



HIGHER EDUCATION
SCHOOL IN NVH
FOR INDUSTRY 4.0



Università
degli Studi
di Ferrara



UNIMORE
UNIVERSITÀ DEGLI STUDI DI
MODENA E REGGIO EMILIA



ALMA MATER STUDIORUM
UNIVERSITÀ DI BOLOGNA



UNIVERSITÀ
DI PARMA

Basic and Advances in NVH for Industry 4.0

MONDAY JULY, 17		
9-10	Course Introduction, E. Mucchi, University of Ferrara	https://meet.google.com/bez-qttx-zwk
10-13	Basics of Vibration, E. Manconi, University of Parma	https://meet.google.com/bez-qttx-zwk
14-18	Basics of Acoustics, L. Maggi, Gea Group	https://meet.google.com/bez-qttx-zwk
TUESDAY JULY, 18		
9-12	Signal processing I, Cecile Capdessus, University of Orleans	https://meet.google.com/bez-qttx-zwk
13-15	Measuring vibration, A. Zippo, University of Modena & Reggio Emilia	https://meet.google.com/bez-qttx-zwk
15-17	Experimental modal analysis: theory, E. Mucchi, University of Ferrara	https://meet.google.com/bez-qttx-zwk
17-18	Measuring acoustics, A. Zippo, University of Modena & Reggio Emilia	https://meet.google.com/bez-qttx-zwk
WEDNESDAY JULY, 19		
9-13	Rotating Machinery I, S. Heyns, University of Pretoria	https://meet.google.com/bez-qttx-zwk
14-16	Rotating Machinery II, M. Cocconcelli, University of Modena & Reggio Emilia	https://meet.google.com/bez-qttx-zwk
16-18	Rotating Machinery III, S. Chatterton, Politecnico di Milano	https://meet.google.com/bez-qttx-zwk
THURSDAY JULY, 20		
9-11	Introduction to piezoelectric technology on measurements, F. Germano, Kistler Italia srl	https://meet.google.com/bez-qttx-zwk
11-13	Experimental modal analysis: theory, E. Mucchi, University of Ferrara	https://meet.google.com/bez-qttx-zwk
14-18	Diagnostics and prognostics by Machine Learning, G. D'Elia, University of Ferrara	https://meet.google.com/bez-qttx-zwk
FRIDAY JULY, 21		
9-10.30	Vibroacoustic modeling of gear transmissions: case studies, Catelani/G. Bartolozzi (Hexagon)	https://meet.google.com/bez-qttx-zwk
10.30-12.30	Periodicity-induced effects and methods in vibro-acoustics, Sergey Sorokin, Aalborg University, Denmark	https://meet.google.com/bez-qttx-zwk

14-16	Numerical Modeling in Structural Acoustics Systems, Prof. Jean-Francois Deu, Laboratoire de Mécanique des Structures et des Systèmes Couplés, Conservatoire National des Arts et Métiers CNAM, Paris, France.	https://meet.google.com/bez-qttx-zwk
16-18	Passive Damping Treatments for Structural Vibrations, Prof. Jean-Francois Deu, Laboratoire de Mécanique des Structures et des Systèmes Couplés, Conservatoire National des Arts et Métiers CNAM, Paris, France.	https://meet.google.com/bez-qttx-zwk
MONDAY JULY, 24		
9-13	Measuring Noise and Vibration NVH (measuring vibration, noise, instrumentations, calibration), E. Mucchi/ E. Proner, University of Ferrara	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
13-14	Lunch at "Inge Bar"	Inge Bar, Via Giuseppe Saragat, 1 - Ferrara
14-18	Anechoic chamber/reverberation room, A. Santoni, C. Marescotti	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
TUESDAY JULY, 25		
8.30	Bus departure for Reggio Emilia	Via Giuseppe Saragat, 1 - Ferrara
10-13	Rotating machinery, G. D'Elia, M. Cocconcelli, University of Modena & Reggio Emilia	Dipartimento di Scienze e Metodi dell'Ingegneria - Reggio Emilia
13-14	Lunch	
14-18	Practice in Matlab: diagnostics and prognostics by ML, G. D'Elia, University of Modena & Reggio Emilia	Dipartimento di Scienze e Metodi dell'Ingegneria - Reggio Emilia
18	Bus departure to Ferrara	
WEDNESDAY JULY, 26		
9-13	Experimental modal analysis (hammer testing), M. Troncosi, University of Ferrara	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
13-14	Lunch at "Inge Bar"	Inge Bar, Via Giuseppe Saragat, 1 - Ferrara
14-16	Environmental testing: Theory, M. Troncosi, University of Ferrara	Aula 18 - Cattedrale, Via Giuseppe Saragat, 1 - Ferrara
16-17	Multiaxial vibration testing, Giacomo D'Elia, MechVib Engineering	Aula 18 - Cattedrale, Via Giuseppe Saragat, 1 - Ferrara
17-18	Monitoring and diagnostics by ML - E. Soave, MechVib Engineering	Aula 18 - Cattedrale, Via Giuseppe Saragat, 1 - Ferrara
20	Social dinner	Hostaria Savonarola, piazza Savonarola 14, Ferrara

THURSDAY JULY, 27		
9-13	Shaker 3D E. Mucchi, E. Proner, University of Ferrara	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
13-14	Lunch at "Inge Bar"	Inge Bar, Via Giuseppe Saragat, 1 - Ferrara
14-18	Experimental modal analysis (shaker testing). E. Mucchi/E. Proner, University of Ferrara	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
FRIDAY JULY, 28		
9-13	Practice: experimental modal analysis. E. Mucchi/E. Proner, University of Ferrara	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
13-14	Lunch at "Inge Bar"	Inge Bar, Via Giuseppe Saragat, 1 - Ferrara
14-17	Practice: experimental modal analysis. E. Mucchi/E. Proner	Engineering Department: Lab corpo E, Via Giuseppe Saragat, 1 - Ferrara
17.00	Closing Aperitif	Cattedrale, Via Giuseppe Saragat, 1 - Ferrara

