

ETRI2M

2015 - 2016

Master [120] in Economics: Econometrics

At Louvain-la-Neuve - 120 credits - 2 years - Day schedule - In englishDissertation/Graduation Project : **YES** - Internship : **NO**Activities in English: **YES** - Activities in other languages : **NO**Activities on other sites : **optional**Main study domain : **Sciences économiques et de gestion**Organized by: **Faculté des sciences économiques, sociales, politiques et de communication (ESPO)**Programme code: **etri2m** - Francophone Certification Framework: 7**Table of contents**

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ETRI2M - Introduction

Introduction

Introduction

Organised in collaboration with the UNamur and the KULeuven 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;
- an integration into international research teams for doing your thesis.

ETRI2M - Teaching profile

Learning outcomes

The second cycle training available at the Department of Economic Science is designed to train academics to understand and analyse the practical economic and social issues of their time, explain and communicate their analyses to a wide range of audiences, put their analyses in wider contexts and go on to work with specialists from other disciplines.

The precise objective of the 120 credit Master in economic sciences with econometrics is to provide the economist with advanced methodological tools and strong analytical skills. It is therefore centred on the research focus and designed for students who intend to move on to a doctorate. This two year programme will provide them with research skills so that they are as well equipped as possible to do a doctoral dissertation.

This programme corresponds to the MPhil of foreign universities (for example the UK and the Netherlands) which offers a two year second cycle research-led programme leading on to a doctorate.

From the outset, this programme requires a good level in mathematics and statistics for economists.

On successful completion of this programme, each student is able to :

1. Compétences analytiques

Dans le cadre de l'analyse économique de questions concrètes et souvent complexes, l'étudiant sera capable de

- 1.1. identifier la ou les questions pertinentes, synthétiser avec discernement les éléments essentiels à leur compréhension,
- 1.2. identifier ce qui rend un modèle utile et dans quel contexte l'utiliser, notamment en identifiant le rôle des hypothèses,
- 1.3. Identifier, au-delà des spécificités et de la diversité de problèmes concrets, les méthodes d'analyse pertinentes,
- 1.4. mener un raisonnement analytique clair et rigoureux,
- 1.5. identifier les méthodes empiriques pertinentes pour évaluer des questions théoriques et/ou pratiques,
- 1.6. collecter et sélectionner les données pertinentes, en apprécier les limites, mener une analyse statistique appropriée,
- 1.7. interpréter les résultats de l'analyse statistique et expliquer les problèmes et limites statistiques sous-jacents.

2. Autonomie intellectuelle et méthodologique

Dans le cadre de l'analyse économique de questions concrètes et souvent complexes, l'étudiant sera capable de

- 2.1. prendre conscience des interactions entre les analyses économiques et les analyses d'autres sciences humaines et sociales; y exercer un regard critique,
- 2.2. distinguer les aspects positifs et normatifs de l'économie,
- 2.3. proposer une manière originale, ancrée dans le raisonnement économique, de penser et solutionner un problème économique et social,
- 2.4. faire preuve d'une capacité à utiliser les outils de l'économie de manière innovante.

3. Connaissance approfondie dans au moins trois domaines de l'économie

3.1. L'étudiant approfondira ses connaissances dans au moins trois domaines de l'économie: macroéconomie, finance, économie du développement, économie internationale, économie du travail, économie sociale, économie industrielle, économie publique....

3.2. En finalité approfondie, l'étudiant sera formé à devenir un chercheur universitaire.

4. Compétences communicationnelles et relationnelles.

L'étudiant sera capable de

- 4.1. exprimer par écrit dans un style scientifique le fruit de son analyse économique,
- 4.2. exprimer le résultat de ses travaux oralement à un public de spécialistes,
- 4.3. faire valoir ses arguments dans un langage technique,
- 4.4. faire valoir ses arguments dans un langage vulgarisé,
- 4.5. collaborer avec ses pairs sur des questions de recherche actuelles.

5. Agir dans un environnement professionnel et international

L'étudiant, au terme de sa formation, sera

- 5.1. apte à s'adapter et agir dans un monde professionnel exigeant et mouvant,
- 5.2. capable de s'intégrer dans une équipe de recherche de pointe en économie quantitative.

