

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

Dissertation/Graduation Project : **YES** - Internship : **optional**

Activities in English: **YES** - Activities in other languages : **NO**

Activities on other sites : **YES**

Main study domain : **Sciences**

Organized by: **Faculty of Science (SC)**

Programme acronym: **ACTU2M** - Francophone Certification Framework: 7

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Learning outcomes

o Data science (10 credits)

o LACTU2110



PROFESSIONAL FOCUS [30.0]

- Mandatory
- ⊗ Optional
- △ Not offered in 2023-2024
- ⊙ Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ ⊕ Not offered in 2023-2024 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

Content:

| | | | | | |
|-------------|--|-------------------------------|--|---|---|
| ○ LACTU2210 | Quantitative Risk Management | Christian Hafner | EN [q2] [30h] [5 Credits] 🌐 > French-friendly | X | |
| ○ LACTU2220 | Asset and Liability Management | Jérôme Barbarin | EN [q2] [30h] [5 Credits] 🌐 > French-friendly | | X |
| ○ LACTU2230 | Health Insurance | Michel Denuit | FR [q2] [45h] [7 Credits] 🌐 | X | |
| ○ LACTU2240 | Stochastic Finance in Insurance | Pierre Ars Pierre Devolder | EN [q2] [30h] [5 Credits] 🌐 > French-friendly | | X |
| ○ LACTU2260 | Actuarial Enterprise Risk Management | Philippe De Longueville | EN [q2] [15h] [3 Credits] 🌐 | | X |
| ○ LACTU2270 | Aspects actuariels des normes de solvabilité et comptables | Cindy Courtois | FR [q1] [30h] [5 Credits] 🌐 | | X |

OPTIONS

- > [Cours au choix](#) [en-prog-2023-actu2m-lactu200o]
 > [Optional courses](#) [en-prog-2023-actu2m-lsc100o]

COURS AU CHOIX [21.0]

- Mandatory
- ⊗ Optional
- △ Not offered in 2023-2024
- ⊙ Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ ⊕ Not offered in 2023-2024 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...)

Students choose 21 credits of courses of which 10 credits KU Leuven or ULB courses.

Year

1 2

Content:

⊗ Data science

| | | | | | |
|-------------|--|-------------------|---------------------------------|---|---|
| ⊗ LDATS2030 | Statistique et data sciences avec R: Programmation avancée | Anouar El Ghouch | FR [q2] [15h+15h] [4 Credits] 🌐 | | X |
| ⊗ LDATS2350 | Data Mining | Robin Van Oirbeek | FR [q2] [15h+15h] [4 Credits] 🌐 | | X |
| ⊗ LDATS2360 | Seminar in data management: basic | Céline Bugli | FR [q1] [15h+10h] [4 Credits] 🌐 | X | X |



OPTIONAL COURSES

- Mandatory
- ⊗ Optional
- △ Not offered in 2023-2024
- ⊖ Not offered in 2023-2024 but offered the following year
- ⊕ Offered in 2023-2024 but not the following year
- △ ⊕ Not offered in 2023-2024 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...)

These credits are not counted within the 120 required credits.

Year


1 2

Content:

| | | | | | |
|-------------|--|---|--------------------------------------|---|---|
| ⊗ LSST1001 | IngénieursSud | Stéphanie Merle Jean-Pierre Raskin (coord.) | (FR) [q1+q2] [15h+45h] [5 Credits] ⊗ | x | x |
| ⊗ LSST1002M | Information and critical thinking - MOOC | | | | |

⌘ Cours de langue

En outre, le Jury appréciera la maîtrise de l'anglais par l'étudiant. Le cas échéant, le cours ci-dessous sera rajouté à son programme.

| | | | |
|-------------|---------------------------------------|--|--|
| ⌘ LANGL1330 | English intermediate level - 1st part | Stéphanie Brabant Estelle Dagneaux Jean-Luc Delghust Aurélie Deneumoustier Fanny Desterbecq Marie Duelz Claudine Grommersch Adrien Kefer (compensates Sandrine Mulkers) Marc Piwnik (coord.) Françoise Stas Anne-Julie Toubeau Marine Volpe | ⌘ [q1 or q2] [20h] [3 Credits]  |
|-------------|---------------------------------------|--|--|

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:

-

ACTU2M - Information

Access Requirements

Master course admission requirements are defined by the French Community of Belgium Decree of 7 November 2013 defining the higher education landscape and the academic organisation of courses.

General and specific admission requirements for this programme must be satisfied at the time of enrolling at the university.

Unless explicitly mentioned, the bachelor's, master's and licentiate degrees listed in this table or on this page are to be understood as those issued by an institution of the French, Flemish or German-speaking Community, or by the Royal Military Academy.

In the event of the divergence between the different linguistic versions of the present conditions, the French version shall prevail.

SUMMARY

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- > [Specific access requirements](#)
- > [University Bachelors](#)
- > [Non university Bachelors](#)
- > [Holders of a 2nd cycle University degree](#)
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- > [Access based on validation of professional experience](#)
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Specific access requirements

In addition to fulfilling the access conditions described below, candidates must provide proof of a sufficient command of the French language (level B1 of the Common European Framework of Reference).

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

University Bachelors

| Diploma | Special Requirements | Access | Remarks |
|--|--|-----------------------------|---|
| UCLouvain Bachelors | | | |
| Bachelor : Business Engineering | | Direct access | |
| Bachelor in Engineering | | Direct access | |
| Bachelor in Mathematics | | Direct access | |
| Bachelor in Physics | | Direct access | |
| Bachelor in Economics and Management Bachelor in Computer Science | Direct access if they have succeeded the Minor in Statistics, Actuarial Sciences and Data Sciences . | - | In some cases, the UCLouvain Enrolment Office, after reviewing their online enrolment or re-enrolment application, will ask the students concerned to provide an enrolment authorisation from the faculty/school. |
| Others Bachelors of the French speaking Community of Belgium | | | |
| Bachelor in Business Engineering Bachelor in Engineering Bachelor in Mathematics Bachelor in Physics | | Direct access | |
| Bachelors of the Dutch speaking Community of Belgium | | | |
| Bachelor in ingenieurswetenschappen, oriëntatie civieltechniek Bachelor in de wiskundige wetenschappen Bachelor in de fysische wetenschappen | | Access based on application | |

Foreign Bachelors

| | |
|---|-----------------------------|
| Bachelor in Business Engineering Bachelor in Engineering Bachelor in Mathematics Bachelor in Physics | Access based on application |
|---|-----------------------------|

Non university Bachelors

> Find out more about [links](#) to the university

Holders of a 2nd cycle University degree

| Diploma | Special Requirements | Access | Remarks |
|---|--|---------------|--|
| "Licenciés" | | | |
| "Licenciés" in Engineering, Mathematics, Physics, Statistics | | Direct access | |
| Masters | | | |
| Master in Business engineering Master in Biomedical Engineering Master in Chemical and Materials Engineering Master in Civil Engineering Master in Computer Science and Engineering Master in Electrical Engineering Master in Electro-mechanical Engineering Master in Mathematical Engineering Master in Mechanical Engineering Master in Physical Engineering Master in Mathematics Master in Physics Master in Statistics | | Direct access | |
| Master in Management Master in Economics Master in Computer Science | Direct access if they have completed the Minor in Statistics, Actuarial Sciences and Data Sciences . | - | In some cases, the UCLouvain Enrolment Office, after reviewing your online enrolment or re-enrolment application, will ask you to provide an enrolment |

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

