Advanced Structural Design

2 units (selection)

Fumiaki Nagao · Professor / Structural Engineering, Civil and Environmental Engineering, Intelligent Structures and Mechanics Systems Engineering

Minoru Noda · Associate Professor / Structural Engineering, Civil and Environmental Engineering, Intelligent Structures and Mechanics Systems Engineering

Target〉 The purpose of this class is to evaluate the safety of structures based on the probabilistic models for static and dynamic lords and resistance variables and structural reliability theories

Outline〉 The probabilistic models for static and dynamic lords and resistance variables, some structural reliability theories and outlines of recent topics to structural design are explained.

Style〉 Lecture

Keyword〉 ***safety of structures, probabilistic models for loads, structural reliability theories***

Relational Lecture〉 "**Advanced Structural Dynamics**"(0.5)

Goal〉 To understand the safety of structures

Schedule〉

1. probabilistic models for static and dynamic lords and resistance variables 1
2. probabilistic models for static and dynamic lords and resistance variables 2
3. probabilistic models for static and dynamic lords and resistance variables 3
4. probabilistic models for static and dynamic lords and resistance variables 4
5. probabilistic models for static and dynamic lords and resistance variables 5
6. limit state of structures 1
7. limit state of structures 2
8. evaluation of structural safety 1
9. evaluation of structural safety 2
10. evaluation of structural safety 3
11. evaluation of structural safety 4
12. evaluation of structural safety 5
13. recent topics to structural design 1
14. recent topics to structural design 2
15. recent topics to structural design 3

Evaluation Criteria〉 evaluated by attitude in class (80%) and reports (20%)

Textbook〉 To be introduced in the class

Reference〉 To be introduced in the class

Contents〉 http://cms.db.tokushima-u.ac.jp/cgi-bin/toURL?EID=216638

Contact〉

⇒ Nagao (A515, +81-88-656-9443, fumi@ce.tokushima-u.ac.jp) Mail (Office Hour: 年度ごとに学科の掲示を参照すること)

⇒ Noda (A514, +81-88-656-7323, noda@ce.tokushima-u.ac.jp) Mail (Office Hour: 年度ごとに学科の掲示を参照すること)