

# COURSE DETAIL

## FOUNDATIONS IN GEOTECHNICAL ENGINEERING

**Country**

Brazil

**Host Institution**

Pontifical Catholic University of Rio de Janeiro

**Program(s)**

Pontifical Catholic University of Rio de Janeiro

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Civil Engineering

**UCEAP Course Number**

115

**UCEAP Course Suffix****UCEAP Official Title**

FOUNDATIONS IN GEOTECHNICAL ENGINEERING

**UCEAP Transcript Title**

GEOTECHNICAL ENG

**UCEAP Quarter Units**

6.00

**UCEAP Semester Units**

4.00

**Course Description**

This course offers an introduction to geotechnical engineering. Topics include: origin and formation of soils; geological-geotechnical profiles-- direct and indirect surveys; undisturbed and dented sampling; soil characterization-- granulometric distribution, physical indexes, limits of consistency, geotechnical classification systems; soil structures, mineralogy of clays, and compacted soils; tensions in soil masses-- geostatic stresses and induced stresses; effective stress and pressure; capillarity; percolation in soils-- concept of loads, permanent flow, permeability coefficient.

**Language(s) of Instruction**

Portuguese

**Host Institution Course Number**

ENG 1209

**Host Institution Course Title**

FUNDAMENTOS DE GEOTECNIA

**Host Institution Course Details****Host Institution Campus**

PUC-Rio

**Host Institution Faculty****Host Institution Degree****Host Institution Department**

Departamento de Engenharia Civil

**Course Last Reviewed**

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