

CONCRETE CERTIFICATION TRAINING DESCRIPTION

CONCRETE FIELD TECHNICIAN: This entry-level training allows the student to become ACI and NCDOT certified. This course will include a fundamental understanding of: NCDOT specifications, basic concepts and components of concrete, and how to correctly complete NCDOT forms relating to concrete sampling. In addition, the student will be trained and tested on all field performance tests, which include; calibration of “Type B” air pressure meter, measurement of air content in concrete using the “Type B” air pressure meter, temperature specifications, sampling specifications, making and curing of test specimens, air content using the volumetric method (roll-o-meter), unit weight, Chace Indicator, and slump test. To be certified, each student must pass all field performance tests, the NCDOT written exam, and the ACI written exam. **ALL STUDENTS WILL BE REQUIRED TO COMPLETE ALL THREE PARTS—NO EXCEPTIONS.** The cost for this school is **\$300.00** per student.

CONCRETE FIELD TECHNICIAN SELF STUDY: This is a school that administers the written and performance tests required for NCDOT Concrete Field Tech Certification. The student is issued the study materials ahead of time for preparation of the exam. Students are encouraged to use the ETEC online study module to assist in preparation of the exams. The exams include the ACI Written Test, the ACI Performance Test, and the NCDOT Written Test. The Chace Indicator Test is conducted during the ACI Performance Test. The cost for this school is **\$300.00** per student.

NCDOT CERTIFICATION ONLY: Individuals who are currently ACI Concrete Field Testing Technician – Grade I certified and seek NCDOT certification only will participate in this school and be exempted from the ACI written exam and the field performance tests portions (except for the Chace Indicator Test). **All students must present an active ACI card prior to testing.** Students participating in the NCDOT Certification School will be mailed a NCDOT Concrete Field Tech Study Guide. The actual class consists of a one-hour review period followed by administration of the NCDOT written test and the Chace Indicator Performance Test. The cost of the school is **\$150.00** per student. The NCDOT Certification Only will be scheduled as needed. A minimum of one class per month will be scheduled. The student will be contacted to receive test site information and test date after receipt of registration form and payment.

NCDOT WRITTEN RETEST: Individuals failing the NCDOT written exam in the Concrete Field Tech School or the NCDOT Certification Only are allowed to retake the exam within one year of the original school date. The cost of the retest is **\$100.00** per student. The NCDOT retest will be scheduled as needed. A minimum of one class per month will be scheduled. The student will be contacted to receive test site information and test date after receipt of registration form and payment.

ACI RETEST: This one-day school is strictly for those students who have completed all parts of the Concrete Field Tech School and failed the ACI written exam only. This school will review all ACI procedures and specifications needed to complete the written exam. Following the review, the written exam will be administered. The cost for this school is **\$150.00** per student.

CONCRETE BATCH TECHNICIAN: This two-day school is for the individual whose job responsibilities pertain to activity at a concrete batch plant. Subjects covered include: NCDOT specifications, plant operations, admixtures used in concrete and their characteristics, moisture determinations, and batch weight adjustments. This school will provide a NCDOT Batch certification only after a separate on-site evaluation is successfully completed. The evaluation will be administered to the students that successfully complete the classroom portion. The purpose of the evaluation is to ensure the student’s ability to actually batch concrete according to NCDOT specifications. Students currently or previously certified as Concrete Batch Technicians

are not required to be NCDOT Concrete Field Tech certified to register in the NCDOT Batch School. Students who have never been NCDOT Certified Batch Technicians have a prerequisite of being a Certified Concrete Field Technician. Training is conducted in a classroom setting where a basic understanding of batching operations is needed and mathematical formulas and calculations are used routinely. This certification is required of all technicians batching concrete for NCDOT or a NCDOT- related project. A copy of the certification number **must** be submitted for every student for registration. The cost for this school is **\$150.00** per student.

CONCRETE MIX DESIGN TECHNICIAN: This four-day advanced school instructs an in- depth, step-by-step procedure to produce the following: ACI concrete mix designs, design variations, weight – volume relationships, and aggregate gradation. Additional subjects include: admixtures and their uses in concrete, use of Portland cement, use of fly ash in concrete, and placing and curing of concrete. Training is conducted entirely in a classroom setting where mathematical formulas and calculations are used extensively. Prerequisites for the school are successful completion on the Concrete Batch Technician Class portion, or a current Concrete Batch Certificate. A copy of the certification number **must** be submitted for every student for registration. The cost for this school is **\$150.00** per student.

CONCRETE PAVEMENT TECHNICIAN: This two to three day school is for the individual whose job responsibilities include concrete paving placement, sampling and testing. Subjects covered include: NCDOT specifications, MIT SCAN, maturity, and joint scoring. Prerequisite for the school is completion of the requirements for a Certified Concrete Field Technician. Batchers of pavement concrete must also be Certified Concrete Batch Technicians. Once the classroom portion of the Concrete Pavement Technician School is successfully completed, all personnel involved in the testing and acceptance of concrete pavement must complete field tests conducted by the Materials and Tests representative at an approved concrete laboratory site. All personnel in the operation, recording, or interpretation of data relating to the Rainhart Profilograph (Model No. 860) must demonstrate operation and data interpretation on an approved jobsite in the presence of designated personnel. The cost for this school is **\$150.00** per student. Concrete Pavement Schools will be scheduled as needed and are project specific.