

# ***Structural Condition Assessment of Existing Structures***

*Learn global best practice and procedures for assessing the condition of existing structures with a focus on non-destructive testing.*

## **Overview**

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Evaluating the condition of an existing structure - a building, a dam, a bridge - is a vitally important exercise carried out by those in the engineering profession. But there is no 'one-size-fits-all' approach for such a task. Different situations, conditions and materials - concrete, wood, metal, stone - require different techniques and testing procedures.

This course covers material evaluation practices and procedures used for assessing the structural condition of existing structures. It covers many aspects of evaluating structures and structural material conditions.

## **Facilitator**

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**Larry D. Olson, P.E., M.ASCE** is President of Olson Engineering. He has expertise in the areas of geotechnical and materials engineering with specialization in non-destructive testing and evaluation of buildings and infrastructure. He has been actively involved in the management and performance of non-destructive testing and evaluation, forensic, vibration and geophysical engineering, and applied research to engineering projects since 1985.

Larry has conducted investigations to determine the conditions of concrete-based facilities such as bridges, slabs and pavements, nuclear reactors, buildings, deep foundations, dams and tunnels. He has also performed non-destructive testing of wood and steel pile foundations, masonry structures and steel columns for integrity evaluations.

He is active in ACI Committees and is the Chairman of the Evaluation committee of the International Concrete Repair Institute.

### **Course Topics Include:**

- Condition surveys,
- planning a materials evaluation,
- destructive and non-destructive testing (NDT),
- limitations of NDT testing,
- statistical evaluation of test data, and
- the interpretation and use of test results will be discussed,
- NDT techniques for establishing in-place material properties for concrete, masonry, wood and metals are a primary focus.

### **Registration Information:**

This course will take place over four 9.00am – 1.00pm AEST sessions held on 19 - 22 July 2021. .



Registration for this course will close at 11.59pm AEST on Tuesday 13 July 2021.

- **This course is run exclusively by The American Society of Civil Engineers with Engineering Education Australia.**