



**THE OHIO STATE UNIVERSITY**  
COLLEGE OF ENGINEERING

# Exploring Citizenship in Engineering: Integrative Designation

## ENGR 2301

**Credit Hours:**

4.00

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**Course Levels:**

Undergraduate (1000-5000 level)

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**Course Components:**

Lecture

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**Course Description:**

Students will use the engineering design and writing processes to define a meaningful problem within specific local or global communities and formulate and propose a solution to that problem. Students will explore various themes around engineering and citizenship through a comprehensive, semester-long proposal project.

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**Prerequisites and Co-requisites:**

Prereq: Completion of GE Foundation Writing and Information Literacy course.

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### **Course Goals / Objectives:**

- Design and conduct semester-long research projects to develop a deep and interdisciplinary understanding of technical or social problems in-context and propose specific solutions to specific problems.
  - Engage in an advanced, in-depth scholarly exploration of diversity, equity, and inclusion in engineering/STEM cultures, especially how race, ethnicity, gender, sexuality, age are experienced and intersect.
  - Identify, evaluate, use, and share credible and relevant sources of information, relying on the frameworks for Information Literacy, to explore the course themes, define problems, and use evidence effectively to support the proposed solution.
  - Reflect critically on experiences, behaviors, processes, and learning (metacognition).
  - Understand the importance of rhetorical communication and writing for technical and non-technical contexts and audiences.
  - Understand processes for composing informative and persuasive documents, and plan and deliver presentations for a variety of audiences and purposes.
  - Collaborate effectively in teams and develop collaborative composing, team management, and communication skills
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### **Course Topics:**

- Introduction to the RFP/Grant, individual exploration of main themes (what is citizenship, justice)
  - Problem definition
  - Refining the problem, understanding the community, and developing solutions
  - Refining solutions, developing the proposal, and sharing out
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### **Designation:**

General Education Course