

## 220303 - Aerospace Materials

Coordinating unit: 205 - ESEIAAT - Terrassa School of Industrial, Aerospace and Audiovisual Engineering  
Teaching unit: 702 - CMEM - Department of Materials Science and Metallurgy  
Academic year: 2018  
Degree: MASTER'S DEGREE IN AERONAUTICAL ENGINEERING (Syllabus 2014). (Teaching unit Compulsory)  
ECTS credits: 5 Teaching languages: Catalan, Spanish

### Teaching staff

Coordinator: Miguel Sánchez Soto

### Learning objectives of the subject

### Study load

Total learning time: 125h	Hours large group:	30h	24.00%
	Hours small group:	15h	12.00%
	Self study:	80h	64.00%

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### Content

title english	Learning time: 6h Theory classes: 2h Self study : 4h
Description: content english	
title english	Learning time: 14h Theory classes: 2h Self study : 12h
Description: content english	
title english	Learning time: 18h Theory classes: 4h Laboratory classes: 2h Self study : 12h
Description: content english	
title english	Learning time: 18h Theory classes: 4h Laboratory classes: 2h Self study : 12h
Description: content english	
title english	Learning time: 10h Theory classes: 2h Laboratory classes: 2h Self study : 6h
Description: content english	

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title english	Learning time: 16h Theory classes: 6h Laboratory classes: 2h Self study : 8h
Description: content english	
title english	Learning time: 30h Theory classes: 8h Laboratory classes: 2h Self study : 20h
Description: content english	
title english	Learning time: 13h Theory classes: 2h Laboratory classes: 5h Self study : 6h
Description: content english	

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### Planning of activities

name english	Hours: 6h Self study: 6h
name english	Hours: 4h Laboratory classes: 2h Self study: 2h
name english	Hours: 4h Laboratory classes: 2h Self study: 2h
name english	Hours: 4h Laboratory classes: 2h Self study: 2h
name english	Hours: 4h Laboratory classes: 2h Self study: 2h
name english	Hours: 4h Laboratory classes: 2h Self study: 2h
name english	Hours: 8h Self study: 3h Laboratory classes: 5h
name english	Hours: 10h Self study: 10h

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### Bibliography

#### Basic:

Cantor, B.; Assender, H.; Grant, P. Aerospace materials. Bristol [etc.]: Institute of Physics, 2001. ISBN 0750307420.

Ashby, Michael F. Materials selection in mechanical design [on line]. 4th ed. Burlington (Massachusetts): Butterworth-Heinemann, 2011 [Consultation: 01/07/2016]. Available on: <<http://www.sciencedirect.com/science/book/9781856176637>>. ISBN 9781856176637.

#### Complementary:

Asthana, R.; Kumar, A.; Dahotre, N. B. Materials processing and manufacturing science [on line]. Amsterdam [etc.]: Elsevier Academic Press, 2006 [Consultation: 06/06/2017]. Available on: <<http://site.ebrary.com/lib/upcatalunya/detail.action?docID=10150475>>. ISBN 9780750677165.

Anderson, T. L. Fracture mechanics: fundamentals and applications. 3rd ed. Boca Raton: Taylor and Francis/CRC Press, 2005. ISBN 0849316561.

#### Others resources: