Course unit: Corporate Finance

** Beware! Under construction. **

Course metadata

- Title in French: Finance d'entreprise
- Course code: tba
- Type: specialized course
- ECTS credits: 4
- Semester 10 (Spring)
- Teaching period: Mid-February to Mid-April
- Teaching hours: 100h
- Language of instruction: English and French
- Coordinator: tba
- Instructor(s): Amaury Schoenauer (Monte Cristo Advisory), Mehdi El Alaoui (World Bank IFC), Benoît Forgues (Rgreen), Olivier Vandooren (Sigée Finance), Lilian Lancelot (Caisse des dépôts), sitraka Forler (Post Luxembourg), Lirone Samoun (smartpush).
- *Last update 22/05/2026 by C. Pouet*

Brief description

This course unit is divided into four parts:

- ** Structured finance ** (24 hours) taught by Amaury Schoenauer,
- ** Project finance ** (24 hours) taught by Mehdi El Alaoui, Benoît Forgues and Olivier Vandooren,
- ** Workshop in corporate finance ** (24 hours) taught by Lilian Lancelot,
- ** Data Project: modeling and validation ** (20 hours) taught by Sitraka Forler and Lirone Samoun.

Learning outcomes

- Know how to build a financial model and challenge its assumptions
- Understand how these operations can allow for financing large industrial projects
- Know the advantage and drawbacks of PPPs
- Understand how bankers can manage risks using structured finance
- Know the advantages and drawbacks of structured operations
- Understanding the specificities of start-up financing and advising

Course content

Structured finance

1. Main market players and rationale for using structured finance

2. Promoters Credits
    - Understanding the Promoter's logic
    - Understanding Credit Risk
    - Assessing the risks for the banker
3. Investor Credit
    - Conceptualization
    - Leverage and Loan to Value (LTV)
    - Debt Service Cover Ratio (DSCR) and Interest Cover Ratio (ICR)
    - Slicing of Debt
4. Due diligence and points of vigilance of the banker
    - Leases and Rental Conditions
    - Valuation Report
5. Other operations
6. Perspectives on Market Finance (Securitization)

Project finance

1. The main steps of project finance
    - Tender
    - Structuring
    - Optimization
2. Financial modelling
    - The issue of circularity
    - Internal rate of return and gearing ratio
    - Case study
3. The case of renewable energy projects
    - Prices and costs of renewables
    - Bank versus funds
    - How to set the price of a project?

Workshop in corporate finance

1. Financial modelling using Excel
2. Advising start-ups (on their business model and in making them viable)
3. Projects with real start-ups

Data Project: modeling and validation

- Projects and models

1. The Bias-Variance tradeoff
2. Feature Selection
3. Feature Engineering
4. Defining a metric

- Models and applications

1. Regressions (linear, polynomial, penalized and logistic)

2. Decision trees (random forest and gradient boosting)

- Focus on Natural Language Processing (NLP)

Bibliography

You can check the availability of the books below at Centrale Méditerranée library.

1. Structured finance
    - Vernimmen, P. (2021). Finance d'entreprise. Dalloz.
2. Project finance
    - Vernimmen, P. (2021). Finance d'entreprise. Dalloz.
3. Workshop in corporate finance
    - Vernimmen, P. (2021). Finance d'entreprise. Dalloz.

From:
https://wiki.centrale-med.fr/mmefi/ -

Permanent link:
https://wiki.centrale-med.fr/mmefi/en:ddefifien2022?rev=1779457535

Last update: **2026/05/22 15:45**