

5.0 credits	30.0 h + 22.5 h	2q
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Teacher(s) :	Glineur François (coordinator) ; Absil Pierre-Antoine ; Van Dooren Paul ; Nesterov Yurii ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	The themes tackled in this course are related to the fundamental disciplines taught in the Masters in Applied Mathematics programme and vary from one year to another according to possible new events and the participants' specific interests. The selected applications come from the world of industry or organization.
Aims :	Apply the theoretical and methodological skills, acquired during the training in applied mathematics, within the framework of mathematical engineering applications. <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>
Content :	The students work in small groups. They select, analyze and develop one or several mathematical engineering applications related to the disciplines that were approached in the course of their education in applied mathematics. These applications are suggested by the teachers, the students or industrial partners. When required, concepts which are useful to carry out the project (summary of the state- of-the-art, recent developments, advanced techniques, etc) are introduced thanks to presentations or directed readings. Presentations of advances made by the groups are organized all along the semester, at the end of which students are asked to write up a final report and to defend their project in front of a jury made up of all teachers, possibly completed by other teachers and researchers having supervised the project.
Other infos :	Problem-based learning. The course is taught either in French or in English.
Cycle and year of study :	> Master [120] in Mathematical Engineering > Master [120] in Electro-mechanical Engineering
Faculty or entity in charge:	MAP