




5.00 credits

30.0 h

Q2

Teacher(s)	Hafner Christian ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	Basic classes in statistics (e.g. INGE1214) and quantitative finance
Main themes	Analysis of various risks in financial and alternative markets
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>1 Ability to evaluate and assess quantitative risks</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"> • Franke, J., Haerdle, W. and Hafner, C. (2012) Statistics of Financial Markets, an Introduction, 3rd edition, New York: Springer. • McNeil, A.J., Frey, R. and Embrechts, P. (2005), Quantitative Risk Management: Concepts, Techniques, and Tools, Princeton UP Series in Finance.
Faculty or entity in charge	LSBA

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Statistics: General	STAT2M	5		
Master [120] in Mathematics	MATH2M	5		
Master [120] in Actuarial Science	ACTU2M	5		
Master [120] in Mathematical Engineering	MAP2M	5		