Practical Details

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*Course schedule :

- Theory (36h):
  - Vibrations: Prof A. Deraemaeker (16h)
  - Acoustics: Prof J.L. Migeot (16h)
  - Visit of LMS.Siemens in Leuven (4)

  not compulsory (but strongly advised)
  - be on time!
  - be quiet!

- Practice (24h):
  - Vibrations and acoustics exercises (Matlab/Actran): 12h
  - Actran Project: 12h

  compulsory
**Course schedule**

**Vibrations : Prof A. Deraemaeker / Acoustics Prof J.L Migeot**

<table>
<thead>
<tr>
<th>Tuesday</th>
<th>Friday</th>
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<tbody>
<tr>
<td>10h Vibrations</td>
<td>Week 1-5 Podcasted</td>
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<tr>
<td>10h Acoustics</td>
<td>Week 6: LMS visit (4h)</td>
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<tr>
<th>Weeks 8,9,11-14</th>
<th>12h Exercises</th>
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<tr>
<td>Actran Project (12h)</td>
<td>Matlab/Actran</td>
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Course support

Vibrations course slides and info available at:
https://arnoresearch.com/vibrations-and-acoustics/

Course podcasting

Vibrations course slides and info also available at:
https://uv.ulb.ac.be
Some of the difficulties

*Coming to another country is not an easy thing:
- Administrative problems: be patient …
- Cultural changes: be open-minded
- Language: French, Dutch and English

*Learning in another country is a challenge, be prepared!
- Different teaching/learning system: adapt yourself
- Notations/methods/background may be different
- Theoretical courses, practical exercises + home working
- Overall, be prepared to work between 40-60 hours a week …

*Learning in English
- Requires adaptation period

-> Be prepared to work hard
-> Ask the 'local' students for help!

Practical Details

Evaluation:

- Theory:
  - Written examination on basics (20%)
    – 14/20 required to be allowed to present oral
  - Oral examination (60%)
  - Exercise sessions (project) (20%)
    – Individual defense combined with oral examination

- 50/100: pass
< 50/100: fail -> Second session in August/September
Your expectations

Objectives of the course

Our main objectives

- Understanding of the fundamental concepts in vibrations and acoustics applied to mechanical engineering structures

- 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.
Evaluation to reach the objectives

- Understanding of the fundamental concepts in vibrations applied to mechanical engineering structures
  Theoretical courses -> practical case studies
    -> Oral examination (with lecture notes)

- Ability to apply these concepts to practical problems with a design-oriented mind.
  Exercise sessions -> 1 final project -> Oral individual assessment

Our 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, representative of what is expected from you to advance in your career.

No spoon feeding

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

- Woodlap sessions
- Exercise sessions in parallel with course

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

Course and exercises content

**Course:**
- Presentation of test cases to introduce necessary theory
- Presentation of the theory
- Illustration with movies
- Woodlap session to assess the understanding of the key concepts
- Visit of LMS.Siemens in Leuven

**Exercise sessions:**
- Matlab/Actran exercises related to the fundamental concepts
- Project using Actran