## **CIVIL ENGINEERING, PH.D.**

All programs of study must be approved by the student's academic advisor and the Department of Civil and Environmental Engineering graduate director.

## **Learning Outcomes**

- Graduates will be able to demonstrate expertise in a core subject area of civil and environmental engineering.
- Graduates will be able to demonstrate a working knowledge of various areas of CEE and related fields.
- Students will be able to describe and discuss sound research approaches and knowledge of advances in Civil and Environmental Engineering.
- 4. Students will be able to demonstrate the ability to apply knowledge of mathematics, science and engineering.
- Graduates will be able to identify pertinent research problems, to formulate and execute a research plan.
- Graduates will be able to describe and discuss advances of knowledge in civil and environmental engineering.
- Graduates will be able to generate and analyze original research results, and to communicate these results through oral presentations and written publications submitted to refereed archival journals.
- 8. Graduates will demonstrate the basic skills needed for life-long learning and professional development.