


7.0 credits	45.0 h + 30.0 h	2q
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Teacher(s) :	Lambrechts Pascal ; Cappelle Natacha (compensates Lambrechts Pascal) ; Federinov Julien (compensates Lambrechts Pascal) ;
Language :	Français
Place of the course	Louvain-la-Neuve
Inline resources:	<p>&amp;amp;amp;lt;!--{cke_protected}{C}%3C!%2D%2D%0A%20%2F*%20Font%20Definitions%20*%2F%0A%40font-face%0A%09%7Bfont-family%3A%22Cambria%20Math%22%3B%0A%09panose-1%3A2%204%205%203%205%204%206%203%202%204%3B%0A%09mso-font-charset%3A0%3B%0A%09mso-generic-font-family%3Aauto%3B%0A%09mso-font-pitch%3Avariable%3B%0A%09mso-font-signature%3A3%200%200%200%201%200%3B%7D%0A%40font-face%0A%09%7Bfont-family%3A%22E3%83%92%E3%83%A9%E3%82%AE%E3%83%8E%E8%A7%92%E3%82%B4%20Pro%20W3%22%3B%0A%09mso-font-charset%3A78%3B%0A%09mso-generic-font-family%3Aauto%3B%0A%09mso-font-pitch%3Avariable%3B%0A%09mso-font-signature%3A-536870145%202059927551%2018%200%20131085%200%3B%7D%0A%20%2F*%20Style%20Definitions%20*%2F%0A%09mso-normal%2C%20li.MsoNormal%2C%20div.MsoNormal%0A%09%7Bmso-style-unhide%3A%3B%0A%09mso-style-qformat%3Ayes%3B%0A%09mso-style-parent%3A%22%22%3B%0A%09margin%3A0cm%3B%0A%09margin-bottom%3A.0001pt%3B%0A%09mso-pagination%3Awidow-orphan%3B%0A%09font-size%3A12.0pt%3B%0A%09font-family%3A%22Times%20New%20Roman%22%3B%0A%09mso-fareast-font-family%3A%22Times%20New%20Roman%22%3B%0A%09mso-ansi-language%3AEN-US%3B%0A%09mso-fareast-language%3AEN-US%3B%7D%0A%09CorpsA%2C%20div.CorpsA%0A%09%7Bmso-style-name%3A%22Corps%20A%22%3B%0A%09mso-style-unhide%3A%3B%0A%09mso-style-parent%3A%22%22%3B%0A%09margin%3A0cm%3B%0A%09margin-bottom%3A.0001pt%3B%0A%09mso-pagination%3Awidow-orphan%3B%0A%09tab-stops%3A35.45pt%2070.85pt%20106.3pt%205.0cm%20177.15pt%20212.6pt%20248.05pt%20283.45pt%20318.9pt%20354.35pt%20389.75pt%20425.2pt%20460.65pt%3B%0A%09font-size%3A12.0pt%3B%0A%09mso-bidi-font-size%3A10.0pt%3B%0A%09font-family%3AHelvetica%3B%0A%09mso-fareast-font-family%3A%22E3%83%92%E3%83%A9%E3%82%AE%E3%83%8E%E8%A7%92%E3%82%B4%20Pro%20W3%22%3B%0A%09mso-bidi-font-family%3A%22Times%20New%20Roman%22%3B%0A%09color%3Ablack%3B%0A%09mso-ansi-language%3Afr%3B%7D%0A.MsoChpDefault%0A%09%7Bmso-style-type%3Aexport-only%3B%0A%09mso-default-props%3Ayes%3B%0A%09font-size%3A10.0pt%3B%0A%09mso-ansi-font-size%3A10.0pt%3B%0A%09mso-bidi-font-size%3A10.0pt%3B%7D%0A%40page%20WordSection1%0A%09%7Bsize%3A612.0pt%20792.0pt%3B%0A%09margin%3A70.85pt%2070.85pt%2070.85pt%2070.85pt%3B%0A%09mso-header-margin%3A36.0pt%3B%0A%09mso-footer-margin%3A36.0pt%3B%0A%09mso-paper-source%3A0%3B%7D%0Adiv.WordSection1%0A%09%7Bpage%3AWordSection1%3B%7D%0A%2D%2D%3E--&amp;amp;amp;gt;</p> <p>Site iCampus (&gt; <a href="http://icampus.uclouvain.be/claroline/course/index.php?cid=MAT1141">http://icampus.uclouvain.be/claroline/course/index.php?cid=MAT1141</a>).</p> <p>Available on the site are problems from examinations of previous years with solutions, the problems to be solved during tutorial sessions with solutions, the lecture notes, and a detailed overview of the course.</p>
Prerequisites :	Euclidean geometry : affine and euclidean space, quadrics . Differential geometry : plane and skew curves ; local theory of surfaces in 3-dimensional space.
Main themes :	Euclidean geometry : affine and euclidean space, quadrics . Differential geometry : plane and skew curves ; local theory of surfaces in 3-dimensional space.
Aims :	<p>Contribution of the course to learning outcomes in the Bachelor in Mathematics programme. By the end of this activity, students will have made progress in:</p> <ul style="list-style-type: none"> <li>-recognise and understand a basic foundation of mathematics.</li> <li>--Choose and use the basic tools of calculation to solve mathematical problems.</li> <li>--Recognise the fundamental concepts of important current mathematical theories.</li> <li>--Establish the main connections between these theories, analyse them and explain them through the use of examples.</li> <li>- identify, by use of the abstract and experimental approach specific to the exact sciences, the unifying features of different situations and experiments in mathematics or in closely related fields (probability and statistics, physics, computing).</li> <li>- show evidence of abstract thinking and of a critical spirit.</li> </ul> <p>Argue within the context of the axiomatic method Recognise the key arguments and the structure of a proof. Construct and draw up a proof independently. Evaluate the rigour of a mathematical or logical argument and identify any possible flaws in it. Distinguish between the intuition and the validity of a result and the different levels of rigorous understanding of this same result.</p> <p>Learning outcomes specific to the course. By the end of this activity, students will be able to:</p>





<b>Programmes / formations proposant cette unité d'enseignement (UE)</b>				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Mathematics	MATH1BA	7	-	
Bachelor in Physics	PHYS1BA	7	-	