

Structural Engineering

We offer M.S. and Ph.D. degrees in both Structural Engineering and Civil Engineering.

Lehigh has internationally recognized graduate research and education programs in structural engineering. Graduates of these programs will have the knowledge and analytical problem-solving capabilities needed to lead and innovate within multi-disciplinary teams for technologically complex environments such as large-structural systems of the civil infrastructure.

FACILITIES

ATLSS: The world-renowned ATLSS Center focuses on the full life-cycle of structural systems and materials for the infrastructure, including developing new systems and materials, developing technology for assessing conditions (e.g., non-destructive evaluation and monitoring technology), understanding system and material failures, and developing technology for repairing and retrofitting existing systems.



NEES: as part of the NSF-NEES Network allows for **Real-Time Multi-Directional (RTMD)** seismic testing, combined with real-time analytical simulations, to investigate the seismic behavior of large-scale structural systems.



SMART STRUCTURES LAB: focuses on utilizing advanced sensors, sensor data compression, smart materials, data mining, sensor networks and damage diagnostic methods for structural control and health monitoring.

STRUCTURAL ENGINEERING FACULTY

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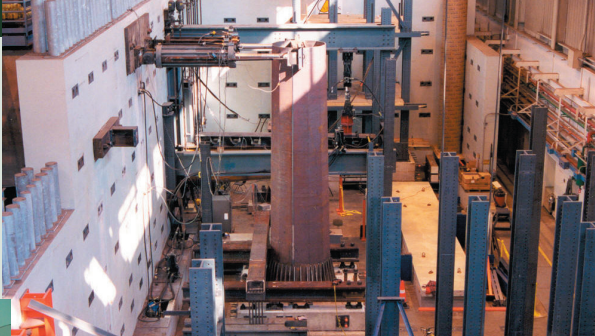
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ADDITIONAL INFORMATION

<http://www3.lehigh.edu/engineering/cee>

LEHIGH APPLICATION

<http://www3.lehigh.edu/engineering/admissions>



RESEARCH AREAS

Advanced Structural Materials and Systems

High performance steels and new systems for steel highway bridges; and fiber composite and precast bridge decks. Precast concrete wall systems and precast concrete diaphragm systems.

Earthquake Resistant Structures

New earthquake resistant steel, steel-concrete composite, and precast concrete structural systems. Performance evaluation and improvement of existing steel and precast concrete systems.

Simulation, Measurement and Evaluation

New laboratory testing methods, field monitoring and evaluation (including non-destructive) of in-service structures and materials.

Infrastructure Reliability, Maintenance and Life-Cycle Performance

Reliability and risk of structures and civil infrastructure. Life prediction, life-cycle performance optimization under conflicting objectives. Bridge network maintenance planning.

Intelligent Infrastructure Systems

Sensing, evaluation, and communication of health, vulnerability and condition of systems.

Infrastructure Hazard Mitigation

Risk evaluation to infrastructure systems from multi hazards including fire and blast loadings, and reliable mitigation technology.