

At Louvain-la-Neuve - 120 credits - 2 years - Day schedule - In frenchDissertation/Graduation Project : **YES** - Internship : **optional**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 acronym: **econ2m** - Francophone Certification Framework: 7**Table of contents**

Introduction	2
Teaching profile	3
- Learning outcomes	3
- Programme structure	5
- Detailed programme	7
- Programme by subject	7
- Course prerequisites	29
- The programme's courses and learning outcomes	29
Information	30
- Admission	30
- Supplementary classes	33
- Teaching method	35
- Evaluation	35
- Mobility and/or Internationalisation outlook	35
- Possible trainings at the end of the programme	36
- Contacts	36

ECON2M - Introduction

Introduction

Introduction

The master focuses on the general, specific, personal and openness skills. The offer of specialisations is based on the areas of expertise of the Economics School of Louvain (ESL): growth and globalisation, development, finance, economy and society, economic policy, Firm strategy & Innovation, European Business, Research oriented.

Your Profile

- You wish to benefit from a solid and versatile training that will enable you to master the foundations of economics;
- you envisage exploring certain more specialised questions relating to the economic world in greater depth;
- you wish to acquire skills that give access to high-level professional careers.

Your Future Job

Our graduates can be found in the following sectors: banking, public administrations, international institutions, auditing, departments of economic studies, industry. They hold positions in the field of finance, as expert consultants, in marketing, top management and strategy or as economists.

Your Programme

This training will give you

- a chance to develop the skills necessary for « problem solvers » to understand and analyse today's concrete economic and social questions;
- a specialisation as a function of your professional objectives and personal tastes (specialised goal) or an advanced training in economics as preparation for research (in-depth goal);
- an interdisciplinary approach thanks to the wide range of options in disciplines complementary to economics;
- high-quality instruction within the Economics School of Louvain (ESL), which brings together the UCL and the University of Namur (UNamur);
- the possibility to participate in one of our international masters, with a one-year stay at one of our partner universities (Geneva, Maastricht, Milan, Lisbon, Warsaw).

ECON2M - Teaching profile

Learning outcomes

The aim of this programme is to train academics to understand and analyse current practical economic and social questions, 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. Various components such as a dissertation, seminars, group work, study reports and work placement reports will enable students to acquire skills in writing and expression required to practise economics at a professional level. To make the link between theory and practice, work placements and outside study visits (especially in developing countries) are available. Exchanges and other kinds of collaboration with foreign universities offer students the chance of becoming familiar with another culture, improving their foreign language skills and experiencing different kinds of teaching methods.

The programme is centred on a foundation which is both solid and covers a variety of subjects. Starting from this common foundation, three different focuses are available. The research focus develops methods of analysis and research. The professional focus enables students to acquire skills in a special area depending on their chosen career. The teaching focus is mainly designed for students who are aiming for a teaching career in higher secondary education.

Key Learning Outcomes common to all ESL Masters:

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

1. Analytical skills.

When deploying and economic analysis of specific and often complex issues, the student will be able to

- 1.1. Identify the relevant issues, grasp the essential elements that are necessary to a proper understanding
- 1.2. Identify what makes an economic model useful, in which context it can be used, and be aware of the role of key assumptions underpinning that model
- 1.3 Identify, beyond the specific and diverse real-life problems, the general methods that are relevant to an economic analysis
- 1.4. Conduct a clear and rigorous analytical reasoning
- 1.5 Identify relevant empirical methods to evaluate theoretical and/or practical issues
- 1.6. Select and collect relevant data, assess their limitations, conduct appropriate statistical analysis,
- 1.7 Interpret the results of statistical/econometric analysis and explain the problems and limitations underlying these tools

2. Intellectual and methodological autonomy:

when pursuing an economic analysis of diverse and complex issues, the ESL student will

- 2.1 be aware of the interactions between economic analysis and those stemming from other human and social sciences; and be able to adopt a critical stance vis-à-vis economics in general
- 2.2 be capable to distinguish the positive and normative moments of economic reasoning
- 2.3 be able to propose an original way, grounded in economic reasoning, of solving real-life economic problems
- 2.4 demonstrate an ability to use the tools of economics in innovative ways.

3. Depth knowledge in at least three areas of the economy

- 3.1. Over his student years at ESL student will deepen his/her knowledge in at least three areas of economics: macroeconomics, finance, development economics, international economics, labour economics, social economics, industrial economics, public economics
- 3.2 Students following the research track at ESL will have acquired research skills preparing them to attend top PhD programmes in Economics
- 3.3 Students following the didactic/pedagogical track at ESL, will have acquired the skills equipping them to become teachers

4. Communication and relational skills.

- 4.1 communicate effectively in written form,
- 4.2 communicate effectively in oral form,
- 4.3 express his view in a technical language,
- 4.4 express his view in everyday language,
- 4.5 develop collaborative skills and work in a team.

5. Act in a professional and international environment.

- 5.1 adapt and act in a demanding and changing professional world,
- 5.2 work in a multicultural and international environment, where English is the lingua franca,
- 5.3 mobilize its expertise as an economist to advise, manage and run companies, associations and government agencies,
- 5.4. perform various tasks and have a real ability to influence the evolution of its environment.

1. Develop an economic line of reasoning.

Develop an economic line of reasoning: develop an accurate economic analysis of real-life and often complex problems/issues, implementing a robust scientific approach and using the necessary analytical skills.

- 1.1. Identify the pertinent issue(s) and summarise the key elements required to understand them.
- 1.2. Identify and justify what makes a model useful and which context to use it in, particularly by identifying the role of assumptions.
- 1.3. With regard to real-life issues and their unique features, identify and justify the relevant analytical methods.
- 1.4. Develop a clear and robust analytical line of thinking.

