ACI CUSTOM SEMINAR TOPIC

Basics of Concrete Materials and Testing

ONE DAY, 7.5 HOURS

Economy, constructibility, and long-term performance of concrete

Program Content:

- **Fundamental Concrete Concepts**
  Understanding the concrete needs for your project
  Matching materials to project requirements
  Moving from materials to completed project
- **Selection and Use of Materials**
  Cementitious materials
  Aggregates
  Chemical admixtures
  Water
  Fibers
- **Codes and Specifications**
  What's a Code and what's a Specification?
  Requirements of ACI 318
  Requirements of ACI 301
- **Concrete Production**
  Ordering and basis of sale
  Production facility
  Delivery issues
  Resolving disputes
  Inspection and certification
- **Sampling and Control Tests for Concrete**
  Why do we test concrete?
  When do we test concrete?
  How do we test concrete?
- **Evaluation of Test Results**
  General review of a test report
  Evaluating cylinder data
  Identifying trends in the test data
- **In-Place Evaluation of Strength**
  Evaluation process
  Testing methods

Who should attend:

Anyone new to the industry or anyone desiring a refresher or update

Instructors:

Douglas W. Deno, Michael L. Leming, W. Calvin McCall, Jon I. Mullarky, Charles K. Nmai, John J. Schemmel, and Luke M. Snell

Seminar handouts:

Specifications for Structural Concrete (ACI 301)
Excerpts from ACI 318, Building Code Requirements for Structural Concrete and Commentary
PCA's Design and Control of Concrete Mixtures (EB113T)
FHWA's Guide to Nondestructive Testing of Concrete (FHWA-SA-97-105)
Special handout binder with notes authored by the instructors