COURSE: Measurement and Experimental analysis of vibration

Contact person: Boris Ljubenkov; boris.ljubenkov@fesb.hr

Main topics:
- Vibrations of single degree and multi degrees of freedom systems
- Applications of the measuring equipment for the vibrational testing using the selected modal identification procedures
- Analysis of dynamic signal
- Carry out experimental modal analysis using the standard equipment and computer software

Programme structure:
- 5-day course
- Sample data will be provided for practice and for final presentation
- Lecture notes will be available either on-line or in printed form

Important dates:
Course dates: 02/09/2019 – 06/09/2019
Deadline for application: 01/08/2019
Confirmation of the course: 15/08/2019
Payment due by: 24/08/2019

Price of the course: 300 € (tax included)

Programme plan:
Day 1
- Introduction to the basis of vibration (3h)
  - Vibration sensors, vibration exciters, measurement chain (1h)
- Individual work/exercise (1h)
Day 2
- Measurement of the frequency response function (FRF) (4h)
  - Individual work/exercise (1h)
Day 3
- Analysis of measured signals in the time domain (2h)
  - Analysis of measured signals in the frequency domain (2h)
  - Individual work/exercise (1h)
Day 4
- System identification (4h)
  - Individual work/exercise (1h)
Day 5
- Students’ final projects (4h)
  - Final presentations (1h)

Programme lecturers:
Ph. D. Damir Sedlar M. Mech. Eng,
Teaching/assistant professor at the University of Split,
Faculty of Electrical Engineering, Mechanical Engineering
and Naval Architecture, Chair of Dynamic and Vibrations,
Split, Croatia.

Ph. D. Ivan Tomac M. Mech. Eng,
Teaching/assistant professor at the University of Split,
Faculty of Electrical Engineering, Mechanical Engineering
and Naval Architecture, Chair of Dynamic and Vibrations,
Split, Croatia.