



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Structural Steel Design

CIVILEN 4320

Credit Hours:

3.00 - 3.00

Course Levels:

Undergraduate (1000-5000 level)

Course Components:

Lecture

Course Description:

Design of steel tensile members, compression members, beams, beam-columns, and bolted and welded connections based on AISC Specifications. Design problem solving. Introduction to computer-aided design.

Prerequisites and Co-requisites:

Prereq: 3310 (431), and enrollment in CivilEn major.

Course Goals / Objectives:

- To learn structural design problem solving and its formulation
 - To learn the AISC Load and Resistance Factor Design (LRFD) Specifications
 - To learn design of members and connections in steel structures
 - To be introduced to computer-aided design of steel structures
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Course Topics:

- Steel and Steel Structures
 - Loads, Methods of Design, and Specifications
 - Design of Tension Members
 - Design of Axially Loaded Compression Members
 - Design of Beams
 - Design of Beam-Columns
 - Design of Bolted Connections
 - Welded connections
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Designation:

Elective