- 1.5. Identify and justify the relevant empirical methods to assess and examine theoretical and/or practical issues.
- 1.6. Collect and select the relevant data, understanding the limits and conducting an appropriate statistical analysis.
- 1.7. Interpret the results of the statistical analysis, explain the underlying statistical problems and limits and form pertinent conclusions concerning the issues studied.
- 1.8. Master and use, in a critical manner, tools from a number of branches of economics and question their underlying assumptions and standards.

2. "Problem solver"

Consider, analyse and resolve a real-life and complex socio-economic problem in a pertinent, critical and innovative manner using an approach based on economic reasoning and in interaction with other human sciences disciplines, displaying intellectual and methodological independence.

- 2.1. Identify and take into consideration the interactions between economic analyses and analyses in other human and social sciences and critically analyse them.
- 2.2. Develop a critical and unique perspective, distinguishing the positive and normative aspects of economics.
- 2.3. Suggest an original way of considering and resolving an economic and social problem based on economic reasoning.
- 2.4. Demonstrate the ability to use economic tools in an innovative manner.
- 2.5. Examine, analyse and resolve a real-life complex socio-economic problem from a global perspective: "Helicopter view and Strategic Thinking".
- 2.6. Develop a critical understanding of 21st-century economic issues and make a positive contribution to the development of all aspects of society.

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.
- 3.3. En finalité didactique, l'étudiant sera formé à devenir enseignant.

4. Communication and interpersonal skills

Communicate in French and English in a professional manner, both verbally and in writing, while adapting to the target audience and context, as well as interacting and collaborating respectfully and constructively with the different players involved in a given situation.

- 4.1. Communicate in writing, in a clear and structured manner, in accordance with the communication standards specific to the context and adapting the communication (content and form) to the target audience and intended purpose.
- 4.2. Communicate verbally, in a clear and structured manner, in accordance with the communication standards specific to the context and adapting the communication (content and form) to the target audience and intended purpose.
- 4.3. Put their arguments across pertinently using technical language, according to the audience.
- 4.4. Put their arguments across pertinently in layman's terms, according to the audience.
- 4.5. Integrate and work effectively within a team and with different stakeholders involved in a given situation (in learning and professional contexts (work placement), nationally or internationally).
- 4.6. Communicate articulately in English, verbally and in writing, in a clear, coherent and well-argued manner on general matters or issues relating to the field of economics, adapting to suit the audience and the context.

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. apte à évoluer dans un environnement international et multiculturel, dont l'anglais est la langue véhiculaire,
- 5.3. capable de mobiliser ses compétences d'économiste pour conseiller, gérer ou diriger des entreprises, associations et organismes publics,
- 5.4. polyvalent sur le plan professionnel et doté d'une réelle capacité à peser sur l'évolution de son l'environnement?

FA. S'il a suivi la finalité approfondie (recherche),

Développer et acquérir les connaissances et compétences nécessaires pour se lancer efficacement dans un projet doctoral ou pour s'orienter vers des carrières professionnelles en recherche ou en consultance de haut niveau.

- FA.1. Maîtriser et mobiliser de manière critique des connaissances et compétences spécialisées en microéconomie.
- FA.2. Maîtriser et mobiliser de manière critique des connaissances et compétences spécialisées en macroéconomie.
- FA.3. Maîtriser et mobiliser de manière critique des connaissances et compétences spécialisées en économétrie.
- FA.4. Mener une démarche scientifique aboutissant à la rédaction d'un « research paper » répondant aux exigences d'un article scientifique.

FS. S'il a suivi la finalité spécialisée,

Développer et acquérir les connaissances et compétences d'un économiste capable de participer à la prise de décision dans le secteur privé comme public, tant au niveau local qu'au niveau international.

- FS.1. Démontrer une connaissance et une réflexion critique sur l'actualité économique.
- FS.2. Intégrer dans leurs analyses des contextes plus larges et la dimension pluridisciplinaire, capable de collaborer avec des spécialistes d'autres disciplines.
- FS.3. Développer des compétences propres à une première expérience professionnelle concrète (stage) dont la mobilisation d'acquis universitaires pour agir avec pertinence en situation concrète.
- FS.4. Se forger un profil d'expert transversal et polyvalent de questions de la vie économique et sociale sachant appréhender les complexités de multiples terrains.

FD. S'il a suivi la finalité didactique,

Mobiliser les compétences nécessaires pour entamer efficacement le métier d'enseignant du secondaire supérieur, dans le domaine des sciences économiques et sociales, et pouvoir y évoluer positivement.

FD.1. Intervenir en contexte scolaire, en partenariat avec différents acteurs.

FD.2. Enseigner en situations authentiques et variées.

FD.3. Exercer un regard réflexif et se projeter dans une logique de développement continu.

Pour plus de détails, consultez l'Agrégation de l'enseignement secondaire supérieur (sociologie, sciences politiques, anthropologie).

Programme structure

This is a joint programme run by UCL and the University Faculties of Notre-Dame de la Paix in Namur (Facultés Universitaires Notre-Dame de la Paix –FUNDP) within the *Economics School of Louvain*. The core subjects and professional focus are shared, being taught in French on one campus and English on the other (Louvain-la-Neuve and Namur respectively).

There is also close cooperation with the Economics Department of KULeuven : students may study up to three subjects from the relevant programme at KULeuven without having to seek special permission to do so.

A. course structure

The 120 credit Master in Economic Science (general) is made up of

- core subjects of 60 credits relating to the area chosen;
- a focus (research, teaching or professional) of 30 credits ;
- options and/or additional subjects relating to the focus for 30 credits.

Each year of the two year course must contain 60 credits.

Core subjects (60 credits)

The core subjects are made up of three components :

- 20 credits for basic training ;
- 20 credits for optional subjects ;
- 20 credits for a dissertation.

