

Course guide

330426 - CAV - Mine Ventilation and Working Conditions

Last modified: 04/05/2023

Unit in charge: Manresa School of Engineering
Teaching unit: 750 - EMIT - Department of Mining, Industrial and ICT Engineering.
Degree: BACHELOR'S DEGREE IN MINING ENGINEERING (Syllabus 2016). (Compulsory subject).
Academic year: 2023 **ECTS Credits:** 4.5 **Languages:** Catalan, Spanish, English

LECTURER

Coordinating lecturer: Sanmiquel Pera, Lluís

Others: Bascompta Massanès, Marc

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

1. (ENG) Coneixement de la ventilació principal i secundària que es pot trobar en una mina subterrània.

Transversal:

2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 3. Communicating clearly and efficiently in oral and written presentations. Adapting to audiences and communication aims by using suitable strategies and means.
3. TEAMWORK - Level 3. Managing and making work groups effective. Resolving possible conflicts, valuing working with others, assessing the effectiveness of a team and presenting the final results.
4. 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.
5. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.

TEACHING METHODOLOGY

LEARNING OBJECTIVES OF THE SUBJECT

STUDY LOAD

Type	Hours	Percentage
Hours medium group	45,0	40.00
Self study	67,5	60.00

Total learning time: 112.5 h

CONTENTS

title english

Description:

content english

Full-or-part-time: 12h

Theory classes: 4h

Self study : 8h

title english

Description:

content english

Full-or-part-time: 12h

Theory classes: 4h

Self study : 8h

title english

Description:

content english

Full-or-part-time: 8h

Theory classes: 3h

Laboratory classes: 1h

Self study : 4h

title english

Description:

content english

Full-or-part-time: 32h

Theory classes: 2h

Laboratory classes: 10h

Self study : 20h

title english

Description:

content english

Full-or-part-time: 18h

Theory classes: 5h

Laboratory classes: 3h

Self study : 10h



title english

Description:

content english

Full-or-part-time: 17h

Theory classes: 5h

Laboratory classes: 2h

Self study : 10h

title english

Description:

content english

Full-or-part-time: 14h

Theory classes: 4h

Laboratory classes: 2h

Self study : 8h

ACTIVITIES

name english

Full-or-part-time: 20h

Laboratory classes: 20h

name english

Full-or-part-time: 10h

Theory classes: 2h

Self study: 8h

GRADING SYSTEM

BIBLIOGRAPHY

Basic:

- Luque Cabal, Vicente. Manual de ventilación de minas. Madrid: Pedeca, 1988. ISBN 8440431929.
- McPherson, Malcolm J. Subsurface ventilation and environmental engineering. London: Chapman & Hall, 1993. ISBN 0412353008.
- De la Vergne, Jack. Hard rock miner's handbook [on line]. 5th ed. Edmonton: Stantec Consulting, 2008 [Consultation: 17/12/2020]. Available on : http://www.stantec.com/content/dam/stantec/files/PDFAssets/2014/Hard%20Rock%20Miner%27s%20Handbook%20Edition%205_3.pdf. ISBN 0968700616.

Complementary:

- Hartman, H. L., ed. SME mining engineering handbook [on line]. 2nd ed. Littleton: Society for Mining, Metallurgy and Exploration, 1992 [Consultation: 24/05/2022]. Available on : <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pq-origsite=primo&docID=6557>

[90](#). ISBN 0873351002.

- Hartman, Howard L. Mine ventilation and air conditioning. 2nd ed., [reprint with corrections]. Malabar, Florida: Krieger, 1991. ISBN 0894644718.