



COLLEGE OF  
**ENGINEERING**  
*Making a world of difference.<sup>sm</sup>*

## Civil & Environmental Engineering **FELLOWSHIP OPPORTUNITIES**

# GAANN Ph.D. Fellowships in Infrastructure Resilience at University of Nevada Reno

The Department of Civil and Environmental Engineering (CEE) at University of Nevada Reno is pleased to announce the availability of GAANN (Graduate Assistance in Areas of National Need) PhD Fellowships. This GAANN program will support fellowships related to the general theme Rebuilding the Nation's Infrastructure for Resilience to Extreme Events. GAANN Fellows will receive a need-based stipend of up to \$34,000 per year, and tuition and fees are covered by the fellowship.

The CEE Department houses a variety of state-of-the-art experimental facilities, including two structural laboratories with a re-locatable four-shake-table array capable of simulating large earthquakes for system level experiments; advanced laboratory facilities for testing soils, materials and full scale pavements; traffic engineering laboratories; and an array of laboratories for research in water reuse, environmental biology, and environmental chemistry. Fellows will select a CEE faculty advisor, and work with their advisor to select a scope of research that is suited to their interests. Fellows will have opportunities for an enhanced graduate school experience that grants student autonomy, develops strong peer networks, and provides overall better preparation for a career in academia. As an essential program element, Fellows will receive teaching instruction from the Engineering Education program, and be given the opportunity to practice by co-teaching with a faculty mentor.

Applicants are currently sought for a fellowship start date of Fall 2020 or Spring 2021. Fellows must be U.S. citizens or permanent residents, demonstrate financial need via evaluation of the FAFSA, qualify for admission to the PhD program in Civil and Environmental Engineering, and aspire to a career in research and/or teaching. Applications are especially encouraged from candidates that are underrepresented in engineering.

For more information, please visit our website:

**[unr.edu/cee/graduate-program/gaann-fellowships](http://unr.edu/cee/graduate-program/gaann-fellowships)**



### **SAMPLE RESEARCH TOPICS**

- Next generation seismic protection.
- High performance computing and regional-scale evaluations of earthquake hazard and risk.
- Coastal resilience to tsunami inundation/storm surge.
- Advanced testing methods for structures and foundations.
- Dynamic soil response and nonlinear soil-structure interaction; mitigation of liquefaction.
- Intelligent infrastructure, health monitoring sensors.
- Pavement design, analysis, rehabilitation and maintenance; full scale pavement testing and analysis.
- Connected and autonomous traffic infrastructure.
- Sustainable water use and reuse.
- Contaminant removal and resource recovery.
- Application of nanotechnology in water/agriculture.
- Evaluation /prediction of carbon cycle with climate change.

### **ADMISSION REQUIREMENTS**

**GPA of 3.25**

**GRE combined verbal/quantitative score of 302**

### **Contact**

**Keri Ryan, Ph.D., GAANN Project Director**

[klryan@unr.edu](mailto:klryan@unr.edu)

