Course Name:
Structural Analysis 2

Course Number:
20013

Credit:
2

Prerequisite:
Structural Analysis 1

Course Description (Objectives):

The main objective of this course is to provide the knowledge to calculate distribution of forces in members of indeterminate structures and to calculate the resultant deformations.

Course Content (outline):

- Analysis of indeterminate structures by Displacement Method: Slope-deflection method
- Analysis of indeterminate structures by Displacement Method: Moment distribution method
- Nonprismatic members
- Approximate analysis of structures
- Influence line for indeterminate structures

References:

- Structural analysis, R. C. Hibbeler, Pearson Prentice Hall, 2014.
- Elementary theory of structures, Y.-Y. Hsieh, Pearson Prentice Hall, 1995.
- Elementary Structural Analysis, C. H. Norris, J. B. Wilbur, and S. Utku. McGraw Hill, 1976.
- Intermediate structural analysis, C.-K. Wang, McGraw Hill, 1982.