6. Agir dans un environnement professionnel international

Agir dans un environnement professionnel international en tant qu'économiste universitaire, selon une approche scientifiquement fondée et ancrée dans l'économie quantitative, en acteur critique et responsable et en ayant intégré une logique de développement continu.

6.1. S'adapter à des contextes et situations divers et complexes et d'y agir avec pertinence, dans un monde professionnel exigeant et mouvant.

6.2. Evoluer dans un environnement international et multiculturel, dont l'anglais est la langue véhiculaire.

6.3. Mobiliser ses compétences d'économiste (spécialisé en économie quantitative) et s'engager, décider et agir de manière autonome et responsable pour entreprendre un projet de doctorat dans une équipe de recherche de pointe en économie quantitative ou d'assurer des postes stratégiques clés dans le secteur privé, public ou institutionnel.

6.4. S'engager dans une pratique professionnelle selon une approche universitaire fondée (d'un point de vue théorique et méthodologique) caractérisée par une prise de distance critique et doté d'une réelle capacité à peser sur l'évolution de son environnement.

6.5. Intégrer une logique d'auto-évaluation, d'apprentissage et de développement continu indispensable pour évoluer positivement dans son environnement professionnel.

Programme structure

The programme is organized by UCL through the Louvain School of Economics with the cooperation of the FUNDP in Namur and KULeuven and other Academy partners.

Structure

The 120 credit Master in Economic Sciences with Econometrics is centred on the research focus. The core subjects of the econometrics component is the same as the research focus of the general course. The 30 credits are therefore common to both the general course and the course with econometrics. The 120 credit Master with econometrics comprises :

- core subjects of 60 credits ;
- a focus of 30 credits ;
- two options of 15 credits each.

PLEASE NOTE THAT THIS PROGRAMME IS BOTH GIVEN AND ASSESSED IN ENGLISH

For a programme-type, and regardless of the focus, options/or elective courses selected, this master will carry a minimum of 120 credits divided over two annual units, corresponding to 60 credits each.

[> Main Courses](#) [en-prog-2015-etri2m-letri200t.html]

[> Research focus](#) [en-prog-2015-etri2m-letri200a]

Options courses

[> Advanced Economics](#) [en-prog-2015-etri2m-letri220o.html]

[> Topics in Economic Research](#) [en-prog-2015-etri2m-letri210o.html]

ETRI2M Detailed programme

Programme by subject

CORE COURSES [75.0]

○ Mandatory

△ Courses not taught during 2015-2016

⊕ Periodic courses taught during 2015-2016

⊗ Optional

⊖ Periodic courses not taught during 2015-2016

■ Activity with requisites

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

						Year	
						1	2
○ LETRI2800	Essay paper	N.		15 Credits		x	
○ Thesis (25 credits)							
○ LETRI2900	Thesis	N.		20 Credits			x
○ LETRI2910	Tutorial	N.	0h+6h	5 Credits			x

○ Advanced Courses in Economics (15 credits)

3 courses out of the following will be offered every year. The student who wants to replace one of this courses by another one from the list Advanced Economic Analysis II will introduce a motivated request.

⊗ LECON2701	Advanced course in economics I	Vincent Vandenberghe	15h	5 Credits	2q		x
⊗ LECON2702	Advanced course in economics II	Sébastien Van Bellegem	15h	5 Credits	1q		x
⊗ LECON2703	Advanced course in economics III	Ernesto San Martin Gutiérrez (compensates Sébastien Van Bellegem), Sébastien Van Bellegem	15h	5 Credits	1q		x
⊗ LECON2704	Advanced Course in Economics IV	François Maniquet	15h	5 Credits	2q		x
⊗ LECON2705	Advanced Course in Economics V	Rigas Oikonomou	15h	5 Credits	2q		x
⊗ LECON2706	Advanced Course in Economics VI	Sébastien Van Bellegem	15h	5 Credits	2q	x	x

○ Seminar (5 credits)

1 among :

