

PH.D. IN CIVIL AND ENVIRONMENTAL ENGINEERING

The Ph.D. in Civil and Environmental Engineering allows integration of advanced study and research within a variety of subdisciplines, including agricultural water management, construction engineering and management, environmental engineering, geoengineering, hydraulic engineering and environmental fluid mechanics, hydrologic science and engineering, structural engineering and mechanics, water and international development, and water resources planning and management.

The Ph.D. degree requires 72 graduate course credit hours for students without an applicable master's degree and 42 graduate course credit hours for students with an applicable master's degree.

Students interested in graduate work should refer to the Graduate and Professional Bulletin (<https://catalog.colostate.edu/general-catalog/graduate-bulletin/>).

Learning Objectives

Upon successful completion, students will be able to:

1. Use concepts and frameworks to effectively design, analyze, and implement creative solutions to fundamental and applied research problems using relevant tools and techniques in their chosen focus area within civil and environmental engineering.
2. Evaluate the effectiveness of designed experiments and implications of resulting data.
3. Apply in-depth knowledge and creativity to advance solutions in their chosen focus area within civil and environmental engineering.
4. Demonstrate effective oral and written communication to convey technical concepts to both technical and non-technical stakeholders.
5. Produce significant technical and scholarly contributions to advance the civil and environmental engineering profession in their chosen focus area while demonstrating professional and responsible behavior to society.