

Faculty of Economic, Social and Political Sciences



ACTU3811 Financial management of insurance companies

[30h+15h exercises] 5.5 credits

Teacher(s): Céline Azizieh
Language: French
Level: Third cycle

Aims

The aim of this course is to present the basic principles of Asset and Liability management applied to insurance companies. At the end of the course, the students must know the ALM methods and understand the main ALM problems of an insurance companies

Main themes

After an introduction to term structure of interest rates and risk measure, the main tools of ALM are presented in a deterministic and a stochastic framework. In a second part, these techniques are applied to various practical problems of ALM in insurance. The theoretical part is completed with reference papers and exercises

Content and teaching methods

Content

1. The various risks of an insurance company
2. Term structure of interest rates
3. ALM tools of first generation (static deterministic analysis)
4. ALM tools of second generation (stress testing)
5. VaR and other risk measures
6. ALM tools of third generation (stochastic scenarios)
7. Economic capital
8. Solvency testing - solvency 2
9. Examples and exercises

Other credits in programs

ACTU22MS	Deuxième année du master en sciences actuarielles, à finalité spécialisée (5.5 credits)	Mandatory
-----------------	---	-----------