

CEEN 4289 – Design in Civil Engineering II  
Course Module – Structural Design and ASCE 7

Two lectures were used to introduce structural loading and the use of ASCE 7, followed by a summary homework assignment.

Lecture 1

Discussed load distribution in a structure. Items discussed included identifying one way vs. two way slabs and calculating tributary area. Content was delivered using YouTube videos as well as traditional notes.

Lecture 2

Discussed how to find dead loads and live loads in ASCE 7. Walked through an example of a wind load calculation for a building using the envelope procedure. Content was delivered using the ASCE 7 online standard, traditional notes, and an Excel template created for wind loads.

Homework Assignment

Students were given dimensions for one floor, one bay of a dormitory. Students had to identify appropriate dead and live loads from ASCE, provide drawings of how the loads were distributed on one girder and one beam, and provide shear and moment diagrams for the girder and beam.