ME-623

Advances in Contact Mechanics

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Cursus	Sem.	Type
Advanced Manufacturing		Obl.
Mechanics		Obl.

Language of teaching	English
Credits	2
Session	
Exam	Oral presentation
Workload	60h
Hours	**42**
Courses	14
TP	28
Number of positions	**10**

Frequency

Every 2 years

Remark

Every two years /Next time Spring 2017

Summary

This is a reading class intended for graduate students interested in learning about the recent and fast developments in the field of contact mechanics and tribology. We will read basic introductory chapters and have in-depth class discussions on recent publications (from nanotriboly to earthquakes).

Content

Rough surfaces
Molecular origins of friction and wear
Multi-asperity models
Friction and fracture
Rate and state friction laws
Stick slip and earthquakes
Each weeks students will be assigned reading that will be discussed in class the following week (format is a reading class, and evaluation is based on active participation)

Learning Prerequisites

Required courses

Master in Mechanics, Physics or Materials Science