Graduate Certificate in Structural Forensics

The objective of the certificate program is to allow students to focus on the forensic analysis of structural components and systems. This provides students with the opportunity to both broaden and deepen knowledge in this area of structural engineering by learning to identify, mitigate, and prevent common shortcomings and degradation that can threaten the integrity and serviceability of structures. The Structural Forensics Graduate Certificate has a basis in materials analysis with optional courses applying to experimental analysis and structural health monitoring.

The certificate program offers an opportunity for engineers to enhance their ability to identify and correct engineering failures without necessarily having to apply for and complete a Master’s degree. The program consists of four courses (12 credit hours).

A bachelor's degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.

Four courses are required to complete the certificate (see Section Completion Requirements below). The following courses count towards the Structural Forensics Graduate Certificate:

1. CE 712 Structural Engineering Materials
2. CE 715 Corrosion Engineering
3. CE 721 Experimental Stress Analysis
4. CE 767 Introduction to Fracture Mechanics
5. CE 895 Experimental Structural Dynamics

Proposed course offering

CE 712, 715, 767, and CE 895 are offered every year. CE 721 is offered on a rotating basis. In any one year period a minimum of four courses are offered to satisfy the requirements of the certificate.

The completion requirements of the graduate certificate in Structural Forensics include: 1) the minimum grade for any course to be applied toward the certificate is a grade of B; and 2) no credits may be transferred from another institution for this certificate.