

Geotechnical Engineering Fundamentals (E 4241)

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General Information

Time: Wednesday, 4:10-6:40 p.m.
Room: 253 Engineering Terrace
Textbook (suggested): *Principles of Foundation Engineering*,
by Braja M. Das, PWS Publishing Co.
Office: 632 Mudd
Office Hour: Thursday, 12:00 - 2:00 p.m.

Grading

Homework (20%);

Exam

Midterm Examination (40%); Final Examination (40%)

Course Descriptions

Foundation Engineering: Art or Science?

Classical versus Advanced Method of Analysis/Design

Design Examples

- Review of soil mechanics
- Shallow foundation - Bearing capacity and settlement/deformation
- Deep foundation (Piles) - Bearing capacity and settlement
- Lateral earth pressure - Rankine and Coulomb earth pressure theories
- Gravity and cantilever retaining walls
- Reinforced soil retaining walls
- Sheet pile walls - cantilever and anchored
- Braced excavation
- Slope stability