



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Engineering Service-Learning Ghana In Country

ENGR 5797.17S

Credit Hours:

4.00 - 4.00

Course Levels:

Undergraduate (1000-5000 level)

Graduate

Course Components:

Lecture

Field Experience

Course Description:

The Engineering Service-Learning in Ghana course takes place during autumn semester in preparation for winter break travel; Travel and service will be conducted during the break between autumn and spring semesters.

Prerequisites and Co-requisites:

Prereq: Enrollment in the College of Engineering, or permission of instructor.

Course Goals / Objectives:

- Identify and analysis the impact of sustainable technology on a developing country in terms of, but not limited to, the environment, public discourse, economy, education, cultural attitudes, socioeconomics, and public health.
 - Learn key aspects of the human centered design process to devise practical and sustainable engineering solutions that involve partnerships with local partners including the community at large.
 - Further develop an understanding and appreciation of global diversity.
 - Participate in a study abroad experience/service-learning experience that may be outside their comfort zone and experience, in order to implement team-based engineering/technical projects and to document and present lessons learned.
 - Synthesize the theory and practice of human centered design within the local and global community.
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Course Topics:

- Human Centered Design process and community development work including intercultural development skills
 - Implementation, evaluation and testing of sustainable technologies in a developing country including team project work
 - Professional communication practices with stakeholders
 - If traveling: Implementation, evaluation and testing of sustainable technologies in a developing country including team project work
 - If not traveling: lecture hours increase for topics in professional communication, research of sustainable technologies, human-centered design process and intercultural skills development.
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Designation:

Elective