Course Designation: Required course


Catalog Data: Design of tension and compression members, trusses, buildings, and bridges, rolled steel beams, plate girders, riveted, welded and pinned joints, introduction to design of multistory frames and plastic analysis; and timber structures.

Prerequisites: CVEG 3073


Siramulu Vinnakota, STEEL STRUCTURAL BEHAVIOR AND LRFD, McGraw Hill. 2006

Course Learning Outcomes
Students will be able to:

• Understand the behaviors of structural steel members and AISC specifications.
• Analyze and design steel tensile member, column and beam.
• Analyze and design the steel connection.
• Analyze and design simple steel structures.

Topics covered:
Design of tension members
Design of compression members
Design of flexural members
Design of beam-columns
Design of connections
Design of composite sections
Design of built-up members

Laboratory Project: Design Two-story Office Building

Class Schedule: Two-hour lecture and three-hour lab sessions per week.

Relationship of Course to Program Outcomes
Program outcome c and k are assessed in the lecture and outcome k is also assessed in the design project.

Calendar

• Instruction Begins January 19
• Last Day to Drop courses without Record: February 3
• Drop day (courses canceled for Non Payment): February 3
• Mid-Semester Examinations March 11-13
• Last date to withdraw from classes with automatic “W”: April 5
• Final Exam May 7-12