

6.0 credits	30.0 h + 54.0 h	2q
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Teacher(s) :	Devillers Michel (coordinator) ; Hautier Geoffroy ;
Language :	Français
Place of the course	Louvain-la-Neuve
Prerequisites :	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
Main themes :	Starting with a summary and overview of the main basic concepts from the course "General chemistry 1", this course will deal with (1) complementary notions on the quantitative treatment of chemical equilibria, (2) complements of thermodynamics : applications of the first law, thermochemistry and introduction to the second law (entropy, free enthalpy), (3) complements of electro-chemistry (electrolysis, electrical conductivity of solutions, introduction to the main analytical applications) and (4) an introduction to the study of phase equilibria (systems with one or two constituents).
Aims :	This course is the continuation of "General chemistry 1". It is aimed at providing a more detailed understanding of the concepts related to chemical equilibria, thermodynamics and electrochemistry. Particular attention is paid to the quantitative aspects of these phenomena and to the use of numerical database. The course will also introduce to the phase equilibria. The basic concepts will be illustrated with examples from the major industrial processes (electrolysis, metallurgy) or related to daily life. <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>
Faculty or entity in charge:	CHIM

Programmes / formations proposant cette unité d'enseignement (UE)				
Intitulé du programme	Sigle	Credits	Prerequis	Acquis d'apprentissage
Bachelor in Chemistry	CHIM1BA	6	LCHM1111 and LPHY1121 and LPHY1122	
Master [120] in Biochemistry and Molecular and Cell Biology	BBMC2M	6	-	
Master [60] in Biology	BIOL2M1	6	-	
Minor in Chemistry	LCHIM100I	6	-	
Bachelor in Bioengineering	BIR1BA	6	LCHM1111	