

13.0 credits

90.0 h + 60.0 h

Teacher(s) :	Gran Marino ; Hanert Emmanuel ; Ponce Augusto ; Dos Santos Santana Forte Vaz Pedro ; Van Schaftingen Jean ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<p>The teaching involves four important parts. The content of the first semester includes a rather quick survey of topics studied at secondary school which are placed in a new view.</p> <p>I. Differential and integral calculus.</p> <p>a) Numbers and functions.</p> <p>b) Functions of one real variable.</p> <p>c) Complex numbers</p> <p>d) Integration and primitivation.</p> <p>II. Basic linear algebra and matrices.</p> <p>III. Functions of several variables.</p> <p>IV. Introduction to differential equations.</p>
Aims :	<p>The aim of this teaching is to present basic tools of algebra and analysis in view of their use in natural sciences. It should also initiate the students to mathematical reasoning. Illustrations and direct applications to natural sciences should be particularly stressed.</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>
Other infos :	<p>Prerequisites: Mean level in mathematical. Consistent work, logical mind, rigor, accuracy, analyse and initiative in front of problems are needed for succes.</p> <p>Evaluation: Written examination aiming to verify the assimilation of overall subjects (theory and practical exercises).</p> <p>Support: Syllabus (available at CIACO)</p> <p>Staff support: Teacher exposes overall subjects during theoretical classes. Teaching assistants are responsible for practical exercise sessions.</p>
Faculty or entity in charge:	SC