

## Alternative Finance

**ECTS : 3**

### **Description du contenu de l'enseignement :**

The aim of this course is to propose an out-of-the-box perspective upon the financial markets and to explore the financial universe beyond the traditional investments like equity, bonds, currency... We will focus the course on the products and technics used at the fringe of finance including crowdfunding, peer-2-peer finance, shadow banking, Bitcoin, social and environmental impact products....

Throughout this course students will learn about alternative investment supports and alternative financing solutions. The objectives of this lecture are:

- To understand the mechanism of alternative risks: global warming, catastrophic events including on the economy, ...
- To explore new area including Environmental, Social, and Governance (ESG) Investment, cryptocurrency etc..
- To get familiar with modelling methods specific to alternative finance.

Course outline:

#### 1. Alternative finance 101

Two faces of the same coin: as investors or as issuers.

#### 2. Modelling methods for alternative finance

- Introduction to the non-Gaussian universe
- Real Option Theory
- Extreme value theory

#### 3. Crypto-currencies: an alternative financial universe

#### 4. Environmental, Social, and Governance (ESG) Investment

#### 5. Crypto-currency : an alternative financial universe.

#### 6. Alternative capital markets and Fintechs: Focus on Crowdfunding and P2P finance

#### 7. Alternative Risk Transfer

- Climate risks
- Insurance and re-insurance. Focus on CAT Bonds

#### 8. Fintech workshop (industry view)

### **Compétence à acquérir :**

Knowledge on the modelling methods specific to alternative finance.

### **Mode de contrôle des connaissances :**

Project

### **Bibliographie, lectures recommandées :**

- Alexandridis, A. K. and A. D. Zaprana, 2013: Weather Derivatives, Springer, 300 pages.
- Barrieu P., and L. Albertini, 2009: The Handbook of Insurance-Linked Securities, Wiley, 398 pages.
- Frunza, M., 2010: Carbon allowances: A new financial asset, Editions universitaires europeennes, 164 pages.
- Guthrie G., Real Options in Theory and Practice, 2009, OUP, 432 pages.

