

## Faculty of Economic, Social and Political Sciences



### ACTU2123 Non life Insurance II

[30h] 4.5 credits

**Teacher(s):** Michel Denuit  
**Language:** French  
**Level:** Second cycle

#### Aims

The aim of this course is to provide students with advanced skills in the methods of pricing of non life products. At the end of the course the students must be able to model the claim process and to establish a priori and a posteriori pricing plans.

#### Main themes

Presentation of the statistical methods for pricing and reserving in nonlife

#### Content and teaching methods

Contenu

Ruin theory

Estimation of outstanding claims reserves

credibility theory

Individual and collective models

solvency margins

Méthode

In addition to ex caethedra lessons, the students are invited to solve various problems by their own and to work on case studies.

#### Other information (prerequisite, evaluation (assessment methods), course materials recommended readings, ...)

Basic knowledge of probability and statistics (level INGE1113 and INGE1214) is necessary for this course

The course is based on the book: "Mathématiques de l'assurance non vie", Tome 2 (Denuit/Charpentier, Economica, Paris)

#### Other credits in programs

<b>ACTU21MS</b>	Première année du master en sciences actuarielles, à finalité spécialisée	(4.5 credits)	Mandatory
<b>STAT21MS/EA</b>	Première année du master en statistique, orientation générale, à finalité spécialisée (économie et assurance)	(4.5 credits)	
<b>STAT22MS/EA</b>	Deuxième année du master en statistique, orientation générale, à finalité spécialisée (économie et assurance)	(4.5 credits)	