

300240 - GEO-MP3 - Geotechnics

Coordinating unit:	300 - EETAC - Castelldefels School of Telecommunications and Aerospace Engineering		
Teaching unit:	751 - DECA - Department of Civil and Environmental Engineering		
Academic year:	2018		
Degree:	BACHELOR'S DEGREE IN AIRPORT ENGINEERING (Syllabus 2010). (Teaching unit Compulsory) BACHELOR'S DEGREE IN AEROSPACE SYSTEMS ENGINEERING (Syllabus 2015). (Teaching unit Optional) BACHELOR'S DEGREE IN AEROSPACE SYSTEMS ENGINEERING/BACHELOR'S DEGREE IN TELECOMMUNICATIONS SYSTEMS ENGINEERING (Syllabus 2015). (Teaching unit Optional) BACHELOR'S DEGREE IN AEROSPACE SYSTEMS ENGINEERING/BACHELOR'S DEGREE IN NETWORK ENGINEERING (Syllabus 2015). (Teaching unit Optional)		
ECTS credits:	4,5	Teaching languages:	Catalan, Spanish

Teaching staff

Coordinator:	Definit a la infoweb de l'assignatura.
Others:	Definit a la infoweb de l'assignatura.

Degree competences to which the subject contributes

Transversal:

1. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
2. TEAMWORK - Level 1. Working in a team and making positive contributions once the aims and group and individual responsibilities have been defined. Reaching joint decisions on the strategy to be followed.
3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.

Learning objectives of the subject

Study load

Total learning time: 112h 30m	Hours large group:	26h	23.11%
	Hours medium group:	9h	8.00%
	Hours small group:	9h	8.00%
	Guided activities:	5h	4.44%
	Self study:	63h 30m	56.44%

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Content

(ENG) - Mecánica de suelos	Learning time: 58h Theory classes: 14h Laboratory classes: 6h Practical classes: 6h Self study : 32h
(ENG) - Suelos compactados	Learning time: 27h Theory classes: 6h Practical classes: 3h Laboratory classes: 3h Self study : 15h
(ENG) - Ingeniería geotécnica	Learning time: 26h Theory classes: 6h Guided activities: 5h Self study : 15h

Planning of activities

(ENG) ACTIVIDAD DIRIGIDA: TRABAJO DE SÍNTESIS SOBRE UNA TÉCNICA DE LA	Hours: 15h Guided activities: 5h Self study: 10h
(ENG) PRÁCTICAS DE LABORATORIO	Hours: 15h Laboratory classes: 5h Self study: 10h

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Bibliography

Basic:

Jiménez Salas, José A.; Justo Alpañes, José L.; Serrano González, Alcibiades A. Geotecnia y cimientos. 2ª ed. Madrid: Rueda, 1975-1984. ISBN 8472070085.

Lambe, T.W.; Whitman, Robert V. Mecánica de suelos. 2ª ed. México: Limusa+, 1995. ISBN 9681818946.

Atkinson, J. The mechanics of soils and foundations. 2nd ed. London: Taylor & Francis, 2007. ISBN 9780415362566.

Muir Wood, David. Soil mechanics : a one-dimensional introduction. Cambridge ; New York: Cambridge University Press, 2009. ISBN 9780521517737.

Complementary:

Wood, David M. Soil behaviour and critical state soil mechanics. Cambridge: University Press, 1992. ISBN 0521337828.

Terzaghi, Karl; Peck, R.B.; Mesri, G. Soil mechanics in engineering practice. 3a ed. New York: John Wiley & Sons, 1996. ISBN 0471086584.