

# NDDOT TECHNICAL CERTIFICATION PROGRAM (TCP)

## SOILS FIELD TESTING

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### 2016-2017 Certification Season

#### SCHEDULE

The following is a list of courses offered for Soils Field Testing certification. The courses are offered through the North Dakota Department of Transportation. Test Out and Renewal are the same course.

Testing out is encouraged for individuals with soil testing experience. We will offer two new-student courses this year. If they fill to capacity, the Test Out option will be available.

#### NEW CERTIFICATION

**February 1, 2017** - NDDOT Valley City District, 1524 8<sup>th</sup> Ave SW, Valley City

This entire course will be held at this location.

**March 21-22, 2017** – Comfort Inn, 1030 E Interstate Avenue, Bismarck. Begins at 1 pm March 21 and 8 am March 22.

This course will be held at the Comfort Inn Bismarck. The performance exam will be held at the NDDOT Materials and Research Office at 300 Airport Road, Bismarck, ND

#### TEST OUT OR RENEWAL

**January 31, 2017** - NDDOT Valley City District, 1524 8<sup>th</sup> Ave SW, Valley City

1 pm

**March 8, 2017** – NDDOT Materials and Research, 300 Airport Road, Bismarck

1 pm

**March 9, 2017** – NDDOT Materials and Research, 300 Airport Road, Bismarck

8 am

#### OVERVIEW

Soils Filed Testing is a course intended for individuals that test soil on construction projects or in a lab as part of their daily job responsibilities. All courses require a written and performance exam.

The Test Out/Renewal provides a *very brief* overview of tests, specification updates and forms as well as a written exam and performance exam.

Individuals requesting Renewal or Test Out are expected to familiarize themselves with the test procedures, specifications and sampling and testing manual before attending. Prior test experience is expected in the majority of the tests.

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The New Certification course will provide presentation, worksheet review and a short practice/demonstration portion. A written exam and performance exam is included.

Certification is valid for 5 years.

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### COURSE SYLLABUS

Soil Tests  
Worksheets and Forms  
Basics Soil Inspection  
Specifications, Relevant Portions of Sections 200 and 700  
    Supplemental Specifications  
Field Sampling and Testing Manual, Sections 200 and 704

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### THE TESTS THAT WILL BE COVERED

ND T 99 & 180 - Moisture-Density Relations of Soils  
ND T 191 - Density In-Place by the Sand Cone Method  
ND T 217 - Determination of Moisture in Soil by Means of Calcium Carbide Gas Pressure Moisture Tester (Speedy)  
ND T 265 - Laboratory Determination of Moisture Content of Soils  
ND D 2167 - Density of Soil in Place by the Rubber-Balloon Method  
ND D 4643 - Microwave Method of Drying Soils

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### MINIMUM REQUIREMENTS

Basic Math Skills  
Calculator (cell phone calculator will not be allowed for exam)

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### WORK EXPERIENCE

Experience and knowledge of construction projects and processes is beneficial and recommended. It is highly recommended that individuals requesting certification have soil testing experience.

### CERTIFICATION REQUIREMENTS

Attending a course or testing out, a written exam and a performance exam.

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### WHO CAN TEST OUT

- Individuals with current similar certifications from another state
- Individuals with recent on-the-job training for soils testing.
- No experience? Individuals that do not have prior testing experience but complete all associated self-paced online modules and submit a copy of their learning record.
  - The modules may be found on the Upper Great Plains Transportation Institute website

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### TEST OUT APPLICATION

An application for Test Out must be submitted. If approved a test-out time may be scheduled online. The Test Out request form may be found on the TCP web page under the **Resources** tab, or by clicking [this link](#):

### RECIPROCITY

Acceptance of certification from other states is not offered for Soils Field Testing certification.

### REGISTRATION FEE

There is not cost for registration.

Please keep in mind this course is intended for individuals that will run tests. Space is limited.

Lunch is on your own.

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### REGISTER ONLINE

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

### INSTRUCTORS

Curt Dunn, Grand Forks District Materials Coordinator

Mark Riley, Fargo District Construction

### RESOURCES

#### **Class Manual**

A recent copy of the course manual is available from the TCP web page or by [clicking this link](#):

#### **Field Sampling and Testing Manual**

<http://www.dot.nd.gov/divisions/materials/testingmanual.htm>

#### ***ND Standard Specification for Road and Bridge Construction and Supplemental Specifications***

<https://www.dot.nd.gov/dotnet/supplspecs/StandardSpecs.aspx>

#### **YouTube** (videos of each test included in the Soils Field certification)

<https://www.youtube.com/channel/UCpsELE5FYuwvmrioZZTzU1Q>

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### ONLINE LEARNING MODULES - UGPTI

Self-paced online modules are available. Completing the online modules does not provide certification but provide a thorough overview of the tests.

The modules are found at the Learning Management System (LMS) at Upper Great Plains Transportation Institute (UGPTI). The modules were created for a new student with little to no field experience. Users will need to request a new account – which can take a couple of days to set up.

<http://www.translearning.org/>

### 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>