

# Materials and Tests Unit Classes

## Summary of Class Prerequisites, OJT Forms, and Field Training Requirements

### Field Operations Schools

#### Concrete

##### Concrete Field Technician (MAT 100)

- Pre-Requisite Form completion preferred (first time attendees)  
Link to form - [Concrete Field Technician Certification PRE-REQUISITE MEMO and FORM For New Attendees Attached.pdf \(ncdot.gov\)](#)

##### Concrete Batch Technician (MAT 110)

- Concrete Field Technician Certificate (certification does not have to be active)
- Field Certification by instructor following class

##### PCCP (Portland Cement Concrete Pavement) (MAT 130/131)

- Active Concrete Field Technician Certificate
- Field Certification by instructor following class

##### ACI Concrete Strength Test

- None

#### Asphalt

##### QMS Roadway Technician (MAT 535)

- Introduction to Asphalt (through Stanley Community College – provide copy of certificate)
- 10 Day OJT (On the Job Training) Checklist Full Packet  
Link to packet - [10 Day OJT Checklist Full Packet.pdf \(ncdot.gov\)](#)
- Roadway Experience Certification Form  
Link to form - [NORTH CAROLINA DEPARTMENT OF TRANSPORTATION \(ncdot.gov\)](#)

##### QMS Level I Plant Technician (MAT 525)

- Introduction to Asphalt (through Stanley Community College – provide copy of certificate)
- QMS Plant Level I Tech OJT Full Packet  
Link to packet - [QMS Plant Level 1 Tech OJT Full Packet.pdf \(ncdot.gov\)](#)

##### QMS Level II Plant Technician (MAT 530)

- Introduction to Asphalt (through Stanley Community College – provide copy of certificate)
- QMS Level I
- Approved Mix Design Course

### **QMS Density Gauge (MAT 380)**

- Field Certification by instructor following class
- Prefer completion of Nuclear Safety and Hazardous Materials (MAT 250) prior to attending

## **GeoMaterials**

### **ABC Sampling (MAT 210)**

- Field Certification by instructor following class

### **Borrow Pit Sampling (MAT 410)**

- Field Certification by instructor following class

### **Conventional Density (MAT 230)**

- Complete OJT Form prior to scheduling Field Certification  
Link to Form - [Conventional Density OJT MT520.pdf \(ncdot.gov\)](#)
- Field Certification by instructor following class

### **Chemical Stabilization Subgrade/Base - QA Field (GEO 156)**

- Pre-requisite classes
  - Chemical Stabilization Subgrade/Base – Essentials (GEO 155) (offered by GeoTechnical Engineering Unit – Geopavement Group)
  - Conventional Density (MAT 230)

### **ABC Sampling Recertification (MAT 210R)**

- Already certified in ABC (cannot be expired over a year), may need Field Certification by Instructor

### **Borrow Pit Sampling Recertification (MAT 410R)**

- Already certified in Borrow Pitt (cannot be expired over a year), may need Field Certification by Instructor

### **Conventional Density Recertification (MAT 230R)**

- Already certified in Conventional Density (cannot be expired over a year), may need Field Certification by Instructor

### **QMS Density Gauge Recertification (MAT 380R)**

- Already certified in Density Gauge (cannot be expired over a year)

### **Nuclear Density Test – Base, Select Material, & FDR (FDR) (MAT 370)**

- Field Certification by instructor following class
- Prefer completion of Nuclear Safety and Hazardous Materials (MAT 250) prior to attending

### **Nuclear Safety and Hazardous Materials Class (NCDOT Employees ONLY) (MAT 250)**

- No Prerequisite

### **Nuclear Safety and HazMat Refresher Training (NCDOT Employees ONLY) (MAT 251)**

- Nuclear Safety and Hazardous Materials Class (MAT 250)
- Must be actively receiving a film badge

## **M&T Laboratory Schools**

### **QC/QA Aggregate Sampling (MAT 400)**

- No Prerequisite

### **QC/QA Aggregate Testing (MAT 405)**

- QC/QA Aggregate Sampling certification
- Precertification Request Form  
Link to form - [Precertification Request Form.pdf \(ncdot.gov\)](https://www.ncdot.gov/Forms/PrecertificationRequestForm.pdf)

### **Concrete Mix Design (MAT 120)**

- Concrete Field Technician Certification (does not have to be active)
- Batch Certification (does not have to be active)

### **Asphalt Mix Design (MAT 575)**

- Introduction to Asphalt (through Stanley Community College – provide copy of certificate)
- QMS Level I or
- QMS Level II
- Approved Mix Design Course

## **Manufactured Materials Schools**

### **Field Welding Inspection (MAT 700)**

- No Prerequisite

### **Field Welder Testing**

- No Prerequisite

### **Bridge Coatings Inspection (MAT 800)**

- No Prerequisite