



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Introduction to Infrastructure

CIVILEN 2001

Credit Hours:

3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

This course introduces early-career students to the world of infrastructure - a system of systems that links the natural and built environments. Students will learn how structural, transportation, environmental, energy, water resources, geodetic, materials, and construction engineers work to contribute to the design, construction, and management of infrastructure systems.

Prerequisites and Co-requisites:

none

Course Goals / Objectives:

- Understand the role of Civil and Environmental Engineers in society
 - Understand the progression of a Civil and Environmental infrastructure project and its essential elements
 - Identify important economic, ethical, and societal concerns associated with infrastructure projects
 - Understand the role of teamwork in Civil and Environmental Engineering projects and contribute to the success of your team
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Course Topics:

- Introduction and Infrastructure Systems
 - Teamwork, Professional Development, and Career Paths
 - Engineering Analysis and Design for Infrastructure
 - Engineering Drawings and Technical Communication
 - Structural, Transportation, and Environmental Infrastructure Systems
 - Environmental, Social, and Economic Considerations of Infrastructure
 - Decision-Making for Infrastructure Projects
 - Ethics and Professionalism
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Designation:

Required