

6 credits

45.0 h

Q1

Teacher(s)	Willem Michel ;
Language :	French
Place of the course	Louvain-la-Neuve
Main themes	Direct method of the calculus of variations, minimax methods, symmetry properties of optimal solutions.
Aims	<p>Contribution of the course to learning outcomes in the Master in Mathematics programme. By the end of this activity, students will have made progress in:</p> <ul style="list-style-type: none"> <li>- Recognise the fundamental concepts of important current mathematical theories.</li> <li>- Establish the main connections between these theories, analyse them and explain them.</li> <li>- Recognise the fundamental concepts of important current mathematical theories.</li> <li>- Identify the unifying aspects of different situations and experiences.</li> <li>- Argue within the context of the axiomatic method.</li> <li>1 - Construct and draw up a proof independently, clearly and rigorously.</li> <li>- Write a mathematical text in French according to the conventions of the discipline.</li> <li>- Structure an oral presentation and adapt it to the listeners' level of understanding.</li> <li>- Find sources in the mathematical literature and assess their relevance.</li> <li>- Correctly locate an advanced mathematical text in relation to knowledge acquired.</li> <li>- Ask himself relevant and lucid questions on a mathematical topic in an independent manner.</li> </ul> <p>Learning outcomes specific to the course (en fonction des thèmes traités). Initiate to the current research in minima and critical points of integral functionals.</p> <p>----- <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></p>
Evaluation methods	Evaluation of lectures, writing and criticism
Teaching methods	Lectures , writing and criticism of both activities.
Content	Variable
Faculty or entity in charge	MATH

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Mathematics	MATH2M	6		