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ACTU2140 Social security and pension funds

[30h+15h exercises] 4.5 credits

Teacher(s): Pierre Devolder

Language: French
Level: Second cycle

Aims

This course aims to familiarise students with the main principles that underpin public and private provident fund schemes (mainly social security and pension funds). A deep comparison between pay as you go and funding methods is presented. A the end of the course, the students must be able to establish the funding scheme of a pension.

Main themes

The purpose of the course is to provide students with basic skills to the funding principles of public and private pension scheme.

Content and teaching methods

- 1. Pension scheme
- 2. Elements of demography
- 3. General funding schemes
- 4. Basic concepts of social security
- 5. Fund of equilibrium
- 6. Pay as you go and defined contributions
- 7. Funding methods
- 8. Individual methods
- 9. Collective methods
- 10. Actuarial gain and loss
- 11. Accounting standards

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

The course is based on the book: "le financement des régimes de retraites" (Pierre Devolder, Economica, Paris)

Other credits in programs

ACTU21MS Première année du master en sciences actuarielles, à finalité (4.5 credits) Mandatory

spécialisée

MAP23 Troisième année du programme conduisant au grade (4.5 credits)

d'ingénieur civil en mathématiques appliquées