Focuses (30 credits)

Three kinds of focus are available :

- a *research focus* leading to research;
- a *teaching focus* leading to teaching (FUNDP in Namur, UCL in Louvain-la-Neuve);
- a *professional focus* leading to economics as a career.

Students select their focus on joining the course. It is possible to change this decision, at the latest by 1 November of the first year; however this may, to a greater or lesser extent, complicate the choice of possible subjects or other activities. (cf. below)

Options and optional subjects (30 credits)

Depending on which focus they have selected, students make up their programme with one or more of the following options and/or optional subjects.

1. Professional options (30 credits)

Students who select a professional focus can choose one of the following eight professional options (each of which is worth 30 credits).

1. Cycles, Growth and Globalisation (UCL in Louvain-la-Neuve)
2. Development Economics (FUNDP in Namur)
3. Financial Economics (UCL and FUNDP in Namur)
4. Public Economics and Social Policies, Norms and Institutions. (UCL in Louvain-la-Neuve)
5. Political Economy and Social Policies (UCL in Louvain-la-Neuve)
6. Economic Policy (FUNDP in Namur)
7. Economics of Business Strategies and Innovation (UCL in Louvain-la-Neuve)
8. European Business (UCL in Louvain-la-Neuve)

NOTE: These options are also available for students who choose the **teaching focus**.

2. Advanced Economic Analysis I Option (15 credits)

Students doing the research focus are strongly recommended to take this option which is reserved for them. They will have the opportunity of applying the most advanced methods of analysis to particular sectors of the economy.

3. Extra options

These extra options are open to all students irrespective of the focus they have chosen.

Options with a professional perspective (15 credits)

These options are open to all students irrespective of their focus. Students doing a research focus will acquire basic training in an area other than their main specialisation. (30 credits ; cfr above).

Options which enhance a specialisation (15 credits)

These options enable students with a professional focus to do more in-depth training in their chosen area of specialisation; this option is therefore only open to students with the relevant specialisation.

Quantitative Methods Option (15 credits)

Students who choose this option will consolidate their training in quantitative methods.

Professional Foreign Language Options (Louvain-la-Neuve ; 15 credits)

This option offers the opportunity for in-depth study of one of three Germanic languages (English, German or Dutch).

Language and International Outlook (Namur ; 15 credits)

This option offers the opportunity for in-depth study of one or two languages (English, German, Dutch and Spanish), learning a new language (possibly in the context of a work placement) and encourages an international outlook which puts language learning into context.

4. Optional subjects

Depending on their other choices, students may make up their programme with one or several subjects from the list of optional subjects (see the detailed list).

Whatever focuses and options are chosen, the programme for this Master must total a minimum of 120 credits, spread over two years of study. This corresponds to 60 credits per year.

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.

> Tronc commun [[en-prog-2018-econ2m-lecon200t.html](#)]**Focuses**

- > **Research focus** [[en-prog-2018-econ2m-lecon200a](#)]
- > **Master [120] in Economics: General, Professional Focus** [[en-prog-2018-econ2m-lecon207s](#)]
- > **Teaching focus** [[en-prog-2018-econ2m-lecon200d](#)]

Options courses

- > **11 options de spécialisation** [[en-prog-2018-econ2m-lecon855r.html](#)]
- > **Macroéconomie : cycle et conjoncture (Site UCL - FR)** [[en-prog-2018-econ2m-lecon250o.html](#)]
- > **Macroéconomie : politiques structurelles (Site UNamur - FR)** [[en-prog-2018-econ2m-lecon251o.html](#)]
- > **Finance : Markets (Site UNamur - EN)** [[en-prog-2018-econ2m-lecon252o.html](#)]
- > **Finance : monnaie (site UCL - FR/EN)** [[en-prog-2018-econ2m-lecon259o.html](#)]
- > **Development: Poverty and Institutions (site UNamur - EN)** [[en-prog-2018-econ2m-lecon260o.html](#)]
- > **Développement : croissance et globalisation/Development : Growth and Globalization (site UCL - FR/EN)** [[en-prog-2018-econ2m-lecon261o.html](#)]
- > **Economics of Public Intervention (Site UNamur - EN)** [[en-prog-2018-econ2m-lecon255o.html](#)]
- > **Economie du travail et des ressources humaines/Labour and Human Resource Economics (Site UCL - FR/EN)** [[en-prog-2018-econ2m-lecon262o.html](#)]
- > **Economie et société (Site UCL - FR)** [[en-prog-2018-econ2m-lecon253o.html](#)]
- > **Firms' Strategies (Site UCL - EN)** [[en-prog-2018-econ2m-lecon256o.html](#)]
- > **International Economics (Site UCL - EN)** [[en-prog-2018-econ2m-lecon257o.html](#)]
- > **Advanced Economic Analysis I (Sites UCL-UNamur-KUL)** [[en-prog-2018-econ2m-lecon258o.html](#)]
- > **Cours au choix** [[en-prog-2018-econ2m-lecon876r.html](#)]
- > **Cours au choix ESL (Economics School of Louvain)** [[en-prog-2018-econ2m-lecon671o.html](#)]
- > **Cours au choix hors ESL (Economics School of Louvain)** [[en-prog-2018-econ2m-lecon889o.html](#)]
- > **Cours de langues (Site UCL)** [[en-prog-2018-econ2m-lecon893o.html](#)]
- > **Cours de langues (Site UNamur)** [[en-prog-2018-econ2m-lecon892o.html](#)]

ECON2M Detailed programme

Programme by subject

CORE COURSES [25.0]

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

Year

1 2

● Formation de base (5 credits)

Un cours d'économétrie appliquée parmi trois

⊗ LECON2031	Applied Econometrics : Time Series	Zhengyuan Gao	30h+12h	5 Credits	1q	x	x
⊗ LECON2033	Applied econometrics: Microeconometrics	Muriel Dejemepe	30h+12h	5 Credits	1q	x	x
⊗ LECON2826	Applied Econometrics - UNamur		30h+12h	5 Credits	1q	x	x

● Mémoire (20 credits)

⊗ Pour les étudiants de finalité didactique ou spécialisée

● LECON2910	Thesis			20 Credits			x
-------------	------------------------	--	--	------------	--	--	---

⊗ Pour les étudiants de la finalité approfondie

● LECON2910A	mémoire (1°partie-FA)			5 Credits	2q	x	
● LECON2910B	Mémoire (2°partie-FA)			15 Credits			x

LIST OF FOCUSES

L'étudiant choisit sa finalité à l'entrée du programme. Il peut modifier ce choix au plus tard le 1er novembre de sa première année ; cette réorientation peut impliquer des contraintes plus ou moins fortes sur les choix des cours ou activités ultérieurs.

