UCL Université catholique de Louvain

LINMA2725

2012-2013

Financial mathematics

5.0 credits	30.0 h + 22.5 h	1q

Teacher(s) :	Devolder Pierre ;
Language :	Français
Place of the course	Louvain-la-Neuve
Aims :	-- Understand the basic principles of quantitative finance -- Master the techniques of stochastic calculus -- Apply stochastic calculus to& bsp;asset pricing and determination of& bsp;investment strategies *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".*
Evaluation methods :	1/5th : project at the end of the semester 4/5ths : written exam - no notes, with form
Content :	-- Intro : risk-free asset -- Part 1 : portfolio theory -- Part 2 : dynamic risk asset -- Part 3 : stochastic calculus -- Part 4 : continuous-time asset pricing -- Part 5 : optimal investment strategy
Bibliography :	Capinski / Zastawniak : Mathematics for Finance (Springer, 2003) Wiersena : Brownian Motion Calculus (Wiley, 2008)
Other infos :	Slides via iCampus
Cycle and year of study :	> Master [120] in Mathematical Engineering > Master [120] in Actuarial Science > Master [120] in Statistics: General > Master [120] in Mathematics
Faculty or entity in charge:	MAP