UCL Université catholique de Louvain

# LAUCE2185

*2015-2016*

# Dynamics of structures

| 5.0 credits | 30.0 h + 30.0 h | 1q |
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| Teacher(s) : | Coyette Jean-Pierre ; |
| Language : | Anglais |
| Place of the course | Louvain-la-Neuve |
| Inline resources: | Course slides, exercices and solutions |
| Prerequisites : | *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.* |
| Aims : | *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".* |
| Evaluation methods : | Examination with/without course notes (to be fixed) ' 4 hours maximum. |
| Teaching methods : | Ex-cathedra course based on available slides (iCampus) for volume 1;<br>Teacher supported project for volume 2. |
| Bibliography : | --<br>Course slides (iCampus) ;<br>--<br>« Random vibrations : Theory and Practice », P.H. Wirsching, T. L. Paetz et H. Ortiz, John Wiley, 1995;<br>--<br>« Théorie des vibrations, application à la dynamique des structures », M. Géradin et D. Rixen, Masson 1996 ;<br>--<br>« Fluid structure interaction », H.J.P. Morand et R. Ohayon, John Wiley, 1995. |
| Other infos : | --<br>Use of Matlab scripts ;<br>--<br>Use of industrial software (MSC Nastran, Actran, etc.) for the project. |
| Faculty or entity in charge: | GC |

## Programmes / formations proposant cette unité d'enseignement (UE)

| Intitulé du programme | Sigle | Credits | Prerequis | Acquis d'apprentissage |
|---|---|---|---|---|
| Master [120] in Civil Engineering | GCE2M | 5 | LMECA2410 | |
| Master [120] in Mechanical Engineering | MECA2M | 5 | - | |
| Master [120] in Electro-mechanical Engineering | ELME2M | 5 | - | |