

Graduate Certificate in Structural Forensics

Graduate Certificate Overview

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).

Standard Admission Requirements for all Graduate Programs

- All applicants must meet the requirements outlined in the Admission to Graduate Study (<https://policy.ku.edu/graduate-studies/admission-to-graduate-study/>) policy.
- Bachelor's degree: A copy of official transcripts showing proof of a bachelor's degree (and any post-bachelor's coursework or degrees) from a regionally accredited institution, or a foreign university with equivalent bachelor's degree requirements is required.
- English proficiency: Proof of English proficiency (<https://gradapply.ku.edu/english-requirements/>) for non-native or non-native-like English speakers is required. There are two bands of English proficiency, including Admission and Full proficiency. For applicants to online programs, Full proficiency is required.

Additional Graduate Program Admission Requirements

- A bachelor's degree in engineering with a GPA of 3.0 or better is required for admission to this graduate certificate program.
- Graduate courses taken for this certificate may be eligible to transfer for credit towards a graduate degree program.

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

Code	Title	Hours
CE 712	Structural Engineering Materials	3
CE 715	Corrosion Engineering	3
CE 721	Experimental Stress Analysis	3
CE 767	Introduction to Fracture Mechanics	3
CE 804	Advanced Structural Dynamics	3

Proposed course offering

CE 712, CE 715, CE 767, and CE 804 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.

At the completion of this program, students will be able to:

- Acquire and integrate new knowledge as needed, using appropriate learning strategies.