⊗ LECON2163	Econometrics	N.		5 Credits			x	x
⊗ LECON2165	Economic Theory	N.		5 Credits			x	x
⊗ LECON2167	Séminaire économique de Louvain	N.		5 Credits			x	x

○ Quantitative Methods (15 credits)

○ LECON2500	Mathematics and Statistics for Economics	Julio Davila Muro, Sébastien Van Bellegem	30h	5 Credits	1q		x	
○ LECON2600	Dynamical Methods in Economics	Rigas Oikonomou	30h	5 Credits	1q		x	

○ Econometrics (5 credits)

Un parmi

⊗ LECON2601	Advanced Econometrics II - Time Series Econometrics	Zhengyuan Gao	30h	5 Credits	2q		x	x
⊗ LECON2602	Advanced Econometrics II - Microeconometrics	William Parienté	30h	5 Credits	2q		x	x

RESEARCH FOCUS [30.0]

○ Mandatory

△ Courses not taught during 2015-2016

⊕ Periodic courses taught during 2015-2016

⊗ Optional

⊖ Periodic courses not taught during 2015-2016

■ Activity with requisites

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

Year

1 2

○ Foundations in economics (25 credits)

○ LECON2111	Advanced Microeconomics I: Decision and Game Theory	François Maniquet	30h+6h	5 Credits	1q	x	
○ LECON2112	Advanced Microeconomics II: General Equilibrium and Mechanism Design	Julio Davila Muro	30h+6h	5 Credits	2q	x	
○ LECON2121	Advanced Macroeconomics I : Intertemporal Behavior and Business Cycles	Luca Pensieroso	30h+6h	5 Credits	1q	x	
○ LECON2122	Advanced Macroeconomics II : Growth, Dynamics and Policy	Rigas Oikonomou	30h+6h	5 Credits	2q	x	
○ LECON2131	Advanced Econometrics - UCL	Sébastien Van Bellegem	30h	5 Credits	1q	x	

⊗ Research seminar I (5 credits)

1 among :

⊗ LECON2161	Research Seminar I: Macroeconomics	David De la Croix, Fabian Kindermann (compensates David De la Croix)	30h	5 Credits	2q	x	
⊗ LECON2653	Research Seminar I : Microeconomics (M613 - UNamur)	N.	30h	5 Credits	2q	x	
⊗ LECON2603	RS I: Econometrics Workshop	Zhengyuan Gao	30h	5 Credits	2q	x	

OPTIONS [15.0]

Les étudiants choisissent trois cours (15 crédits) parmi l'offre de cours des deux options suivantes.

The student choose three courses among the list Advanced Economic I or Advanced Economic II

- > [Advanced Economics](#) [en-prog-2015-etri2m-letri220o]
 > [Topics in Economic Research](#) [en-prog-2015-etri2m-letri210o]

ADVANCED ECONOMICS [15.0]

- Mandatory
 Courses not taught during 2015-2016
 Periodic courses taught during 2015-2016
 Optional
 Periodic courses not taught during 2015-2016
 Activity with requisites

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

Year

1 2

Optional Quantitative methods

<input checked="" type="radio"/> LECON2603	RS I: Econometrics Workshop	Zhengyuan Gao	30h	5 Credits	2q	x	
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Optional International

<input checked="" type="radio"/> LECON2604	Advanced International Trade	Florian Mayneris	30h	5 Credits	1q	x	
<input checked="" type="radio"/> LECON2622	Advanced Intern Monetary Eco - KUL	N.		5 Credits		x	x
<input checked="" type="radio"/> LECON2624	Current Development in European Integration - KUL	N.		5 Credits		x	x

Optional Money and Finance

<input checked="" type="radio"/> LECON2605	Capital Markets Theory	Sophie Béreau	30h	5 Credits	2q	<input type="circle-slash"/>	x
<input checked="" type="radio"/> LECON2625	Fixed Income Securities - KUL	N.		5 Credits			x x
<input checked="" type="radio"/> LECON2654	Advanced Monetary Economics (UNamur)	N.	30h	5 Credits	2q		x x

