Course Syllabus

Introduction to Steel Structures, Structural Systems and Overview of Steel Building, AISC specifications.

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Design Methods (ASD and LRFD) Loads and Load Combinations

Analysis and Design of Tension Members including connection elements

subject to Tension

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Introduction and design of Compression Members Under Concentric Axial

Loads

Design of Axially Loaded Compression Members and Base Plates

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Design of Flexural Members (Beams)

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Cover-plated beams and built-up girders (plate girders)

Design of members under Bending and Axial Force

Bolted Connections

Welded Connections

Floor Vibrations (If time allows)

* Steel Design, by William T. Segui, Cengage Learning, 5th Edition, 2013
* AISC Steel Construction Manual 15th Edition (Steel manual should be brought in all lectures and exams)

Type of teaching

2 hrs in lectures

2 hrs tutorial

**Requirements for credit points:**

For the award of credit points, it is necessary to pass the module exam.

The module exam (practical and theoretical) contains:

[Written 120 min for theoretical]

[Written 45 min for practical]

**Student's attendance is required in all classes**.

**Grade Distribution:**

The Grade is generated from the examination result(s) with the following

20% activity (quizzes, assignment, and H.W)

20% mid-term exam

60% final theoretical Exam

**Work load:**

The workload is 150h. It is the result of 60h attendance and 90h self studies.