

5.0 credits	30.0 h + 15.0 h	2q
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Teacher(s) :	Haine Luc ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	<ul style="list-style-type: none"> <li>- Complex numbers, entire convergent series, exponential and logarithmic functions, analytic functions.</li> <li>- Holomorphic functions, Cauchy integral, Taylor and Laurent developments, singular points, calculus of residues.</li> <li>- Conformal transformations, automorphisms of the plane, the open disk and the Riemann sphere.</li> <li>- Sequences and series of holomorphic and meromorphic functions, elliptic functions.</li> </ul>
Aims :	<p>Complex analysis is a central subject in mathematics, that includes numerous applications in engineering and physical sciences. The course is dedicated to the study of the basic methods of the theory of analytic functions of a complex variable. It also aims to develop a geometrical intuition of the subject and proposes openings towards fields of applications.</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 :	Prerequisite : Mathematical analysis 1 and 2, or equivalent.
Cycle and year of study :	<ul style="list-style-type: none"> <li>&gt; <a href="#">Bachelor in Mathematics</a></li> <li>&gt; <a href="#">Bachelor in Engineering</a></li> <li>&gt; <a href="#">Master [120] in Mathematical Engineering</a></li> <li>&gt; <a href="#">Bachelor in Physics</a></li> <li>&gt; <a href="#">Bachelor in Economics and Management</a></li> </ul>
Faculty or entity in charge:	MATH