Note :

Les 30 crédits de la finalité didactique sont suivis entièrement soit sur le site de Louvain-la-Neuve soit sur celui de Namur.

parmi :

- > [Research focus](#) [en-prog-2018-econ2m-lecon200a]
- > [Master \[120\] in Economics: General, Professional Focus](#) [en-prog-2018-econ2m-lecon207s]
- > [Teaching focus](#) [en-prog-2018-econ2m-lecon200d]

RESEARCH FOCUS [30.0]

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

Year

1 2

o Advanced microeconomics (UCL) (10 credits)

● LECON2111	Advanced Microeconomics I: Decision and Game Theory	Benoit Decerf 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

o Advanced macroeconomics (UCL) (10 credits)

● LECON2121	Advanced Macroeconomics I : Intertemporal Behavior and Business Cycles	Luca Pensieroso	30h+6h	5 Credits	1q	x	x
● LECON2122	Advanced Macroeconomics II : Growth, Dynamics and Policy	Rigas Oikonomou	30h+6h	5 Credits	2q		x

o Quantitative methods (5 credits)

● LECON2131	Advanced Econometrics - UCL	Sébastien Van Belleghem	30h	5 Credits	1q	x	x
-------------	---	-------------------------	-----	-----------	----	---	---

o Research seminar I (5 credits)

1 parmi :

⊗ LECON2161	Advanced macroeconomics III	Thomas Baudin (compensates David De la Croix) David De la Croix	30h	5 Credits	2q		x
⊗ LECON2653	Research Seminar I : Microeconomics (M613 - UNamur)		30h	5 Credits	2q	x	x
⊗ LECON2603	RS I: Econometrics Workshop	Zhengyuan Gao Ernesto San Martin Gutiérrez (compensates Zhengyuan Gao)	30h	5 Credits	2q	x	x

MASTER [120] IN ECONOMICS: GENERAL, PROFESSIONAL FOCUS
[30.0]

○ Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

Year

1 2

○ Cours de méthode (5 credits)

1 parmi 2 :

⊗ LECON2352	Methods for the evaluation of public policies	William Parienté	30h	5 Credits	2q	x	x
⊗ LECON2833	Empirical Finance - UNamu		30h	5 Credits	1q	x	x

○ Cours réflexif (5 credits)

1 parmi 3 :

⊗ LECON2421	History of Economic and Social Development	Jean-Christophe Defraigne	30h	5 Credits	1q	x	x
⊗ LECON2061	Philosophy and epistemology of the economics	Danielle Zwarthoed	30h	5 Credits	2q	x	x
⊗ LECON2907	Institutional Foundations of Markets		30h	5 Credits	2q	x	x

○ Séminaire d'analyse économique - SAE (5 credits)

1 séminaire parmi 4 :

⊗ LECON2476	Economic Analysis Seminar I - UCL	Francis Martin	30h	5 Credits	2q	x	x
⊗ LECON2416	Economic Analysis Seminar II - UCL	Vincent Vandenberghe	30h	5 Credits	2q	x	x
⊗ LECON2486	Economic Analysis Seminar III - UCL	Johannes Johnen	30h	5 Credits	1q	x	x
⊗ LECON2824	Economic Analysis Seminar IV - UNamur		30h	5 Credits	2q	x	x

○ Séminaire d'actualité - ACTU (5 credits)

1 parmi 4 :

⊗ LECON2446	Seminar on Contemporary Economic Issues I - UCL	Vincent Van Steenberghe	30h	5 Credits	2q	x	x
⊗ LECON2373	Seminar on Contemporary Economic Issues II	Vincent Vandenberghe	30h	5 Credits	2q	x	x
⊗ LECON2382	Seminar on Contemporary Economic Issues III	Bernard Delbecque	30h	5 Credits	1q	x	x
⊗ LECON2820	Seminar in Contemporary Economic Issues - UNamur		30h	5 Credits	2q	x	x

○ Activité d'apprentissage (10 credits)

L'étudiant choisit de réaliser un stage et le séminaire "économie-monde professionnel" ou de prendre 2 cours supplémentaires dans la liste des cours du bloc "finalité spécialisée"

⊗ Stage (10 credits)

○ LECON2490	Stage-Internship			5 Credits	1 + 2q	x	x
○ LECON2492	Seminar : Economics - Professional World	Bernard Hanin	30h	5 Credits	1q	x	x

TEACHING FOCUS [30.0]

IMPORTANT NOTE: In accordance with article 138 para. 4 of the decree of 7 November 2013 concerning higher education and the academic organisation of studies, teaching practice placements will not be assessed in the September session. Students are required to make every effort to successfully complete the teaching practice in the June session, subject to having to retake the year.

L'étudiant doit choisir l'entièreté des cours de la finalité didactique soit à Namur soit à Louvain-la-Neuve. Il ne peut en aucun cas mixer les activités sur deux sites.

