AASHTO T 99	Moisture-Density Relations of Soils
MoDOT TM 40	A One-Point Moisture-Density Relations Test for Soils
AASHTO T 310	Density and Moisture Content of Soil and Soil Aggregate by Nuclear Methods (Shallow Depth)
MoDOT TM 35	Moisture Offset Factor for a Nuclear Gauge

Concrete Field

Cost: \$275.00 First Time, \$275.00 Renewal*

PDH hours 4

No Prerequisite

1 Day - First Time, ½ Day – Renewal

(First Time Only)

MoDOT TM20	Measurement of Air, Surface or Bituminous Mixture Temperature
AASHTO R60/ASTM C 172	Sampling of Freshly-Mixed Concrete
ASTM C 1064	Temperature of Freshly-Mixed Portland Cement Concrete
AASHTO T 119/ASTM C 143	Slump of Hydraulic Cement Concrete
AASHTO T 152/ASTM C 231	Air Content of Freshly-Mixed Concrete by the Pressure Method
AASHTO T 23/ASTM C 31	Making and Curing of Concrete Test Specimens in the Field

Concrete Strength

Cost: \$275.00 First Time, \$275.00 Renewal*

PDH hours 4

No Prerequisite

1 Day - First Time, ½ Day – Renewal

(First Time Only)

AASHTO T 24/ASTM C 42	Obtaining and Testing Drilled Cores of Concrete
AASHTO T 148/ASTM C 174	Measuring Length of Drilled Concrete Cores
AASHTO T 231/ASTM C 617	Capping Cylindrical Concrete Specimens
AASHTO T 22/ASTM C 39	Compressive Strength of Cylindrical Concrete Test Specimens

Plasticity Index

Cost: \$275.00 First Time, \$275.00 Renewal*

PDH hours 4

No Prerequisite

1 Day - First Time, ½ Day – Renewal

(First Time Only)

MoDOT TM 79	Dry Preparation of Disturbed Soil and Soil Aggregate Samples for Test Particle Size Analysis of Soils (Aggregate Specific)
AASHTO T 89	Determining the Liquid Limit of Soils (Aggregate Specific)
AASHTO T 90	Determining the Plastic Limit and Plastic Index of Soils (Aggregate Specific)

International Roughness Index (IRI) Profile

Cost: \$275.00 PDH hours 4

No Prerequisite

1 Day

MoDOT TM 59	Determination of the Surface Profile using the International Roughness Index
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*On Site: Renewals are conducted at Kansas City, St. Louis, Poplar Bluff, Springfield & on the STC campus. See [LOCATIONS](#) specific addresses.



MoDOT Technician Certification Program

Certification Courses

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[\(Figure 1\)](#)

Figure 2

TCP Courses Given by Missouri University of Science & Technology

Superpave QC/QA

Cost: \$1100.00 First Time, \$625.00 Renewal

PDH hours 36

Prerequisite requirements: Aggregate Technician & Bituminous Technician

5 Days - First Time, 2 Day – Renewal

(First Time Only)

AASHTO T 209	Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)
AASHTO T 312	Preparing and Determining the Density of HMA Specimens by Means of the Superpave Gyrotory Compactor
AASHTO T 308	Determining the Asphalt Binder Content of HMA by the Ignition Method
AASHTO R 30	Standard Practice for Mixture Conditioning of HMA
	Practice for Superpave Volumetric Design for HMA
	Standard Specification for Superpave Volumetric Mix Design
	Plant Operation
	Intro to Superpave
	Temperature-Viscosity Relations
	Field Verification
	Job Mix Formula (JMF) Interpretation
	Volumetrics
	HMA QC Plan
	Pay Factor Theory, QC/QA
	Record Keeping, QC/QA
	Contract Administration
	Random Sampling

HMA Aggregate (Consensus Tests)

Cost: \$300.00

PDH hours 4

Prerequisite requirements: Aggregate Technician

1 Day

AASHTO T 176	Plastic Fines in Graded Aggregates and Soils by the Use of the Sand Equivalent Test
AASHTO T 304	Un-compacted Void Content of Fine Aggregate
ASTM D 5821	Standard Test Method for Determining the Percentage of Fractured Particles in Course Aggregates

TSR

Cost: \$300.00

PDH hours 4

Prerequisite requirements: Superpave QC/QA

1 Day

AASHTO T 283	Resistance of Compacted Bituminous Mixtures to Moisture Induced Damage
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Binder Ignition

Cost: \$300.00

PDH hours 4

Prerequisite requirements: Aggregate Technician & Bituminous Technician

1 Day

AASHTO T 308	Determining the Asphalt Binder Content of HMA by the Ignition Method
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TCP Courses Given by MoDOT Central Lab

Aggregate Specific Gravity

Cost: \$250.00

PDH hours 4

Prerequisite requirements: Aggregate Technician

1 Day

AASHTO T 84/ASTM C 128	Specific Gravity and Absorption of Fine Aggregate
AASHTO T 85/ASTM C 127	Specific Gravity and Absorption of Coarse Aggregate
MoDOT TM 81	Specific Gravity and Absorption of Aggregate Using Automatic Vacuum Sealing Method (Informational Only)

T 85 Absorption

Cost: \$100.00

PDH hours 2

Prerequisite requirements: Aggregate Technician

½ Day

AASHTO T 85/ASTM C 127	Specific Gravity and Absorption of Coarse Aggregate With Emphasis on Absorption
MoDOT TM 81	Specific Gravity and Absorption of Aggregate Using Automatic Vacuum Sealing Method (Informational Only)

Low Slump

Cost: \$250.00

PDH hours 4

Prerequisite requirements: Concrete Field

1 Day

MoDOT TM 36	Nuclear Density of Concrete Overlays
	Volumetric Batched and Continuous Mixed Concrete Plant Calibration

*Compressive Strength

(*Prestress/Precast personnel only)

Cost: \$100.00

PDH hours 2

No Prerequisite

½ Day

AASHTO T 231/ASTM C 617	Capping Cylindrical Concrete Specimens
AASHTO T 22/ASTM C 39	Compressive Strength of Cylindrical Concrete Test Specimens