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## NRMCA's Concrete Technologist Training and Certification Course "Short Course" November 6 - 10, 2017 • Silver Spring, MD

The Concrete Technologist Training and Certification Course "Short Course", has provided intensive training and certification on the fundamentals of concrete, aggregates and concrete making materials since 1964. The following certifications can be obtained:

- NRMCA Concrete Technologist, Level 2
- NRMCA Concrete Technologist, Level 3
- NRMCA Field Testing Technician Grade II Certification

The "Short Course" is a 5-day program, with 4 days of training followed by certification exams. The course emphasizes nationally accepted standard procedures and practices by referencing ACI and ASTM documents for quality control and production of ready mixed concrete.

**Morning sessions** are reserved for classroom instruction and discussions on the following topics:

- |                                    |   |
|------------------------------------|---|
| ◆ Fundamentals of Concrete         | ◆ Statistical Methods                   |
| ◆ Ready Mixed Concrete & ASTM C 94 | ◆ ACI Code & Specification Requirements |
| ◆ Cement                           | ◆ Testing Hardened Concrete             |
| ◆ Fly Ash                          | ◆ Concreting in Extreme Weather         |
| ◆ Slag & Silica Fume               | ◆ Managing Returned Concrete            |
| ◆ Aggregates                       | ◆ Quality Control Procedures            |
| ◆ Chemical Admixtures              | ◆ Handling, Placing & Finishing         |

**Afternoon sessions** include working groups on:

- ◆ Calculations in concrete and aggregate technology: aggregate moisture, specific gravity relative density with weight to volume relationships, aggregate gradations, concrete mixture proportioning, statistical calculations and ACI requirements.
- ◆ NRMCA Field Testing Technician Grade II Certification. Instruction on the eight standards that are included in this certification.
- ◆ Aggregates Laboratory: demonstrations on aggregate sampling and test methods.

**NRMCA Field Grade II** is an optional certification offered at the Short Course and covers the following standards: C31 (making and curing beams); C42 (cores); C94 (ready mix spec); C803 (Windsor probe); C805 (rebound hammer); C1611 (slump flow for SCC); C1688 (density of pervious); and C1702 (infiltration of pervious). This certification requires ACI Field I certification as a pre-requisite which is not offered at the Short Course.

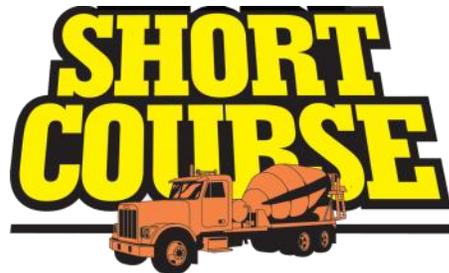


### Comprehensive training and certification for concrete-techs.

**Course Texts and References** Short Course participants receive NRMCA publications, comprehensive notes on each topic and practice problems sets, Compilation of ASTM Standards, American Concrete Institute (ACI) educational publications, and Portland Cement Association's (PCA) Design and Control of Concrete Mixtures; Summary of standards and study guide for NRMCA Field Grade II certification.

**Space is limited:** The capacity of this course is limited to 40 attendees due to size of training facility. Persons interested in attending this course are encouraged to register early. For more information contact Karen Bean at NRMCA, 240-485-1168 or 888-846-7622, ext. 1168, by email at [kbean@nrmca.org](mailto:kbean@nrmca.org)

**For registration & travel information,** contact Jessica Walgenbach at (888) 846-7622 x1152 or [jwalgenbach@nrmca.org](mailto:jwalgenbach@nrmca.org).



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*The highest professional designation in the industry.* This seminar is part of NRMCA's Seminars, Training and Education Programs, STEPS™, and earns you credit towards becoming a CCPf.