- Mandatory
 Courses not taught during 2018-2019
 Periodic courses taught during 2018-2019
- Optional
 Periodic courses not taught during 2018-2019
 Activity with requisites

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

Year

1 2

⌘ - (30 credits)

Offerte sur le site UCL

o Matières transversales (12 credits)**o Comprendre l'adolescent en situation scolaire, gérer la relation interpersonnelle et animer le groupe classe (4 credits)**

Choisir 1 des activités suivantes. Le cours et le séminaire doivent être suivis au même quadrimestre.

⌘ LAGRE2020P	Comprendre l'adolescent en situation scolaire, Gérer la relation interpersonnelle et animer le groupe classe.	Pascale Steyns	22.5h +22.5h	4 Credits	1q	x	
⌘ LAGRE2020Q	Comprendre l'adolescent en situation scolaire, Gérer la relation interpersonnelle et animer le groupe classe.	Pascale Steyns	22.5h +22.5h	4 Credits	2q	x	

o Séminaire d'observation et d'analyse de l'institution scolaire et de son contexte (en ce compris le stage d'observation) (2 credits)

Choisir 1 des activités suivantes. Les 2 1ères séances de cours à suivre en prérequis, le séminaire et le stage d'observation de l'institution scolaire doivent être suivis au même quadri.

⌘ LAGRE2120S	Séminaire d'observation et d'analyse de l'institution scolaire et de son contexte (en ce compris le stage d'observation)	Branka Cattonar	0h+25h	2 Credits	1q	x	
⌘ LAGRE2120T	Séminaire d'observation et d'analyse de l'institution scolaire et de son contexte (en ce compris le stage d'observation)	Branka Cattonar	0h+25h	2 Credits	2q	x	

o Didactique générale et formation à l'interdisciplinarité (4 credits)

Une des activités suivantes:

⌘ LAGRE2220A	Didactique générale et formation à l'interdisciplinarité	Jean-Louis Dufays (coord.) Marc Romainville	37.5h	4 Credits	1 + 2q	x	
⌘ LAGRE2220S	Didactique générale et formation à l'interdisciplinarité	Jean-Louis Dufays (coord.) Marc Romainville	37.5h	4 Credits	2q	x	
o LAGRE2400	See specifications in french	Michel Dupuis Anne Ghysseleinckx	20h	2 Credits	2q		x

o Formation disciplinaire de base (18 credits)

o LAGES2530	Communication des savoirs scientifiques	Paul De Theux de Meylandt et Montjardin Fabienne Thomas	30h	4 Credits	2q	x	
o LAGES2804	Didactique des sciences économiques et juridiques et réflexion sur le contenu des programmes	Nathalie Monier Anne Nossent	45h	4 Credits	1q		x
o LAGES2803	Exercices de micro-enseignement et accompagnement des stages en sciences économiques	Annick Detry Anne Nossent	30h	4 Credits	1 + 2q		x

o Stage d'enseignement (6 credits)**⌘ Stage en un bloc annuel (6 credits)**

destiné aux étudiants effectuant la finalité didactique en un bloc annuel

o LAGES9001	Stage d'enseignement		60h	6 Credits	1 + 2q	x	x
-------------	----------------------	--	-----	-----------	-----------	---	---

Year

1 2

⌘ Stage sur deux blocs annuels (6 credits)*destiné aux étudiants effectuant la finalité didactique en deux blocs annuels (allègement)*

○ LAGES9002	Stage d'enseignement (1ère partie)		15h	2 Credits	1 + 2q	x	
○ LAGES9003	Stage d'enseignement (2ème partie)		45h	4 Credits	1 + 2q		x

⌘ - (30 credits)*Offerte sur le site UNamur*

○ LAGRE2209	Fondements de la neutralité (FAGR M409 - B Hespel)		20h	2 Credits		x	x
○ LFAGR2201	Education Scolaire et Société (FAGR M401 - E Charlier / M Romainville)		30h+10h	4 Credits	2q		x
○ LFAGR2402	Psychopédagogie I (M402 - UNamur)		30h+20h	4 Credits	1q		x
○ LFAGR2406	Psychopédagogie II (M406 - UNamur)		30h+10h	3 Credits	2q		x
○ LEAGR2107	Didactique des sciences économiques et des sciences de gestion I (M107 - UNamur)		30h+15h	5 Credits	1q		x
○ LEAGR2108	Stage débutant en enseignement secondaire et Analyse des pratiques (M108 - UNamur)		3h+12h	2 Credits			x
○ LEAGR2209	Stage de perfectionnement en enseignement secondaire et Analyse des pratiques (EAGR M209 R Vincent)		7h+38h	5 Credits	2q		x
○ LEAGR2204	Didactique des sciences économiques et des sciences de gestion II (M204 - UNamur)		30h	3 Credits	2q		x

○ Cours au choix (2 credits)*Un cours au choix parmi:*

⌘ LFAGR2403	Education aux nouvelles technologies de l'enseignement et de l'apprentissage (FAGR M403)		15h	2 Credits	2q	x	x
⌘ LFAGR2404	Analyse des pratiques (FAGR M404)		8h+7h	2 Credits	2q	x	x
⌘ LFCAP2003	Pédagogie des adultes		15h	2 Credits	2q	x	x
⌘ LFAGR2405	Initiation aux pratiques de tutorat (FAGR M405)		4h+11h	2 Credits	2q	x	x
⌘ LEAGR2408	Stage d'ouverture (EAGR M408)		0h+15h	2 Credits	1q	x	x
⌘ LSAGR2205	Didactique et épistémologie des mathématiques I (y compris stage) (M205 - UNamur)		15h+15h	2 Credits	1q	x	x

OPTIONS

En fonction de la finalité choisie par l'étudiant, il complètera son programme comme suit :

