

Actuarial Enterprise Risk Management

LACTU 2260 – 2025/2026



The Lecturer



Eddy VANBENEDEN

Currently:

- IA|BE Qualified Actuary
- Marsh Re (previously Guy Carpenter): Head of Advisory Continental Europe, Global Leadership Team Global Analytics and Advisory
- Lead Sustainability Working Group at IA|BE
- AAE Sustainability and Climate Working Group (IA|BE representative)
- IAA Climate and Sustainability Committee (IA|BE representative)
- Board member Perils AG
- Invited Lecturer – UCLouvain

Previous experience

- Guy Carpenter: Head of Analytics Continental Europe, Global Leadership Team Global Analytics and Advisory
- St Paul Re: Senior Actuary European Underwriting
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General Information

- Course is in English or French and material is in English



- Practical information
 - Slides, Readings
 - Slides based on
 - “Enterprise Risk Management, From Incentives to Controls, second edition, James Lam, Wiley, 2014
 - Additional Insights from “Enterprise Risk Analysis for Property & Liability Insurance Companies: A Practical Guide to Standard Models and Emerging Solutions”, Different Guy Carpenter contributors, 2007
 - Regulatory texts (Solvency II directive, NBB circulars...)
 - Industry References
 - Practical examples
- The course is general, but most examples and applications will come from the (re)insurance sector

Calendar

Day	Date	Time	Auditorium	#
Friday	18/09/2026			1
Friday	25/09/2026			2
Friday	02/10/2026			3
Friday	09/10/2026			
Friday	16/10/2026			4
Friday	23/10/2026			5 – Q&A



Subject to changes

Objectives of the course

- At the end of the course, the students will:
 - have a comprehensive understanding of ERM
 - understand the risk management process: identify, analyse, measure and mitigate the risks faced by an undertaking, with a focus on (re)insurance companies
 - understand the current dynamic of risks and how different risks can interact
 - understand the governance and compliance aspects of risk management
 - make the link between different areas of the actuarial sciences
 - be able to develop a simplified economic capital model
 - understand the importance and limitation of modelling in ERM
 - have a first view on emerging risks, how emerging risks may impact the risk management process, the sustainability of a company and how actuarial modelling should approach emerging risks

Examination

Project (7/20)

- Possible topics
 - Simplified economic capital
 - Investment decisions from a risk management perspective
 - Risk management decisions
- By team of 2 students or individual

Written exam (13/20)

- Theory
- Readings (1 list of reading(s) per course)
- Applications
- Follow up questions on project

1. Introduction

- General information

2. What's ERM?

- Definition
- Examples and lessons learned

3. Risk Management in Context

- Introduction
- Lessons learned
- Concepts and Processes

4. Corporate governance

- Corporate governance – general
- Best practices
- Linking corporate governance and ERM
- Corporate governance and Solvency II
- Zoom on 4 independent control functions

4. Emerging Risks

- What are emerging risks?
- Climate and sustainability
- Zoom on sustainable finance and risk
- Casualty Cat (e.g. PFAS)
- Cyber and AI
- **Modelling of emerging risks**

5. Risk Management Applications

- Economic capital modelling
- Own Risk and Solvency Assessment (ORSA)
- Project evaluation

6. Case study

In progress!