

OLIVER H. RAYMOND DOCTORAL FELLOWS PROGRAM

In response to global sustainability challenges, infrastructure and environmental systems solutions require developing smarter systems that are responsive to users and make full use of increasingly limited resources. The design of these solutions will require a new kind of engineering education to support an increasingly technical workforce.

The Department of Civil Engineering at the University of Kentucky announces the establishment of the Oliver H. Raymond Doctoral Fellows program for the support of the next generation of researchers and educators capable of meeting the challenges facing global infrastructure and the environment in the 21st century.

The Raymond Doctoral Fellows program provides full-funded fellowships for new Ph.D. students interested in conducting interdisciplinary research and which includes collaboration with other disciplines, both inside and outside engineering.

Program Benefits:

Raymond Fellows will receive full tuition and fees, along with health benefits for up to four years of the Ph.D. studies (additional funding past the initial three years may be available through research or teaching assistantships); a competitive annual stipend; and individualized research mentorship and inquiry-based instructional training. Students that make outstanding progress in their research will be eligible for supplements to the stipend.

PhD Student Requirements:

- Students must be US citizens or permanent residents. International students are not eligible for this fellowship.
- Students must hold a Master of Science in Civil Engineering (MSCE) or equivalent degree.
- Graduates from the University of Kentucky (UK) are eligible, but preference will be given to students new to the University of Kentucky.
- The Department of Civil Engineering is committed to enhancing the diversity of our graduate student cohort and strongly encourages applications from female and minority candidates.

Research Themes:

The Raymond Fellows will focus on convergent research. Dissertation research topics will have the following themes: water, food, and energy nexus; environmental management and decision making; spatial information visualization; management of complex projects; assessment and mitigation of geologic hazards; multi-hazards assessment and impact mitigation for resilient critical infrastructure; smart structural components and systems; sustainable construction materials; connected autonomous vehicles; multi-modal sustainable transportation solutions; risk-based decision making; and big-data analytics for civil engineering applications. Within these themes, Fellows will have the flexibility to work with their advisors to define meaningful research topics.

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Faculty Contacts:

Initial contacts regarding the interdisciplinary research associated with the Raymond Doctoral Fellows program are as follows:

Water resources and water infrastructure – Dr. Lindell Ormsbee, lindell.ormsbee@uky.edu

Structural systems and components – Dr. Issam Harik, harik@uky.edu

Transportation systems and data analytics – Dr. Nick Stamatiadis, nick.stamatiadis@uky.edu

Geotechnical systems and infrastructure materials – Dr. L. Sebastian Bryson, sebastian.bryson@uky.edu

Construction and project management – Dr. Tim Taylor, <u>tim.taylor@uky.edu</u>

Environmental Science and Engineering – Dr. Kelly Pennell, kellypennell@uky.edu

Applications:

Applications should include: (1) a detailed CV; (2) a motivation statement that describes the student's research interests and future aspirations (1-page maximum); (3) two external letters of recommendation; and (5) unofficial transcripts.

The applications are due as one PDF package delivered via email to the Director of Graduate Studies, Dr. L. Sebastian Bryson, sebastian.bryson@uky.edu

Note: All potential graduate students are required to submit a separate application for UK Graduate Admissions. However, the application fee will be waived for accepted Raymond Doctoral Fellows. The specific requirements for admissions are given on the Graduate School website:

http://www.rgs.uky.edu/gs/ProspectiveStudents/Admission.html

Important Dates:

The Application Deadline for this fellowship is December 1.



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