UCLouvain

## mlsmm2121

2021

**Derivative Securities** 

5.00 credits	30.0 h	Q1

Teacher(s)	Fox Mathilde (companyates Platten Isabelle) : Platten Isabelle :		
Teacher(s)	Fox Mathilde (compensates Platten Isabelle) ;Platten Isabelle ;		
Language :	French		
Place of the course	Mons		
Prerequisites	MGEST1219 FINANCE		
Main themes	This course provides students with a framework:  - to understand the fundamental concepts of derivative products (forward and futures, swaps, options);  - to develop the necessary skills used in valuing derivative contracts (Ito's process, risk neutral valuation);  - to understand a wide variety of issues related to risk management and investment decisions using derivatives.		
Learning outcomes	At the end of this learning unit, the student is able to:  At the end of this course, students will be able to:  - Describe and interpret the general features of basic types of derivative securities, such as forward and futures contracts, swaps, options, and basic structured products.  - Apply the No Arbitrage Principle to price derivatives in an efficient financial market.  - Price derivative securities using mathematical models and numerical methods.  - Design optimal strategies to use derivative instruments for financial risk management and for financial engineering.		
Evaluation methods	Written examination (open questions)		
Teaching methods	Lectures, flipped classroom, exercises and case studies		
Content	- Features of derivatives securities, such as forward contracts, futures, swaps and options;  - Risk neutral valuation principle;  - Pricing of derivatives securities, by mathematical models or by numerical methods;  - Implementation of hedging strategies using derivative securities.		
Inline resources	Student corner		
Bibliography	Hull, Options, Futures, and Other Derivatives (10th Edition), Pearson, 2017		
Faculty or entity in charge	CLSM		

Programmes containing this learning unit (UE)					
Program title	Acronym	Credits	Prerequisite	Learning outcomes	
Master [120] : Business Engineering	INGM2M	5		٩	
Master [60] in Management	GESM2M1	5		٩	
Master [120] in Management	GEST2M	5		٩	
Master [120] in Business Management	GENT2M	5		٩	
Master [120] in Management	GESM2M	5		٩	
Master [120] : Business Engineering	INGE2M	5		٩	