Concrete Repair Basics
ONE DAY, 7.5 HOURS
Best methods and materials for economical and effective concrete repairs

Program Content:
- **Condition Survey**
  Causes and types of deterioration
  Evaluating deteriorating concrete
  Determining the extent of potential damage
  Assessing the consequences and risks of material failures

- **Repair Techniques**
  Removing damaged concrete
  Preparing existing concrete for repair
  Patching and overlays
  Repair techniques such as shotcrete, carbon fiber reinforcing, and chloride extraction

- **Repair Materials**
  Selecting materials for different repair situations and environments, including sealants, protection systems, cementitious materials, and polymeric materials

- **Cracks and Joints**
  Understanding cracks and joints
  Causes and effects of cracking
  Methods of repairing cracks and joints
  Installing expansion joints for elevated slabs and slabs on ground

- **Applications of Repair Techniques**
  Case studies that utilize repair methods and materials for various types of structures

Who should attend:
Engineers, repair contractors, material suppliers, maintenance personnel, and public works engineers

Instructors:
James P. Donnelly, Paul E. Gaudette, James E. McDonald, and Michael M. Sprinkel.

Seminar handouts:
Guide for Making a Condition Survey of Concrete in Service (ACI 201.1R)
Causes, Evaluation, and Repair of Cracks in Concrete Structures (ACI 224.1R)
Guide for Evaluation of Concrete Structures before Rehabilitation (ACI 364.1R)
Strength Evaluation of Existing Concrete Buildings (ACI 437R)
Concrete Repair Guide (ACI 546R)
Course Notes authored by the instructors