Optional Public Economics

<input checked="" type="radio"/> LECON2607	Public Economics	Jean Hindriks	30h	5 Credits	2q		x
<input checked="" type="radio"/> LECON2069	Ethics and Social Choice	François Maniquet, Eve Ramaekers (compensates François Maniquet)	30h	5 Credits	1q	<input type="circle-slash"/>	x
<input checked="" type="radio"/> LECON2620	Advanced Environmental and Transportation - KUL	N.		5 Credits			x x

Optional Reflexive courses

<input checked="" type="radio"/> LECON2065	History of Economic Thought	Luca Pensieroso	30h	5 Credits	2q		x
<input checked="" type="radio"/> LECON2067	Critical Analysis of Market Economies	Géraldine Thiry	30h	5 Credits	1q	<input type="plus"/>	x

Optional Other fields

<input checked="" type="radio"/> LECON2608	Advanced Labour Economics	Muriel Dejemepe, Bruno Van der Linden	30h	5 Credits	1q		x
<input checked="" type="radio"/> LECON2342	Development theories	Andreaia Lemaître, Marthe Nyssens	30h	5 Credits	2q		x
<input checked="" type="radio"/> LECON2652	Microinstitutions and Markets in Developing Economies - UNamur	N.	30h	5 Credits	2q		x x

						Year	
						1	2
⊗ LECON2621	Advanced Industrial Economics - KUL	N.		5 Credits		x	x
⊗ LECON2610	Industrial Organization	Wing Man Wynne Lam, Florian Mayneris	30h	5 Credits	2q	x	x
⊗ LECON2655	Population and Family Economics	Fabio Mariani	30h	5 Credits	2q ⊕	x	
⊗ LECON2665	Political Economy and Macro Institutions in Developing Economies - UNamur	N.	30h	5 Credits	2q	x	

TOPICS IN ECONOMIC RESEARCH [15.0]

L'étudiant choisira parmi les cours d'économie de niveau approfondi enseignés à l'UCL - voir liste ci-dessous. Il pourra également suivre des cours d'économie de niveau approfondi dans d'autres universités belges (UNamur, KULeuven, USaint-Louis-Bruxelles).

Cette liste est indicative et pourra évoluer au fil du temps.

Chaque cours vaut 5 crédits.

● Mandatory

△ Courses not taught during 2015-2016

⊕ Periodic courses taught during 2015-2016

⊗ Optional

⊖ Periodic courses not taught during 2015-2016

■ Activity with requisites

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

Year

1 2

⊗ Advanced Courses in Economics at UCL

⊗ LECON2701	Advanced course in economics I	Vincent Vandenberghe	15h	5 Credits	2q	X	X	
⊗ LECON2702	Advanced course in economics II	Sébastien Van Bellegem	15h	5 Credits	1q	X	X	
⊗ LECON2703	Advanced course in economics III	Ernesto San Martin Gutiérrez (compensates Sébastien Van Bellegem), Sébastien Van Bellegem	15h	5 Credits	1q	X	X	
⊗ LECON2704	Advanced Course in Economics IV	François Maniquet	15h	5 Credits	2q	X	X	
⊗ LECON2705	Advanced Course in Economics V	Rigas Oikonomou	15h	5 Credits	2q	X	X	
⊗ LECON2706	Advanced Course in Economics VI	Sébastien Van Bellegem	15h	5 Credits	2q	X	X	
⊗	Advanced Courses in Economics at UNamur	N.		Credits		X	X	
⊗	Advanced Courses in Economics at KULeuven	N.		Credits		X	X	
⊗	Advanced Courses in Economics at USaint-Louis (BXL)	N.		Credits		X	X	
⊗	Advanced Courses in Economics at other Universities	N.		Credits		X	X	

Course prerequisites

A document entitled [en-prerequis-2015-etri2m.pdf](#) specifies the activities (course units - CU) with one or more pre-requisite(s) within the study programme, that is the CU whose learning outcomes must have been certified and for which the credits must have been granted by the jury before the student is authorised to sign up for that activity.

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

As the prerequisites are a requirement of enrolment, there are none within a year of a course.

