



Coupled Problems: Vibro-Acoustics.

January 27th - 28th 2022

**Mechanical Engineering
Dynamics and Control
Eindhoven University of Technology**

**Structural Dynamics and Acoustics
Department of Mechanical Engineering
University of Twente**

General

This course will give an introduction to various aspects on vibro-acoustics. It focuses on numerical/theoretical aspects (finite element methods/boundary element methods to solve the Helmholtz equation as well as source localization techniques) but some experimental (specifically source localization) techniques are covered as well. This course is part of the 3TU Engineering Mechanics training program for PhD students.

Local organization

The course is organized by the Dynamics and Control group of the TU/e and the Structural Dynamics and Acoustics and Engineering Fluid Dynamics group of the University of Twente. It will be hosted by the University of Twente. The local organizing committee is composed of

- Debbie Zimmerman (secretary)
- Ysbrand Wijnant

Lecturers

- Ines Lopez Arteaga (TU/e)
- Ysbrand Wijnant (UT)

Lecture notes

Lecture notes will be distributed during the course.

Prerequisites

Undergraduate courses in Applied Mathematics (partial differential equations). The Finite Element Method and Boundary Element Method that are used are explained in sufficient detail

Date/Programme:

The course will be hosted by the University of Twente on Monday 27th and Tuesday 28th, 2022
More detailed programme will follow soon.

Fee/Registration

The course is free for registered members of the graduate school Engineering Mechanics and for the research members of the contributing research groups. The course fee for non EM members is € 100 for students and € 400 for other participants. They will receive an invoice after accepted registration.

Participants need to register by completing the on line registration form that can be found [http://www. https://engineeringmechanics.nl/courses/](http://www.https://engineeringmechanics.nl/courses/) **before January 15th 2020.**
Members of the Graduate School Engineering Mechanics receive priority in case of over-subscription.

For more information about hotel accommodation on the campus of the University of Twente please contact Debbie Zimmerman (secretary): d.b.zimmermanvanwoesik@utwente.nl

Further information about the educational programme and other activities of the Graduate School on Engineering Mechanics can be found at: www.engineeringmechanics.nl