Selon la finalité choisie, prendre...		11 options de spécialisation (OS)	L'option Advanced Economic Analysis I (AEA)	Cours au choix (CC)
Finalité spécialisée	soit	3 OS (45 crédits)		<ul style="list-style-type: none"> • 1 OS supplémentaire (15 crédits) • 1 cours au choix parmi CC (5 crédits)
	soit	3 OS (45 crédits)		<ul style="list-style-type: none"> • 4 cours aux choix parmi CC (20 crédits)
Finalité approfondie		2 OS (30 crédits)	option AEA (15 crédits)	<ul style="list-style-type: none"> • LECON2500 Mathematics and Statistics for Economists (5 crédits) • un autre cours de l'option AEA non encore choisi (5 crédits) • 2 cours au choix parmi CC, dont 1 cours réflexif parmi LECON2065, LECON2067 et LECON2069 (10 crédits)
Finalité didactique	soit	3 OS (45 crédits)		<ul style="list-style-type: none"> • 1 OS supplémentaire (15 crédits) • 1 cours au choix parmi CC (5 crédits)
	soit	3 OS (45 crédits)		<ul style="list-style-type: none"> • 4 cours aux choix parmi CC (20 crédits)

Rem: L'étudiant peut choisir ses cours au choix parmi l'ensemble des cours repris dans les 11 options de spécialisation, ainsi que parmi les cours repris dans les 4 groupes de "Cours au choix". **Le choix doit être approuvé par le comité de gestion des programmes de la ESL (Economics School of Louvain).**

11 options de spécialisation

- > Macroéconomie : cycle et conjoncture (Site UCL - FR) [[en-prog-2018-econ2m-lecon250o](#)]
- > Macroéconomie : politiques structurelles (Site UNamur - FR) [[en-prog-2018-econ2m-lecon251o](#)]
- > Finance : Markets (Site UNamur - EN) [[en-prog-2018-econ2m-lecon252o](#)]
- > Finance : monnaie (site UCL - FR/EN) [[en-prog-2018-econ2m-lecon259o](#)]
- > Development: Poverty and Institutions (site UNamur - EN) [[en-prog-2018-econ2m-lecon260o](#)]
- > Développement : croissance et globalisation/Development : Growth and Globalization (site UCL - FR/EN) [[en-prog-2018-econ2m-lecon261o](#)]
- > Economics of Public Intervention (Site UNamur - EN) [[en-prog-2018-econ2m-lecon255o](#)]
- > Economie du travail et des ressources humaines/Labour and Human Resource Economics (Site UCL - FR/EN) [[en-prog-2018-econ2m-lecon262o](#)]
- > Economie et société (Site UCL - FR) [[en-prog-2018-econ2m-lecon253o](#)]
- > Firms' Strategies (Site UCL - EN) [[en-prog-2018-econ2m-lecon256o](#)]
- > International Economics (Site UCL - EN) [[en-prog-2018-econ2m-lecon257o](#)]
- > Advanced Economic Analysis I (Sites UCL-UNamur-KUL) [[en-prog-2018-econ2m-lecon258o](#)]

Cours au choix

- > Cours au choix ESL (Economics School of Louvain) [[en-prog-2018-econ2m-lecon671o](#)]
- > Cours au choix hors ESL (Economics School of Louvain) [[en-prog-2018-econ2m-lecon889o](#)]
- > Cours de langues (Site UCL) [[en-prog-2018-econ2m-lecon893o](#)]
- > Cours de langues (Site UNamur) [[en-prog-2018-econ2m-lecon892o](#)]

11 OPTIONS DE SPÉCIALISATION [15.0]**MACROÉCONOMIE : CYCLE ET CONJONCTURE (SITE UCL - FR) [15.0]**

L'objectif de l'option est de transmettre à l'étudiant une formation complète lui permettant de travailler dans les services d'analyse économique en banques privées, banques centrales, institutions internationales. Au terme de l'apprentissage, l'étudiant aura acquis une capacité à : fournir un discours structuré et précis concernant les mécanismes qui régissent les fluctuations de court-terme ; construire et analyser les résultats d'un modèle empirique décrivant les fluctuations des grands agrégats macroéconomiques ; faire une analyse pointue de la situation conjoncturelle d'un pays, proposer et interpréter un modèle de prévision.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
● LECON2313	Applied macroeconomics	Yuliya Rychalovska	30h	5 Credits	2q	x	x
● LECON2311	Business cycle analysis and short-term macroeconomic forecasts	Vincent Bodart	30h	5 Credits	2q	x	x
● LECON2021	Economic Fluctuations and Foundations of Macro Polici	David De la Croix	30h	5 Credits	2q	x	x

MACROÉCONOMIE : POLITIQUES STRUCTURELLES (SITE UNAMUR - FR) [15.0]

L'objectif de cette option est de sensibiliser les étudiants aux effets attendus des décisions de politique économique. L'accent porte sur les agrégats macroéconomiques et sur les effets d'incitation des dispositifs publics sur les décisions privées. Le programme combine des approches didactiques diversifiées et, reposant sur des cadres théoriques et méthodologiques différents, donne des éclairages complémentaires sur l'incidence des interventions publiques. Au terme de l'option, l'étudiant a acquis une capacité à : expliquer/anticiper les conséquences macroéconomiques des imperfections de marché, identifier et quantifier les effets macroéconomiques attendus des décisions de politique économique, définir une stratégie face à une situation macro-économique donnée (crise, déficit...), comprendre la manière dont la politique fiscale affecte les décisions d'investissement des firmes.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊙ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
⊗ LECON2862	Politique économique et finances publiques - UNamur (H Bogaert)	Chantal Kegels	30h	5 Credits	1q	x	x
⊗ LECON2861	Imperfections des marchés : conséquences macroéconomiques - UNamur (E Toulemonde)		30h	5 Credits	1q	x	x
⊗ LECON2860	Politiques économiques : exercices de simulation - UNamur (H Bogaert)		30h	5 Credits	1q	x	x
⊗ LECON2863	Politique fiscale et stratégie des entreprises (M863 - M Mignolet)		30h	5 Credits	1q ⊙	x	x

