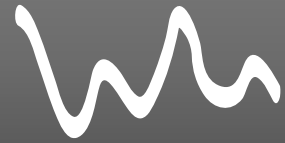


# MECHANICAL VIBRATIONS PRACTICAL DETAILS



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## Course schedule

- Theory (24h) : Prof. Arnaud Deraemaeker  
Prof. Wout Weijtjens

*Not compulsory (but strongly advised)*

*- be on time!*

*- be quiet!*

- Practice : Exercises (36h)

*Compulsory*

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## Flipped class principle

- Watching pre-recorded videos/reading material before coming to the class <https://youtu.be/FN1gSfpl13I>
- During the class :
  - Wooclap sessions to consolidate knowledge <https://app.wooclap.com/events/OAYMY/0>
  - Questions and answers
  - Clarifications of the concepts not understood by the majority
  - Practical cases discussed in more details

FLIPPED



→ Interactions are a necessity for continuous evaluation of the teaching/learning process

→ Flipped class will work if you play the game and will fail if you don't

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## Course material and organization

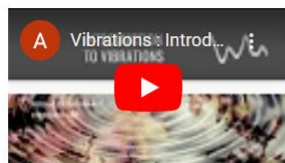
**Vibrations** course material available at:

<https://structuraldynamics.ulb.be/>

- [Basics of Structural Dynamics](#)
- [Advanced Concepts in Structural Dynamics](#)

A copy of the slides for each topic is given in pdf (link next to title below)

**1. Introduction.** [pdf](#)



Note that a few new modules are not available in video recordings and will be taught using the classical method

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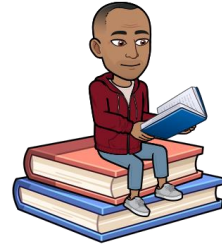
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## Course evaluation

### Evaluation :

-**Theory** : Oral examination (January) :  
*40% Theory basics evaluated by Wout Weijtfens*  
*40% Applied case studies evaluated by Arnaud Deraemaeker*

-**Practice** : Exercises:  
20% - continuous evaluation  
> 50% : *pass*  
< 50% : *fail -> Second session in August/September*



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## Course objectives

### Main objectives

- Understanding the fundamental concepts in vibrations applied to mechanical engineering problems

- Ability to apply these concepts to practical problems with a design-oriented mind.



→ We care that you become a good engineer useful to our society.

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## Philosophy of teaching and learning

### Group working vs individual assessment

-> Learn to work in groups and benefit from the others, representative of real working conditions

-> Verify that you have the sufficient knowledge to work as an engineer (individual assessment), representative of what is expected from you to advance in your career.



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## Philosophy of teaching and learning

### No spoon feeding

-> You learn by doing yourself and by doing mistakes.  
Listening and copying is not learning



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Questions ?

