



## ETRI2M - Introduction

### Introduction

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#### Introduction

Organised in collaboration with the UNamur and the KU Leuven and equivalent to the MPhil programmes of foreign universities (UK, Netherlands, for example), the master in economic sciences, econometrics orientation is designed for students who envisage continuing their training with a third cycle (doctorate) and wish to receive in two years a training in research that will enable them to pursue a doctoral thesis project under ideal conditions. The courses are given in English by researchers who propose advanced questions in topics of pure economics.

THIS PROGRAMME IS GIVEN AND EVALUATED ENTIRELY IN ENGLISH.

#### Your profile

- You have good skills in mathematics and statistics and wish to contribute to the analysis of the most recent economic and social questions;
- you wish to do research and envisage continuing your education with a doctorate;
- you are interested in pure economics and wish to acquire an analytical expertise on economic matters.

#### Your future job

Our graduates will orient themselves both towards the private sector and towards the public or institutional sector, where they will hold analytical positions and participate in decision-making of all kinds: economic policy decisions or strategic corporate decisions.

#### Your programme

The master offers you

- the possibility of composing your programme à la carte to acquire expertise in a specialised area, as a function of your field of research;
- advanced training in the methodological tools of the economist; many personal works and research seminars on specialised issues;
- a preparation for writing scientific articles in your area of specialisation;
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## ETRI2M - Teaching profile

### Learning outcomes

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**Become an expert actor in economic life, capable of rigorously and critically analyzing contemporary socio-economic issues**

- 3.1. Master and critically mobilize specialized and advanced knowledge, tools, and skills in microeconomics.
- 3.2. Master and critically mobilize specialized and advanced knowledge, tools, and skills in macroeconomics.
- 3.3. Master and critically mobilize specialized and advanced knowledge, tools, and skills in econometrics.
- 3.4. Master and critically mobilize specialized and advanced knowledge, tools, and skills in quantitative methods and applied mathematics in economics.

#### **4. Develop a high-level personal scientific research project**

Design and develop a high-level personal scientific research project (thesis), implementing a rigorous methodological approach to delve into an open research question in quantitative economics, demonstrating a level of expertise that qualifies them to join a leading research team in quantitative economics.

- 4.1. Effectively use basic and specialized tools for research in quantitative economics.
- 4.2. Understand, synthesize, and discuss high-level scientific articles within the framework of research seminars.
- 4.3. Formulate an open research question in quantitative economics.
- 4.4. Report on the state of knowledge regarding this question by utilizing high-level scientific articles.
- 4.5. Conduct an in-depth personal scientific study on this research question following a rigorous methodological approach, demonstrating original scientific content (produced by the student) that meets the required level for a scientific publication in an international economics journal.
- 4.6. Write high-level scientific articles that meet the standards of a scientific article published in a recognized international economics journal.

#### **5. Communication and Interpersonal Skills**

Communicate in French and English professionally and in accordance with the requirements of scientific communication, both orally and in writing, adapting to the audience and context.

Collaborate respectfully and constructively with the various stakeholders involved in a given situation, particularly in the context of high-level research or consultancy.

- 5.1. Communicate in writing clearly and structured according to the specific communication standards of the context, adapting both content and form to the intended audience and objectives, especially for a specialist audience.
- 5.2. Communicate orally clearly and structured according to the specific communication standards of the context, adapting both content and form to the intended audience and objectives, especially for a specialist audience.
- 5.3. Present arguments effectively using technical language, tailored to the intended audience.
- 5.4. Present arguments effectively using simplified language, tailored to the intended audience.
- 5.5. Integrate and collaborate effectively within a team and with various stakeholders involved in a given situation, especially with peers on current research issues.
- 5.6. Communicate clearly, coherently, argumentatively, nuanced, and precisely in English, both orally and in writing, with ease on general topics or those related to the field of economics, adapting to the audience and context, especially in the context of high-level research or consultancy.
- 5.7. Debate and participate in reflective discussions on advanced economic issues with researchers/experts/specialists.

#### **6. Act in an International Professional Environment**

Act in an international professional environment as an academic economist, with a scientifically based approach rooted in quantitative economics, as a critical and responsible actor, having embraced a logic of continuous development.

- 6.1. Adapt to diverse and complex contexts and situations and act appropriately in a demanding and ever-changing professional world.
- 6.2. Operate in an international and multicultural environment where English is the common language.
- 6.3. Utilize your skills as an economist (specialized in quantitative economics) to engage, decide, and act autonomously and responsibly, whether pursuing a Ph.D. in a leading research team in quantitative economics or holding key strategic positions in the private, public, or institutional sectors.
- 6.4. Engage in professional practice with a theoretically and methodologically grounded approach.



