

5.00 credits

30.0 h

Q2



This learning unit is not being organized during this academic year.

| | |
|-----------------------------|--|
| Language : | English |
| Place of the course | Louvain-la-Neuve |
| Main themes | We will start to investigate the basic concepts in a simple binomial model in discrete time before generalizing them to general dynamic markets in discrete time. Before extending the concepts to continuous time, we will introduce the main mathematical tools of stochastic calculus. We will analyze applications to pricing of options on stocks and on interest rates via change of numeraire techniques. |
| Learning outcomes | <p>At the end of this learning unit, the student is able to :</p> <p>1 The student will be able to master financial concepts related to modern asset pricing theory by arbitrage. This will allow him to get the knowledge necessary to evaluate most prices of financial derivatives on stock and in-terest rates.</p> |
| Content | We will present the main theoretical concepts and apply them in exercises to help for a better understanding. |
| Other infos | The students should have basic knowledge in probability and statistics, mathematics, and finance. The evaluation will be an oral exam. The support is made of slides and exercises with their correc-tions. |
| Faculty or entity in charge | ECON |

| Programmes containing this learning unit (UE) | | | | |
|---|---------|---------|--------------|---|
| Program title | Acronym | Credits | Prerequisite | Learning outcomes |
| Master [120] in Economics: Econometrics | ETRI2M | 5 | |  |
| Master [60] in Economics : General | ECON2M1 | 5 | |  |
| Master [120] in Economics: General | ECON2M | 5 | |  |