

## Management of Credit Risk : Theory and applications

**ECTS : 6**

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

This course is an introduction to Credit Risk in its different dimensions (Default/Recovery/Transition), starting from a description of the phenomenology of Credit Risk, the different instruments subject to credit risk to the different modelling approach both for single name or portfolio exposure. Numerous concrete examples illustrate the concepts introduced and the mathematical model are studied through exercises. The aim is to cover the broad domain of credit risk from retail products (credit card, mortgages) to sovereign credit risk, looking at the existing practical issues that students would have to solve in their future employment either as Risk Managers, Traders, Asset Managers, Credit Risk Officer, Analysts, ...

A book covering the different concepts presented in class is made available and corrected exercise are also available to the students.

### **Compétence à acquérir :**

The key concepts pertaining to credit risk should be understood by students and a solid framework would allow an easier analysis of credit risk and its management in their future job.

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

A final exam mixing (i) questions on topic seen during the class and (ii) quantitative exercises to measure credit risk.

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

Credit Risk - Pricing, Measurement, and Management - Darrelle Duffie - Princeton University Press

Credit Risk Modeling - David Lando

Credit Risk - Tomasz Bielecki, Marek Rutkowski