Year

1 2

⌘ LECON2602

Advanced Econometrics II - Microeconometrics

William Parienté

EN [q2] [30h] [5 Credits] 

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***RESEARCH FOCUS [30.0]***

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## **OPTIONS [15.0]**

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*The student chooses three courses (15 credits) among the list Advanced Economic I or among the list Advanced Economic II or among the two lists indifferently. In the first cases, the option will be specifically mentioned in the diploma supplement issued, with the three courses chosen; in the latter case, the three chosen courses will also be repeated, but without an option title.*

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## ADVANCED ECONOMICS II

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- 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]

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**MASTER [120] IN ECONOMICS: ECONOMETRICS [ERASMUS MUNDUS  
JOINT MASTER DEGREE QEM]**

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- Mandatory
  - ✘ Optional
  - △ Not offered in 2024-2025
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Joseph Gomes

**En statistiques**

en fonction des connaissances de départ tout ou partie de :

LECGE1224	Economics and Management Statistics	Cédric Heuchenne	FR [q2] [30h+15h] [5 Credits]
LECGE1316	Econometrics	William Parienté (compensates Muriel Dejemeppe)	FR [q1] [30h+15h] [5 Credits]
LECGE1335	Data Analysis : modélisation et outils d'analyse de données	Jean-François Maystadt	FR [q2] [30h+15h] [5 Credits]
LCOPS1114	Statistics and Bases of Probability Theory	Marie Delacre (compensates Rainer von Sachs)	FR [q1] [30h+30h] [5 Credits]

**En méthodes mathématiques**

en fonction des connaissances de départ tout ou partie de :

LECGE1112	Mathematics in economy and management	Pascal Lambrechts Mathieu Van Vyve	FR [q1] [45h+30h] [6 Credits]
LECGE1230	Mathematics in Economics and Management II	Pieter Klaessens	FR [q1] [45h+30h] [6 Credits]
LECGE1333	Game theory and information in economics		EN [q2] [30h+10h] [5 Credits] Δ

en fonction des connaissances de départ, un, deux ou trois cours parmi :

LECGE1121	Economic and Social History	Emmanuel Debruyne	FR [a1] [30h] [4 Credits]
LECGE1216	Growth and Development	Mélanie Lerevire (compensates David De la Croix)	FR [q1] [30h] [5 Credits]
LECGE1217	History of Economic Theories	Luca Pensieroso	EN [q2] [30h] [5 Credits]
LECGE1228	Regional Economics		EN [q2] [30h+10h] [5 Credits]
LECGE1229			



## ETRI2M - 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

- > [General access requirements](#)
- > [Specific access requirements](#)
- > [University Bachelors](#)
- > [Non university Bachelors](#)
- > [Holders of a 2nd cycle University degree](#)
- > [Access based on validation of professional experience](#)
- > [Access based on application](#)
- > [Admission and Enrolment Procedures for general registration](#)

### Specific access requirements

**The current admission requirements are those described in the French version:** [https://uclouvain.be/prog-etri2m-cond\\_adm](https://uclouvain.be/prog-etri2m-cond_adm)

#### University Bachelors

Diploma	Special Requirements	Access	Remarks
<b>UCLouvain Bachelors</b>			
		Direct access	
#		<a href="#">Access based on application</a>	
<b>Others Bachelors of the French speaking Community of Belgium</b>			
		<a href="#">Access based on application</a>	
<b>Bachelors of the Dutch speaking Community of Belgium</b>			
		Direct access	
"		<a href="#">Access based on application</a>	
<b>Foreign Bachelors</b>			
		<a href="#">Access based on application</a>	

#### Non university Bachelors

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

#### Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
<b>"Licenciés"</b>			
		<a href="#">Access based on application</a>	
<b>Masters</b>			
		<a href="#">Access based on application</a>	

## **Access based on validation of professional experience**

> It is possible, under certain conditions, to use one's personal and professional experience to enter a university course without having the required qualifications. However, validation of prior experience does not automatically apply to all courses. Find out more about [Validation of priori experience](#).

Entry to all Masters (with the exception of Advanced Masters) can be gained through the special procedure for accrediting prior learning and experience known as VAE (validation des acquis de l'expérience).

## **Access based on application**

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.

## **Admission and Enrolment Procedures for general registration**

## Teaching method

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The programme is mainly designed as a training course for research into economics. The teaching methods vary according to objectives. The ex cathedra courses enable students to acquire basic tools for research into economics. Depending on the subject, there may also be additional practical work or reading tasks using relevant academic articles. Students learn how to communicate the results of their research orally through the dissertation seminars. The dissertation helps students to write academic articles. Finally, through Research seminars I and II, students learn how to understand and synthesize presentations which cover new research ground.

## Evaluation

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***The evaluation methods comply with the regulations concerning studies and exams. More detailed explanation of the modalities specific to each learning unit are available on their description sheets under the heading "Learning outcomes evaluation method".***

Depending on the activity, different forms of assessment are used. The assessment of work for courses will usually take the form of an examination (written or oral) and/or a piece of individual work. The assessment of participation in seminars will be on the production and oral presentation of an individual piece of work or one done by a group. Final dissertations are assessed by a board of examiners, on the basis of a written document and its oral presentation, both at the intermediary and final stages.

To obtain a student's average, the grades awarded for each course unit are weighted by their respective credits.

## Mobility and/or Internationalisation outlook

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This programme, entirely in English and designed as training for research, is aimed at an international audience. Louvain has a long tradition and an outstanding reputation in this field. The majority of the students doing a doctorate are non-Belgian.

Cooperation with KU Leuven makes the programme more attractive since advanced level subjects (all in English) are available in a wide variety of key fields in economics.

## Possible trainings at the end of the programme

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- Advanced Masters : Master in International Economics and Development (University Development Commission - Commission universitaire au développement – CUD)

Academic supervisor: [François Maniquet](#)

Jury

- Président du Jury: [William Parienté](#)
- Secrétaire du Jury: [François Maniquet](#)

Useful Contact(s)

- Responsable administrative: [Géraldine Carette](#)

