



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Citizenship in Engineering Contexts

ENGR 2300

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Description:

This course engages with thematic concepts and definitions of citizenship, diversity, equity, inclusion, and justice through historical and contemporary lenses. Students explore the applications and implications of these concepts across a wide range of engineering contexts. Students will approach the writing process from a rhetorical perspective.

Prerequisites and Co-requisites:

Credit for Foundations: Completion of GE Foundation Writing and Information Literacy course.

Course Goals / Objectives:

- 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
 - Engage in critical & logical thinking about the influence of engineering culture & its technical processes on communities & society at the local, state, national, and global level, with a focus on intersections with equity & justice
 - Reflect critically on 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.
 - Apply strategies for common types of workplace communication
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Course Topics:

- Course Intro, Conceptual and Theoretical Foundations, Rhetorical Foundations & Technical Writing Style, Planning and conducting research
 - Applications, Extensions, and Intersections: Theoretical
 - Applications, Extensions, and Intersections Equity, Justice, and Citizenship at School and Work: Equity in Hiring, Pay and Promotion
 - Applications, Extensions, and Intersections: Equity, Justice, and Citizenship in Urban Design, Transportation and the Environment
 - Applications, Extensions, and Intersections Equity, Justice, and Citizenship in Engineering Design: Automation, Robotics, Algorithms, and Artificial Intelligence
 - Applications, Extensions, and Intersections: Equity, Justice, and Citizenship on the Internet Social Media, Privacy and Surveillance, Big Data and Augmented Reality
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Designation:

General Education Course