The prerequisites are defined for the CUs for different years and therefore influence the order in which the student can enrol in the programme's CUs.

In addition, when the panel validates a student's individual programme at the beginning of the year, it ensures the consistency of the individual programme:

- It can change a prerequisite into a corequisite within a single year (to allow studies to be continued with an adequate annual load);
- It can require the student to combine enrolment in two separate CUs it considers necessary for educational purposes.

For more information, please consult [regulation of studies and exams](#).

The programme's courses and learning outcomes

For each UCL training programme, a [reference framework of learning outcomes](#) specifies the competences expected of every graduate on completion of the programme. You can see the contribution of each teaching unit to the programme's reference framework of learning outcomes in the document "In which teaching units are the competences and learning outcomes in the programme's reference framework developed and mastered by the student?"

The document is available by clicking [this link](#) after being authenticated with UCL account.

ETRI2M - Information

Admission

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

Accès sur dossier :

- Le responsable académique du programme détermine sur base du dossier l'éventuel complément de formation.
- Les candidats doivent avoir un bon niveau d'anglais avant d'entamer le master 120 en économie.

Une preuve d'aptitude à suivre des cours en anglais DOIT IMPERATIVEMENT être jointe au dossier de la demande d'admission :

- soit un relevé de note universitaire prouvant que vous avez suivis au minimum 3 cours d'économie en anglais durant votre parcours universitaire antérieur;
 - soit la preuve de la réussite d'un test d'anglais de niveau B2 du CECR : Cadre Européen Commun de Référence (Common European Framework).
- [University Bachelors](#)
 - [Non university Bachelors](#)
 - [Holders of a 2nd cycle University degree](#)
 - [Holders of a non-University 2nd cycle degree](#)
 - [Adults taking up their university training](#)
 - [Personalized access](#)

University Bachelors

Diploma	Special Requirements	Access	Remarks
UCL Bachelors			
		Direct access	
Tout bachelier	S'il a suivi la mineure en économie	On the file: direct access or access with additional training	
Others Bachelors of the French speaking Community of Belgium			
		Direct access	
Bachelors of the Dutch speaking Community of Belgium			
		Direct access	
Tout bachelier	S'il peut justifier des connaissances en économie et méthodes quantitatives	Access with additional training	
Foreign Bachelors			
		Direct access	

— Non university Bachelors

Diploma	Access	Remarks

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

— Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"			
		Direct access	
Masters			

Direct access

— Holders of a non-University 2nd cycle degree

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

— Adults taking up their university training

> See the website www.uclouvain.be/en-vae

Tous les masters peuvent être accessibles selon la procédure de valorisation des acquis de l'expérience.

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).

— Personalized access

Reminder : all Masters (apart from Advanced Masters) are also accessible on file.

Entry to all Masters (with the exception of Advanced Masters) can also be gained on submission of a special personal file.

— Admission and Enrolment Procedures for general registration

Teaching method

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

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.

Mobility and/or Internationalisation outlook

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 KUL 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

- Advanced Masters : Master in International Economics and Development (University Development Commission - Commission universitaire au développement – CUD)
- Doctoral programme training : doctorate in Economic Sciences

Certificates

Students who decide only to take a part of the proposed programme may either move to the 60 credit general Master programme or, alternatively, receive a diploma.

Contacts

Curriculum Management

Entite de la structure ECON

Acronyme	ECON
Dénomination	Ecole des Sciences économiques/Economics School of Louvain
Adresse	Place Montesquieu 3 bte L2.06.01 1348 Louvain-la-Neuve Tél 010 47 39 53 - Fax 010 47 32 90
Site web	https://www.uclouvain.be/econ.html
Secteur	Secteur des sciences humaines (SSH)
Faculté	Faculté des sciences économiques, sociales, politiques et de communication (ESPO)
Commission de programme	Ecole des Sciences économiques/Economics School of Louvain (ECON)

Academic Supervisor : [Sébastien Van Bellegem](#)

Jury:

Président du Jury : [Sébastien Van Belleghem](#)

Secrétaire du Jury : [Fabio Mariani](#)

Usefull Contacts

Responsable administrative : [Marie Gilot](#)

