

Grading and Base Tester Certification Class Agenda 2023-2024

Instructors

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Timing, attendance, and breaks

Class days are from 8:00 a.m. to 4:30 p.m. Attendance will be taken in the morning and afternoon. There will be short breaks throughout the day and a 1 hour lunch break around 12:00 noon.

Day 1: Classroom

- Introductions
 - Instructors and Students
 - Housekeeping
 - Grading and Base Tester Certification Requirements

- Section 1: Project Documentation (MnDOT Grading & Base Manual, Proposal, Plans, MnDOT Schedule of Materials Control and Independent Assurance (Grading & Base Report, Classroom Packet p. 2)

- Section 2: Soil Information (Review Sections 1 & 2, Classroom Packet p. 1)

- Section 3: Specifications 2106 and 2211, MnDOT Standard Specifications for Construction – 2020 Edition, Moisture and Compaction Compliance Requirements

- Section 4: (See agenda for “Day 3: Classroom” on next page)

- Section 5: Moisture Test Methods: Burner, Speedy Moisture Meter, Nuclear Gauge, Microwave, EOMC Form

- Section 6: Moisture-Density Test Method (Proctor Test), One-point Proctor

- Section 7: Compaction Compliance Test Methods: DCP, Sand Cone, Nuclear Density Gauge, LWD, Test Rolling (Relative Density Test (Sand Cone) Worksheet, Classroom Packet p. 5)

Day 2: Laboratory

- Demonstrations: Procedures will be demonstrated by Laboratory Instructors
- Hands-on stations
 - Moisture Density Test (Proctor)
 - Moisture Calculations
 - Calibration of Cone and Plate
 - Calibration of Sand
 - Relative Density Test (Sand Cone)
 - DCP (Aggregate Base)
 - Soil Identification (Triaxial Chart)

Day 3: Classroom

- Review of Test Procedures (from Laboratory Day)
- Section 4: Specifications 3138 and 3149, MnDOT Standard Specifications for Construction – 2020 Edition, Material Requirements (Classroom Packet pp. 3, 4)
- Section 8: Random Sampling for Aggregate Base (Random Sampling Class Exercise, Classroom Packet p. 6)
- Review and practice examples (see GBTC Training Manual Appendix and Classroom Packet p. 7)
- Wrap up
 - Course evaluation
 - Information about the written exam

Deadlines (see the course webpage for more information):

1. The **written exam** will open for you at the end of the last day of class. You must complete the exam within one week after it is open for you, meaning the same day the following week.
2. The GBTC is awarded once the course (classroom, laboratory day and test) and prerequisites are completed.

View the Technical Certification Program website at mndot.gov/technical-certification for information about: our program and certification process, class registration, course materials and program documents, construction resources, exams, Technical Certification Card, and help and contacts.