

330606 - DMMIN - Mining Desing and Modeling

Coordinating unit: 330 - EPSEM - Manresa School of Engineering
 Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering
 Academic year: 2019
 Degree: MASTER'S DEGREE IN MINING ENGINEERING (Syllabus 2013). (Teaching unit Compulsory)
 ECTS credits: 5 Teaching languages: Catalan, Spanish

Teaching staff

Coordinator: Sanmiquel Pera, Lluís

Degree competences to which the subject contributes

Specific:

1. (ENG) Coneixement adequat de la tecnologia d'explotació de recursos minerals.
2. (ENG) Coneixement de sistemes de control i automatismes.

Transversal:

3. SUSTAINABILITY AND SOCIAL COMMITMENT. Being aware of and understanding the complexity of social and economic phenomena that characterize the welfare society. Having the ability to relate welfare to globalization and sustainability. Being able to make a balanced use of techniques, technology, the economy and sustainability.
4. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.

Learning objectives of the subject

Study load

Total learning time: 125h	Hours large group:	0h	0.00%
	Hours medium group:	45h	36.00%
	Hours small group:	0h	0.00%
	Guided activities:	0h	0.00%
	Self study:	80h	64.00%

330606 - DMMIN - Mining Desing and Modeling

Content

<p>title english</p>	<p>Learning time: 24h Laboratory classes: 8h Self study : 16h</p>
<p>Description: content english</p>	
<p>title english</p>	<p>Learning time: 21h Laboratory classes: 7h Self study : 14h</p>
<p>Description: content english</p>	
<p>title english</p>	<p>Learning time: 40h Laboratory classes: 15h Self study : 25h</p>
<p>Description: content english</p>	
<p>title english</p>	<p>Learning time: 40h Laboratory classes: 15h Self study : 25h</p>
<p>Description: content english</p>	

330606 - DMMIN - Mining Desing and Modeling

Planning of activities

name english	Hours: 18h Laboratory classes: 6h Self study: 12h
name english	Hours: 18h Laboratory classes: 6h Self study: 12h
name english	Hours: 10h Theory classes: 2h Self study: 8h

Bibliography

Basic:

Maptek. VULCAN [on line]. Sulte: Maptek, 2017- [Consultation: 29/01/2018]. Available on:
<<http://www.maptek.com/cl/productos/vulcan/>>.

Pla Ortiz de Urbina, F. Fundamentos de laboreo de minas. Madrid: Escuela Técnica Superior de Ingenieros de Minas, 1994. ISBN 8485616059.

Hustrulid, W. A.; Kuchta, M.; Martin, R. Open pit mine planning & design. 3rd ed. London: CRC Press, 2013. ISBN 9781466575127.

Read, J.; Stacey, P., eds. Guidelines for open pit slope design. Collingwood: CSIRO Publishing, 2009. ISBN 9780415874410.

Sturgul, J. R. Mine design: examples using simulation. Littleton: Society for Mining, Metallurgy, and Exploration, 2000. ISBN 0873351819.

Bustillo, M.; López, C. Manual de evaluación y diseño de explotaciones mineras. Madrid: Entorno Gráfico, 1997. ISBN 8492170824.

Complementary:

Hustrulid, W. A.; Bullock, R. L., eds. Underground mining methods: engineering fundamentals and international case studies. Littleton: Society for Mining, Metallurgy and Exploration, 2001. ISBN 0873351932.

Gertsch, R. E.; Bullock, R. L., eds. Techniques in underground mining: selections from underground mining methods handbook. Littleton: Society for Mining, Metallurgy and Exploration, 1998. ISBN 0873351630.