At the University of California San Diego, challenging convention is our most cherished tradition. The Campaign for UC San Diego is a university-wide comprehensive fundraising effort to transform the student experience, our campus, and ultimately the way humanity approaches problems and develops solutions.

Structural Engineering

Building Innovation Leaders

Our quest for global solutions powers our success. Since our department’s launch in 1999, we have emerged as a changemaker. Our facilities are unmatched anywhere in the world, our graduates are in demand from top employers, our research has directly impacted standards and practice, and our scholars have discovered solutions to some of the most challenging problems in the field. At the heart of this innovation hub is our core mission: to propel students to the top of their field through intensive hands-on learning and integrating engineering mechanics theories, computational modeling simulations, experimental testing observations, practical design concepts, and cutting-edge research.

We envision UC San Diego at the forefront of innovation in safeguarding people, structures, and systems. Today, structural engineers face grand challenges including climate change, extreme events such as earthquakes and tsunamis, and issues impacting health, energy, defense, and transportation. Our unparalleled research infrastructure enables full-scale testing, yielding solutions that empower society to maximize safety, resilience, and preparedness. Our aspirations are to position faculty and students as international experts in the field; to promote breakthrough discovery and innovation in civil, geotechnical, aerospace, naval, marine, energy, and biological applications; and to advance safety and sustainability for people everywhere.

Widening our impact means investing in opportunities to sustain our people and programs. Visionary philanthropic support for student scholarships, teaching and research laboratory resources, and endowed faculty chairs will power bold new possibilities and maximize our potential for global impact.

One of a kind

For a holistic focus on all aspects structural engineering

World’s leading program

For large-scale dynamic structural testing and earthquake safety engineering

Research focused

164 PhD graduates, 86 MS thesis graduates

World’s largest outdoor shake table

For seismic testing of large-scale structures, upgraded to apply 6-degree of freedom ground motions

Multidisciplinary

Faculty spanning a broad spectrum of training and specialties including civil, mechanical, and aerospace engineering, material science, and mechanics

Continue the nontradition.
Structural Engineering Priorities

Enhancing the student experience

» **Scholarships** assure student access to opportunity, nurturing the next generation of structural engineers from all backgrounds, experiences, and aspirations.

» **Teaching laboratories** create access to immersive and experiential learning opportunities from day one. Through early hands-on problem-solving, students gain the confidence and motivation they need to succeed in class along with opportunities to integrate theory and practice well before entering the workforce. Support for teaching lab resources propels our students to higher levels of excellence in their coursework, research, internships, and careers.

Enriching our campus community

» **Faculty Endowed Chairs** support and recognize our distinguished professors and upcoming academic leaders, helping retain and recruit world-class global scholars.

Sparking research and innovation

» **Research laboratories** set the stage for discovery. Our research is driven by a range of societal challenges, from improving earthquake resilience of buildings and bridges, monitoring and simulating the performance of structures under multi-hazard and extreme events loading, understanding the structural performance of wind-turbine blades for green energy production, to the modeling and testing of biological structures, to the development of smart structures and sensing technologies.

Our researchers also address emerging interdisciplinary challenges in areas such as structural optimization, systems engineering, additive manufacturing, data science, machine learning, smart materials, geothermal energy recovery and storage, and bioengineering structures.

Support for research laboratory resources powers our engine of innovation.

Help us continue the nontradition.

With your help, UC San Diego will power new generations of problem-solvers at the forefront of research and practice. Already our uniquely talented scholars and vast experimental facilities serve as vital resources for private industry and government agencies. Together with your philanthropic support of the **Campaign for UC San Diego**, we can become a leading global force in innovation.

**Learn more at campaign.ucsd.edu**

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