S3FIN467
FINANCIAL MODELING

Number of ECTS credits : 3
Course language : English
Course leader and speaker : Dominique GEYER

EVALUATION METHODS

Assessment (Title)	Weighting in %	
Final examination	100	%

COURSE DESCRIPTION

The objective for this course is to develop the financial modeling skills used in the application of financial theory to practical problems in investment analysis, and valuation. In particular, the course will cover the application of Excel spreadsheet functions to financial analysis. Additional topics to be covered include simulation and fraud detection.

COURSE OBJECTIVES

Course objectives include

(1) Demonstrating proficiency in using financial tools to estimate the financial wealth of the company,
(2) Demonstrating proficiency in creating visual basic functions,
(3) Demonstrating proficiency in building their own financial model.

Tackled concepts: Financial model ; financial statements ; model calibration ; model forecasting

LEARNING METHODS

The course integrates a variety of didactical approaches and techniques including lectures, plenary and group discussions, group exercises, small projects and working on real life cases.

ASSIGNMENTS & ASSESSMENTS

Assessment will be based on an end-exam. Every student is required to complete an individual spreadsheet. The student should be able to understand a complex financial situation and to make reliable financial forecasts.

BIBLIOGRAPHY

Benninga Simon, Financial Modeling, MIT Press, 2014
Noro Boris, Modélisation financière avec Excel, ENI, 2018
Holden Craig, Excel Modeling in Corporate Finance, Pearson, 2014

SESSIONS

N°	Session duration	Session type	Course description
1	3h00	Lecture & cases studies & exercices	Introduction to financial modeling The aim of the session is to formulate an earnings model with the financial report of an actual company. An earning model is a representation of a company's financial position, disaggregated to a level which can be analysed based on historic results and future expectations.
2	3h00	Lecture & cases studies & exercices	Building a basic financial statement The aim of the session is to begin a very simple model to fully understand the procedures before modeling a more complex situation. So we begin with the income statement presented by function.
3	3h00	Lecture & cases studies & exercices	Converting to a intermediate tier earning model The first model of session 2 was focused on the primary assumptions of a simplistic model. Now we'll disaggregate to a lower level of granularity, and link our future earnings estimates to our defined outputs. The forecast horizon is the end of current fiscal year.
4	3h00	Lecture & cases studies & exercices	Conerting to an advanced earning model The aim of the session is to complete the intermediate model to understand the relationship between the three financial statements (balance sheet, income statement and cash flow statement). This session demonstrate how to model the balance sheet and cash flow model.
5	3h00	Lecture & cases studies & exercices	Model calibration & forecasting This session discusses how to incorporate future estimates. We consider two versions of models of the company. One version is calibrated to meet management's guidance and consensus estimates. The second version incorporates alternative opinions about the company.