

2.0 credits	20.0 h + 15.0 h	2q
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Teacher(s) :	Jeanmart Hervé ; Raucent Benoît ; Herman Benoît ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Dismantling and functional analysis of mechanisms. Measurements on mechanical parts. Sketching and computer-aided-drawing Kinematic analysis
Aims :	Introduce students to the design process in mechanical engineering and the knowledge of mechanisms and assembly processes. Develops students' capacity to perform functional analysis and implement graphical tools. <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 :	This course is based mainly on a practical and deductive approach. The students start by dismantling and reassembling a complex mechanical system (e.g. an automobile engine), thereby giving for-hands on experience of mechanical components, their interdependence and functional analysis. The students are then required to carry out a thorough investigation of a mechanical subsystem , involving dimensional analysis, functional analysis and component design, followed by an operational analysis and workshop drawings produced by a CAD software.
Other infos :	Prerequisites : basic technical drawing skills, e.g. FSAJ1631 Format : practicals in groups of 2 students 1st semester: engine dismantling 2nd semester: functional analysis and AUTOCAD drawing (half day per week) Assessment : year long involvement. Reports and drawings. Final interview. Stream : design and projects in mechanical engineering
Cycle and year of study :	> Bachelor in Engineering > Bachelor in Mathematics
Faculty or entity in charge:	MECA