

NDDOT TECHNICAL CERTIFICATION PROGRAM (TCP)

ASPHALT MIX DESIGN AND PRODUCTION CONTROL

SCHEDULE

ASPHALT MIX DESIGN AND PRODUCTION CONTROL

April 12-16, 2021, using Microsoft Teams

This will be a combined class with the South Dakota DOT. At this time the entire class is expected to be completed virtually using Microsoft Teams. If any changes are made students will be notified. Some portions will be unique to each state.

Schedule will be added to this document and you will receive an email invitation after registration is processed.

<http://www.dakota-asphalt.org/>

OVERVIEW

Beginning with the *scheduled* April 2020 class, the title of this class was modified. 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: 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](#).

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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

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[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 DAPA for payment.

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

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

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