



Course guides

290639 - MECSOL14 - Soil Mechanics and Foundations

Last modified: 06/10/2020

Unit in charge: Vallès School of Architecture
Teaching unit: 753 - TA - Department of Architectural Technology.
Degree: DEGREE IN ARCHITECTURE STUDIES (Syllabus 2014). (Compulsory subject).
Academic year: 2020 **ECTS Credits:** 3.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: CARLOS JAEN GONZALEZ

Others:

Primer quadrimestre:
XAVIER GIMFERRER VILAPLANA - 1
CARLOS JAEN GONZALEZ - 1
JOSEP PRATDESABA FARGAS - 1

Segon quadrimestre:
CARLOS JAEN GONZALEZ
ROGER SEÑIS LOPEZ

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

ET1G. An aptitude for conceiving, calculating, designing and executing foundation solutions and integrating them into existing buildings and urban areas (T).

Generical:

CE1. An aptitude for creating architectural projects that meet both aesthetic and technical demands.
CE8. An understanding of structural, construction and engineering design problems related to building design.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

To know tools and processes to apply sustainability criteria in the structural design.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	16,5	22.00
Hours large group	16,5	22.00
Self study	42,0	56.00

Total learning time: 75 h



CONTENTS

Syllabus

Description:

Soil mechanics and foundation structures.

Full-or-part-time: 33h

Theory classes: 16h 30m

Practical classes: 16h 30m

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Terzaghi, Karl; Peck, Ralph B. Mecánica de suelos en la ingeniería práctica. 2ª ed. Barcelona [etc.]: El Ateneo, 1958. ISBN 8470210203.
- Rico Rodríguez, Alfonso; Castillo, Hermilo del. La Ingeniería de suelos en las vías terrestres : carreteras, ferrocarriles y aeropistas. México, D.F. [etc.]: Limusa, 1974-1977. ISBN 9681800540.
- Jiménez Salas, José A; Justo Alpañes, José L. de; Serrano González, Alcibíades A. Geotecnia y cimientos. Madrid: Rueda, 1971-1980. ISBN 8472070174.
- Bowles, Joseph E. Propiedades geofísicas de los suelos. Bogotá [etc.]: McGraw-Hill, 1982. ISBN 9684511183.
- Rodríguez Ortiz, José María; Serra Gesta, Jesús; Oteo Mazo, Carlos. Curso aplicado de cimentaciones. 4a ed. Madrid: Colegio Oficial de Arquitectos de Madrid, 1989. ISBN 8485572378.