



5 credits

30.0 h + 30.0 h

Q1

Teacher(s)	Coyette Jean-Pierre ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Aims	<i>The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit".</i>
Evaluation methods	Examination with/without course notes (to be fixed) ' 4 hours maximum.
Teaching methods	<ul style="list-style-type: none"> • Ex-cathedra course based on available slides (iCampus) for volume 1; • Teacher supported project for volume 2.
Inline resources	Course slides, exercices and solutions
Bibliography	<ul style="list-style-type: none"> • Transparents du cours (iCampus) • « Random vibrations : Theory and Practice », P.H. Wirsching, T. L. Paetz et H. Ortiz, John Wiley, 1995. • « Théorie des vibrations, application à la dynamique des structures », M. Géradin et D. Rixen, Masson 1996. • « Fluid structure interaction », H.J.P. Morand et R. Ohayon, John Wiley, 1995.
Other infos	<ul style="list-style-type: none"> • Use of Matlab scripts ; • Use of industrial software (MSC Nastran, Actran, etc.) for the project.
Faculty or entity in charge	GC

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Electro-mechanical Engineering	ELME2M	5		
Master [120] in Civil Engineering	GCE2M	5	LMECA2410	
Master [120] in Mechanical Engineering	MECA2M	5		