

6.00 credits

30.0 h

Q1



**This learning unit is not open to incoming exchange students!**

Teacher(s)	Claes Anouk ;Zhang Hairui ;
Language :	English
Place of the course	Bruxelles Saint-Louis
Learning outcomes	<p><b>At the end of this learning unit, the student is able to :</b></p> <p>The objective of the course is to allow students to obtain solid knowledge about different (plain vanilla) financial derivatives. They will learn to identify and define fundamental concepts in financial derivatives. Students will learn to understand the functions of the financial derivatives and will apply the financial theory during financial exercises. After having taken this course, students will be able to price forwards, futures, swaps and (plain vanilla) options.</p>
Evaluation methods	<p>Written exam:</p> <p>during an on-campus closed book exam, students will have to identify, define and explain theoretical concepts. They will also need to solve problems pricing financial derivatives during an open book exam.</p>
Teaching methods	<p>Lectures in which theoretical concepts will be explained, are illustrated with examples and exercises. Financial examples applying theoretical concepts will be demonstrated, together with financial applications in MS Excel.</p> <p>The course is taught in a hybrid mode: part of the course will be taught on campus, part of the material will be discussed in online videos. Students will also have the opportunity to ask questions during online Q&amp;R meetings.</p>
Content	<ul style="list-style-type: none"> <li>* Introducing Derivatives and Trading Strategies involving Options</li> <li>* Futures Market and Hedging with Futures</li> <li>* Determining Forwards and Futures Prices</li> <li>* Swaps: Pricing Interest Rate and Currency Swaps</li> <li>* Option Markets and Properties of Stock Options</li> <li>* Option Pricing using Binomial Trees</li> <li>* Black-Scholes-Merton Model</li> <li>* The Greeks</li> </ul>
Inline resources	<p>On the university's electronic platform the following additional information will be offered:</p> <ul style="list-style-type: none"> <li>- a copy of the slides used</li> <li>- online videos</li> <li>- the exercises that will be solved. Additional exercises will be added (partially with solutions)</li> </ul>
Bibliography	Ouvrages de références : John C. Hull, "Options, Futures and Other Derivatives, 11th Edition", Pearson/Prentice Hall, New Jersey.
Faculty or entity in charge	ESPB

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Advanced Master in Financial Risk Management (shift schedule)	GRFB2MC	6		