

# NDDOT TECHNICAL CERTIFICATION PROGRAM (TCP)

## ASPHALT MIX DESIGN AND PRODUCTION CONTROL

### SCHEDULE

#### ASPHALT MIX DESIGN AND PRODUCTION CONTROL

~~April 14-16, 2020, Quality Inn, 1030 E Interchange Ave, Bismarck, ND, 701-223-1911~~ **Canceled for 2020 – will be scheduled next in Spring of 2021 (2/3/2020)**

The South Dakota DOT and DAPA offer a similar class that is eligible for reciprocity.  
<http://www.dakota-asphalt.org/>

#### LODGING

A block of rooms is available under NDDOT/DAPA and will be available until the block is filled or March 26. Rooms may be available after the release date but are not guaranteed.

[Hotel Web Link](#)

### OVERVIEW

Beginning with the April 2020 class, the title of this class is new. The content will remain largely the same but will have more focus on the asphalt mix design process and will include a certification option in aggregate specific gravity for experienced testers. The course will continue to provide an overview of production control, field placement and recognizing quality issues. Course length is approximately 24 hours.

Two separate certifications will be offered through this course. Asphalt Mix Designer and Asphalt Mix Controller.

Asphalt Mix Designers are individuals that create or review asphalt mix designs, run tests included in mix designs or provide recommendations to adjust the JMF/mix design on QC/QA asphalt paving projects. Completion of this course **and** the pre-requisites as aggregate and asphalt tester is required for certification.

Asphalt Mix Controllers will attend the same courses but are not testers. They are often contractor or Engineer staff that provide oversight/inspection during mix placement.

Whether your goal is Asphalt Mix Design tester certification or field Asphalt Mix Controller you will go through the same courses.

*Please note: This course is NOT an introductory course. Students are expected to have on-the-job experience with asphalt paving and/or testing for asphalt mix design with current tester certification before registering.*

An example of the course manual is available from the TCP web page or by [clicking this link](#).

# NDDOT TECHNICAL CERTIFICATION PROGRAM (TCP)

## ASPHALT MIX DESIGN AND PRODUCTION CONTROL

---

### COURSE SYLLABUS

Review of mix design aggregate and asphalt mix tests  
Aggregate Specific Gravity Testing, ND T 84 and ND T 85  
Volumetric Parameter Determination for Asphalt Mix Design  
Mixture Design  
Calculating and reporting asphalt mixture properties  
Specifications and testing tolerances  
Troubleshooting mixture problems in the field

---

### MINIMUM REQUIREMENTS

Math Skills  
Familiarity with calculator (cell phone calculator will not be allowed for exam)  
Field experience and general knowledge of construction projects and processes  
Certification as Aggregate Field Lab and Asphalt Mix Tester

---

### WORK EXPERIENCE

This is not an introductory course. Two to five years of asphalt mix design testing experience is ***strongly*** suggested prior to registering for this course. Effectively performing the responsibilities of Asphalt Mix Design or Asphalt Mix Control/Production Control can only be accomplished by the combination of testing experience followed by certification.

---

### RECOMMENDED ONLINE TRAINING

The following modules are available through the [UGPTI Learning Management System](#). An account is required but is available by request for no charge. The courses will be a refresher for those with prior testing experience, and a good opportunity to learn the basics before class for the student with less testing experience.

Superpave Mix Design Process and Analysis  
Superpave for Construction  
AASHTO T 30 – Mechanical Analysis of Extracted Aggregate  
AASHTO T 166 – Bulk Specific Gravity of Compacted Asphalt Mixtures  
AASHTO T 308 – Asphalt Content by Ignition Oven  
AASHTO T 312 – Gyration Specimens  
Ethics Awareness for the Transportation Industry

---

### REFERENCE MATERIAL

Manual with presentations

MS 2 Asphalt Mix Design Methods

---

# NDDOT TECHNICAL CERTIFICATION PROGRAM (TCP) ASPHALT MIX DESIGN AND PRODUCTION CONTROL

[ND Standard Specification for Roads and Bridges](#)

[ND Field Sampling and Testing Manual](#)

## CERTIFICATION REQUIREMENTS

Aggregate Testing Certification  
Asphalt Mix Testing Certification  
Asphalt Pavement Inspection – Course completion  
Asphalt Mix Design and Field Control

Successful completion of all courses.

Certification for Aggregate Specific Gravity is available in this course. Successful completion of a performance exam is required.

## REGISTRATION FEE

\$650

*Payment may be made via credit card or by check mailed to DAPA. Registration for the class is through the DOT web link. A class registration confirmation email will contain the link to the DAPA payment web page.*

Includes class manual, MS 2 Asphalt Mix Design Methods, handouts and written exam.

Break refreshments.

Lunch is on your own.

---

## REGISTER ONLINE

To register for this course [click this link](#) or go to the TCP Registration link found on the NDDOT TCP web page under the tab labeled ***Certification Classes***.

---

## INSTRUCTORS

Ken Swedeen, Dakota Asphalt Pavement Association

Mark Blow, Asphalt Institute

## CONTACT

Questions: [dotmaterials@nd.gov](mailto:dotmaterials@nd.gov)  
701-328-6937

NDDOT TCP Web Link  
<http://www.dot.nd.gov/divisions/materials/techniciancertification.htm>