


3 credits	15.0 h	Q2
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Teacher(s)	Hafner Christian ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	Basic classes in statistics (e.g. INGE1214) and quantitative finance <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	Analysis of various risks in financial and alternative markets
Aims	<p>1 Ability to evaluate and assess quantitative risks</p> <p>----</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>
Evaluation methods	Assignments (20%) and oral exam (80%)
Teaching methods	Several practical assignments, to be solved on the computer, will be used to guideline the students throughout the class. The assignments will be evaluated.
Content	This class introduces the student to the methodology used in quantitative risk management. The topics cover basic concepts in risk management, risk measures, multivariate models, financial time series and measures of dependence. It will be focused on the statistical aspects and practical implementation of the discussed techniques.
Bibliography	<p>Les transparents se basent principalement sur</p> <ul style="list-style-type: none"> <li>• Franke, J., Haerdle, W. and Hafner, C. (2012) Statistics of Financial Markets, an Introduction, 3rd edition, New York: Springer.</li> <li>• McNeil, A.J., Frey, R. and Embrechts, P. (2005), Quantitative Risk Management: Concepts, Techniques, and Tools, Princeton UP Series in Finance.</li> </ul>
Faculty or entity in charge	LSBA

<b>Programmes containing this learning unit (UE)</b>				
Program title	Acronym	Credits	Prerequisite	Aims
Master [120] in Actuarial Science	ACTU2M	3	LFSAB1105 AND LSTAT2020 AND LACTU2010 AND LACTU2170 AND LACTU2280	
Master [120] in Statistics: General	STAT2M	3		