

8.0 credits	45.0 h + 45.0 h	1q
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Teacher(s) :	Vitale Enrico ;
Language :	Français
Place of the course	Louvain-la-Neuve
Main themes :	Recall of fundamental notions in mathematics : numbers, sets, language; Matrix calculus and resolution of systems of algebraic equations; Vector spaces and euclidean spaces; linear maps and linear operators
Aims :	This course is an introduction to the fundamentals of linear algebra. In this basic course, students in mathematics or physics are expected to develop the following methodological skills: fluency in the basic technical language, capacity for abstraction and for using algebraic formalism in relation with intuition, accuracy in expression and ability to use various techniques of proof. More specifically, the course focuses on topics related to the solution of systems of algebraic equations of the first degree and vector space transformations and aims to develop an intuition for these topics while pointing towards applications in several directions. <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 :	Matrix calculus and systems of first order equations ; vector spaces and linear maps, diagonalisation and eigen spaces
Cycle and year of study :	> Bachelor in Mathematics > Bachelor in Physics
Faculty or entity in charge:	MATH