

At Louvain-la-Neuve - 120 credits - 2 years - Day schedule - In French

ACTU2M - Introduction

Introduction

2.3

Maîtriser un socle de savoirs en sciences actuarielles et en finance mathématique lui permettant d'appréhender et de résoudre les problèmes actuels tout en développant de manière autonome les nouvelles connaissances nécessaires pour rester compétent tout au long de sa vie professionnelle.

2.4

Articuler des savoirs des différentes disciplines connexes (calcul des probabilités, statistique, droit, économie, comptabilité, fiscalité, etc.) afin de concevoir, individuellement et en équipe, des procédés de gestion de l'impact financier des risques, de les réaliser et de les communiquer aux parties prenantes.

Detailed programme by subject

CORE COURSES [64.0]

- Mandatory
- ✘ Optional
- △ Not offered in 2024-2025
- ⊖ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Year

1 2

o Mémoire au choix (15 credits)



PROFESSIONAL FOCUS [30.0]

- Mandatory
- ✂ Optional
- △ Not offered in 2024-2025
- ⊙ Not offered in 2024-2025 but offered the following year
- ⊕ Offered in 2024-2025 but not the following year
- △ ⊕ Not offered in 2024-2025 or the following year
- Activity with requisites
- 🌐 Open to incoming exchange students
- 🚫 Not open to incoming exchange students
- [FR] Teaching language (FR, EN, ES, NL, DE, ...)

Click on the course title to see detailed informations (objectives, methods, evaluation...)

Year

1 2

o Content:

| | | | |
|-------------|------------------------------|------------------|---------------------------|
| ○ LACTU2210 | Quantitative Risk Management | Christian Hafner | EN [q2] [30h] [5 Credits] |
|-------------|------------------------------|------------------|---------------------------|

| | | | | Year | |
|-------------|-----------------------------------|---------------|--|------|---|
| | | | | 1 | 2 |
| ⌘ LDATS2360 | Seminar in data management: basic | Céline Bugli | EN [q1] [15h+10h] [4 Credits] 🌐 | x | x |
| ⌘ LINFO2275 | Data mining & decision making | Marco Saerens | EN [q2] [30h+15h] [5 Credits] 🌐 > French-friendly | x | x |

⌘ **Mathématiques de la finance**

| | | | | | |
|-------------|---------------------------------------|------------------|---|---|---|
| ⌘ LMAT2470 | Processus stochastiques (statistique) | | EN [q2] [30h] [5 Credits] Δ 🌐 > English-friendly | x | x |
| ⌘ LSTAT2170 | Times series | Rainer von Sachs | EN [q2] [30h+7.5h] [5 Credits] 🌐 | | |

OPTIONAL COURSES

- Mandatory
 - ✘ Optional
 - △ Not offered in 2024-2025
 - ⊖ Not offered in 2024-2025 but offered the following year
 - ⊕
-

Course prerequisites

The **table** below lists the activities (course units, or CUs) for which there are one or more prerequisites within the programme, i.e. the programme CU for which the learning outcomes must be certified and the corresponding credits awarded by the jury before registering for that CU.

These activities are also identified **in the detailed programme**: their title is followed by a yellow square.

Prerequisites and student's annual programme

As the prerequisite is for CU registration purposes only, there are no prerequisites within a programme year. Prerequisites are defined between CUs of different years and therefore influence the order in which the student will be able to register for the programme's CUs.

In addition, when the jury validates a student's individual programme at the beginning of the year, it ensures its coherence, meaning that it may:

- require the student to combine registration in two separate CUs which it considers necessary from a pedagogical point of view.
- transform a prerequisite into a corequisite if the student is in the final year of a degree course.

For more information, please consult the [Academic Regulations and Procedures](#).

Prerequisites list

LACTU2900 "Mémoire recherche" has prerequisite(s) LACTU2010 ET LACTU2030 ET LACTU2230 ET LACTU2170

- LACTU2010 - [Property and casualty insurance actuarial science](#)
- LACTU2030 - [Life insurance actuarial science](#)
- LACTU2230 - [Health insurance actuarial science](#)
- LACTU2170 - [Financial valuation of actuarial liabilities](#)

LACTU2910 "Mémoire projet" has prerequisite(s) LACTU2010 ET LACTU2030 ET LACTU2230 ET LACTU2170

- LACTU2010 - [Property and casualty insurance actuarial science](#)
- LACTU2030 - [Life insurance actuarial science](#)
- LACTU2230 - [Health insurance actuarial science](#)
- LACTU2170 - [Financial valuation of actuarial liabilities](#)

The programme's courses and learning outcomes

For each UCLouvain training programme, a [reference framework of learning outcomes](#)



Others Bachelors of the French speaking Community of Belgium

Access based on application : access may be granted either directly or on the condition of completing additional courses of a maximum of 60 ECTS credits, or refused.

Foreign students who have completed a university education (minimum 3 years) with strong quantitative connotation and who have obtained at least 70% (or 14/20) of average for all successful university years in their home university, without the slightest failure in mathematics courses, calculation of probabilities and statistics, have the possibility to apply for admission to the program of the Master in Actuarial Science (120 ECTS).

Moreover students who wish to be admitted on the basis of a dossier are invited to consult the [criteria for the evaluation of application](#).

Admission and Enrolment Procedures for general registration

Students must draw up their individual programmes and submits it to the Jury who is responsible for accrediting prior learning and experience.

Entity

Structure entity

Denomination

Faculty

Sector

SST/SC/LSBA

(LSBA)

Faculty of Science (SC)

Sciences and Technology (SST)

