



COURSE: Mechanics and Dynamics of Structures: Module of "Dynamics of Structures"		
ACADEMIC YEAR: 2018-2019		
TYPE OF EDUCATIONAL ACTIVITY: (Basic, Characteristic, Affine, Free choice, Other)		
TEACHER: MARIA ANNA DE ROSA		
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phone: 0971205059		mobile (optional):
Language: italian		
ECTS: 6	n. of hours: 54	Campus: Potenza School of Engineering
EDUCATIONAL GOALS AND EXPECTED LEARNING OUTCOMES The student must be able to understand the dynamic behavior of a system, apply it to other structural patterns and deepen it as it has learned.		
PRE-REQUIREMENTS Strength of materials		
SYLLABUS - Dynamic behaviour of discrete systems with one or n degrees of freedom: free vibration frequencies and vibration modes, resonances. The presence of damping. Dynamic behaviour of one-dimensional continuous systems: the equations of motion for Euler-Bernoulli beams and for Timoshenko beams. Discretization methods for continuous systems, and finite element approaches for the dynamic analysis of trusses and frames		
TEACHING METHODS Theoretical lessons.		
EVALUATION METHODS Oral examination		
TEXTBOOKS AND ON-LINE EDUCATIONAL MATERIAL Notes from the teacher Meirovitch "Fundamentals of vibrations" McGRAW-HILL		
INTERACTION WITH STUDENTS The teacher, after explaining the content of the course, will collect the entries. Each student enrolled will receive detailed course notes.		
EXAMINATION SESSIONS (FORECAST)¹ 23/01/2019 , 13/02/2019 , 13/03/2019 , 17/04/2019 , 15/05/2019 , 12/06/2019 , 24/07/2019 , 25/09/2019 , 16/10/2019 , 27/11/2019 , 11/12/2019		
SEMINARS BY EXTERNAL EXPERTS YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		
FURTHER INFORMATION		

¹Subject to possible changes: check the web site of the Teacher or the Department/School for updates.



Università degli Studi della Basilicata
Scuola di Ingegneria

