

330419 - TCA - Applied Surveying and Cartography

Coordinating unit: 330 - EPSEM - Manresa School of Engineering
 Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering
 Academic year: 2019
 Degree: BACHELOR'S DEGREE IN MINING ENGINEERING (Syllabus 2016). (Teaching unit Compulsory)
 ECTS credits: 6 Teaching languages: Catalan

Teaching staff

Coordinator: Sanmiquel Pera, Lluís

Degree competences to which the subject contributes

Specific:

1. (ENG) Elaboració de cartografia temàtica.

Transversal:

2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
3. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
4. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.

Learning objectives of the subject

Study load

Total learning time: 150h	Hours large group:	0h	0.00%
	Hours medium group:	60h	40.00%
	Hours small group:	0h	0.00%
	Guided activities:	0h	0.00%
	Self study:	90h	60.00%

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Content

title english	Learning time: 47h Theory classes: 8h Laboratory classes: 9h Self study : 30h
Description: content english	
title english	Learning time: 40h Theory classes: 6h Laboratory classes: 7h Self study : 27h
Description: content english	
title english	Learning time: 33h Theory classes: 9h Laboratory classes: 9h Self study : 15h
Description: content english	
title english	Learning time: 20h Theory classes: 3h Laboratory classes: 5h Self study : 12h
Description: content english	
title english	Learning time: 10h Theory classes: 4h Self study : 6h
Description: content english	

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Planning of activities

name english	Hours: 8h Laboratory classes: 4h Self study: 4h
name english	Hours: 22h Laboratory classes: 11h Self study: 11h
name english	Hours: 10h Practical classes: 2h Self study: 8h
name english	Hours: 10h Practical classes: 2h Self study: 8h

Bibliography

Basic:

- Domínguez García-Tejero, Francisco. Topografía general y aplicada. 13ª ed. Madrid: Mundi-Prensa, 1998. ISBN 8471147211.
- Estruch Serra, Miquel. Cartografía minera [on line]. 3a ed. Barcelona: Edicions UPC, 2001 [Consultation: 18/11/2016]. Available on: <<http://hdl.handle.net/2099.3/36231>>. ISBN 8489636028.
- Estruch Serra, Miquel. Topografía para minería subterránea. Barcelona: Edicions UPC, 2002. ISBN 8483015919.
- Robinson, Arthur H., et al. Elementos de cartografía. Barcelona: Omega, DL 1987. ISBN 8428207682.

Complementary:

- Fernández Fernández, Luís. Topografía minera. 2a ed. León: Universidad de Leon. Secretariado de Publicaciones, 1990. ISBN 8477191387.
- Martín Asín, Fernando. Geodesia y cartografía matemática. 3ª ed. Madrid: Fernando Martín Asín, 1990. ISBN 843980248X.
- Sanmiquel Pera, Lluís. Métodos planimétricos: radiación, itinerario, intersección [on line]. Manresa: EPSEM, 2003 [Consultation: 18/11/2016]. Available on: <<http://hdl.handle.net/2117/11639>>. ISBN 9788469411254.
- Taton, Robert. Topografía subterránea. Madrid: Paraninfo, 1972.