

5.00 credits

30.0 h

Q2

Teacher(s)	Barbarin Jérôme ;
Language :	English
Place of the course	Louvain-la-Neuve
Prerequisites	<i>The prerequisite(s) for this Teaching Unit (Unité d'enseignement – UE) for the programmes/courses that offer this Teaching Unit are specified at the end of this sheet.</i>
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
Learning outcomes	<p>At the end of this learning unit, the student is able to :</p> <p>1 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</p>
Evaluation methods	Case study
Content	<p>The following topics will be covered:</p> <ul style="list-style-type: none"> • Assets and Liabilities of an insurance company and their associated risks • ALM tools of first generation (statistic deterministic analysis) • Off-Balance sheet instruments and their uses in ALM • ALM tools of second generation (stress testing) • ALM of third generation (stochastic models) • Performance measures and Risk Measures (Value at Risk and others) • Economic capital and Regulatory Capital (Solvency II)
Bibliography	Les transparents fournis renvoient à la littérature spécialisée.
Faculty or entity in charge	LSBA

Programmes containing this learning unit (UE)				
Program title	Acronym	Credits	Prerequisite	Learning outcomes
Master [120] in Actuarial Science	ACTU2M	5	LACTU2020 AND LACTU2170	