FINANCE : MARKETS (SITE UNAMUR - EN) [15.0]

L'objectif de cette option est d'étudier l'origine et la mesure des risques dans la volatilité des marchés, les effets de levier, la durée des engagements et les relations d'information asymétrique. Elle examine les moyens de diversification, de couverture et de mutualisation des risques selon les situations et les acteurs. Elle étudie le rôle de production d'information des marchés et des intermédiaires financiers. La pédagogie est mixte dans le module mais aussi à l'intérieur de chaque cours, avec une grande part d'implication des étudiants : brèves analyses de produits ou de concepts, notes ou présentations de lectures, test d'hypothèses à formuler ou à appliquer, question d'actualité à présenter en public. Au terme de l'option, les étudiants auront acquis une capacité à gérer des risques financiers, tant au niveau d'une entreprise qu'au niveau d'une banque ou d'un portefeuille.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊙ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
● LECON2331	Economics of Finance and Risk Management - UNamur	Pierre Giot	30h	5 Credits	2q	x	x
● LECON2336	Management of Banks and Financial Institutions	François Ducuroir	30h	5 Credits	2q	x	x
● LECON2831	Corporate Finance and Financial Intermediation - UNamur		30h	5 Credits	2q	x	x

FINANCE : MONNAIE (SITE UCL - FR/EN) [15.0]

L'objectif de l'option est d'initier les étudiants aux aspects macroéconomiques du rôle de la monnaie, des marchés financiers et des changes et leur permettre, à travers une exploration des théories importantes, d'applications empiriques et d'études de cas de mieux comprendre les problèmes monétaires et financiers actuels, dans leur dimension à la fois nationale et internationale. De manière à intégrer au mieux les développements théoriques et leurs applications potentielles, les étudiants seront invités, dans chacun des cours, à suivre de près l'actualité sur les thèmes couverts par les cours de l'option. Au terme de l'apprentissage, les étudiants auront acquis une capacité à pouvoir comprendre et analyser de façon rigoureuse un large éventail de phénomènes macroéconomiques d'ordre monétaire et financier.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

							Year	
							1	2
● LECON2436	Monetary and Financial Macroeconomics	Luca Pensieroso	30h	5 Credits	1q	x	x	
● LECON2335	International monetary economics	Vincent Bodart	30h	5 Credits	1q	x	x	
● LECON2834	Monetary Policy		30h	5 Credits	1q	x	x	

DEVELOPMENT: POVERTY AND INSTITUTIONS (SITE UNAMUR - EN)

[15.0]

This option consists of three courses. Overall the focus is on the microeconomic analysis of central aspects of the dynamics of development in low income countries in particular: the questions of poverty and inequality; market imperfections; state failures; the role of institutions including family and collective structures; population dynamics and environmental transformations. The theoretical approach is combined with numerous applications, exercises and case studies. Learning outcomes comprise appropriate skills to analyze and design realistic and innovative solutions for various development challenges.

○ Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
○ LECON2821	Population, Environment and Governance - UNamur		30h	5 Credits	1q	x	x
○ LECON2822	Development and Institutions: Economic Approaches - UNamur		30h	5 Credits	1q	x	x
○ LECON2825	Poverty and Livelihood Strategies - UNamur		30h	5 Credits	1q	x	x

DÉVELOPPEMENT : CROISSANCE ET GLOBALISATION/ DEVELOPMENT : GROWTH AND GLOBALIZATION (SITE UCL - FR/EN) [15.0]

This option aims at equipping students with the theoretical and empirical tools that are necessary to understand and discuss long-term growth and its determinants. The option provides an historical perspective of economic theories of development, and an analysis of macroeconomic issues that emerge in a context of increasingly globalized economies. Upon completion of this option, students will be able to critically mobilize economics of development /macroeconomics of development theories, as well as accounting and statistical tools currently used to analyse and discuss contemporary growth or development problems.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
⊗ LECON2312	Macroeconomics of the development	Frédéric Docquier	30h	5 Credits	2q	x	x
⊗ LECON2310	Topics in Economic Growth: Theory and Applications	Fabio Mariani	30h	5 Credits	2q	x	x
⊗ LECON2342	Development theories		30h	5 Credits	2q △	x	x
⊗ LECON2823	Globalization and Macroeconomic Policies (UNamur)	Romain Houssa	30h	5 Credits	2q	x	x

ECONOMICS OF PUBLIC INTERVENTION (SITE UNAMUR - EN) [15.0]

L'objectif de l'option est d'amener les étudiants à comprendre comment une politique économique est décidée (aspect political economy), quels objectifs elle tente de poursuivre (aspect normatif) et quelle évaluation on peut faire de cette intervention publique (aspect management public). Chaque année, un sujet commun couvrant les trois objectifs est abordé. Il peut s'agir par exemple de l'organisation des inscriptions scolaires, de la réforme des pensions. Les acquis de l'apprentissage comprennent : une compréhension des finalités de l'intervention publique, notamment une capacité à identifier quand l'Etat doit intervenir et quand il vaut mieux laisser faire les marchés ; une connaissance des modes d'élaboration des politiques publiques concrètes dans des démocraties modernes ; une capacité à comprendre et à contribuer à la modernisation des méthodes de management du secteur public.

○ Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
○ LECON2350	Public Management	Jean Hindriks	30h	5 Credits	2q	x	x
○ LECON2411	Norms and Public Interventionng	François Maniquet	30h	5 Credits	2q	x	x
○ LECON2904	Political Economics : Explaining Public Policies - UNamur		30h	5 Credits	2q	x	x

ECONOMIE DU TRAVAIL ET DES RESSOURCES HUMAINES/LABOUR AND HUMAN RESSOURCE ECONOMICS (SITE UCL - FR/EN) [15.0]

L'objectif de cette option est de familiariser les étudiants avec l'économie du travail moderne, un domaine de l'économie ayant une pertinence pratique directe. L'analyse classique des marchés du travail couvre la demande et l'offre de travail, le capital humain, la discrimination, la concurrence parfaite et imparfaite sur le marché du travail, le chômage. La nouvelle économie du travail met l'accent sur la gestion des ressources humaines (carrières des travailleurs, contrats de travail), les implications de l'asymétrie d'information et des flux (recherche d'emploi, taux de rotation des travailleurs, adéquation entre emplois vacants et demandeurs d'emploi). Singulièrement en Europe, comprendre le marché du travail exige de prendre en compte institutions (syndicats), normes (droit du travail) et intervention publique (fiscalité du travail, subventions salariales...). Cette option met l'accent sur l'interaction entre analyses théoriques et empiriques ainsi que sur des études de cas. Les acquis de l'apprentissage comprennent: une bonne connaissance de faits stylisés et une capacité à utiliser de façon critique les statistiques officielles ; une familiarité avec les techniques actuelles utilisées en économie empirique pour analyser les relations causales et une aptitude à combiner théories et données dans le traitement de questions plus politiques concernant l'emploi (cause du chômage ou des inégalités des revenus) ; une capacité à formuler des recommandations de politique de l'emploi fondées sur la connaissance et l'analyse. L'option prépare les étudiants à occuper des postes du privé ou du public où une bonne compréhension du marché du travail et des questions connexes est nécessaire (entreprises, conseil en gestion des ressources humaines, partenaires sociaux, départements de recherche des différents organismes privés et publics, instituts statistiques ...). Note : Cette option bilingue offre certains cours en français et d'autres en anglais.

○ Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
○ LECON2051	Labour, unemployment and Politics	Muriel Dejemeppe François Rycx Lamme d'Huisnacht (compensates Muriel Dejemeppe) François Rycx Lamme d'Huisnacht (compensates Bruno Van der Linden) Bruno Van der Linden	30h	5 Credits	2q	x	x
○ LECON2353	Labour Productivity	Vincent Vandenberghe	30h	5 Credits	2q	x	x
○ LECON2905	Personnel Economics		30h	5 Credits	2q	x	x

ECONOMIE ET SOCIÉTÉ (SITE UCL - FR) [15.0]

L'objectif de l'option est de développer l'analyse économique en dialogue avec d'autres sciences sociales. Elle examine le statut des institutions, des politiques publiques et des organisations comme éléments de régulation structurant les marchés. Divers thèmes sont abordés, pour lesquels le croisement des disciplines est particulièrement fécond, tels que les politiques sociales et économiques, le secteur non-marchand, les entreprises sociales et plus généralement, l'interdépendance entre économie et société. Plusieurs paradigmes ou courants méthodologiques sont mobilisés afin d'éveiller l'étudiant à la pluralité des regards et des outils disponibles pour comprendre les faits économiques. Au terme de l'apprentissage, les étudiants auront acquis une capacité d'analyser la diversité des institutions et des organisations composant nos économies. Les étudiants seront capables de fournir un regard pluridisciplinaire sur les faits économiques, d'intégrer leurs analyses dans des contextes sociopolitiques et de travailler avec des spécialistes d'autres disciplines.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
● LECON2351	Non profit Economics	Olivier Brolis (compensates Marthe Nyssens) Marthe Nyssens	30h	5 Credits	2q	x	x
● LTRAV2720	Comparative social protection systems	Sarah Marchal Laura Merla Yannick Vanderborght	45h	5 Credits	2q	x	x
● LECON2340	Economy and society	Isabelle Ferreras François Maniquet Géraldine Thiry (compensates François Maniquet)	30h	5 Credits	2q	x	x

FIRMS' STRATEGIES (SITE UCL - EN) [15.0]

The objective of this option is to acquaint students with traditional topics in Industrial organisation (microeconomic and game theory, structure and behaviour of firms, strategic interactions) and their application to innovation and information markets, as well as to give them an overview of the interaction between the evolution in economic thinking and the content of the EU competition and sectoral regulatory policies. There is a particular emphasis on the interaction between theoretical and empirical modelling as well as case studies. Learning outcomes comprise an ability to : Understand the specificities of innovation and information markets and the consequences on firms' strategies and public policies, Analyze potential anticompetitive cases and establish an argument using the models in industrial organisation, Explain the rationale of industry regulation and its possible consequence, Perform empirical analyses of an industry using these models and econometric tools. The option prepares students to hold positions in regulatory department of firms, in competition or regulatory authorities, in consultancy firms.

○ Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

							Year	
							1	2
⊗ LECON2370	Industrial Organization and Competition Policy	Johannes Johnen	30h	5 Credits	1q	x	x	
⊗ LECON2372	Economics of Competition Policy	Elisabeth Van Hecke	30h	5 Credits	1q	x	x	
⊗ LLSMS2041	Economics of Innovation (in English)	Paul Belleflamme	30h	5 Credits	1q	x	x	
⊗ LECON2864	Regulation: Theory and Practice		30h	5 Credits	1q	x	x	

INTERNATIONAL ECONOMICS (SITE UCL - EN) [15.0]

The objective of this option is to give students a solid grasp of international economics and to ensure that they can use partial and general equilibrium techniques to understand a range of economic issues in international trade and geographical economics. There is a particular emphasis on the interaction between theoretical and empirical modelling. Learning outcomes comprise: a good knowledge of facts relating to international trade and of the role and functioning of the World Trade Organization and multi-lateral trade negotiations (Uruguay, Doha,...); the role of trade and fiscal policies in a global economy and the strategic aspects involved; an understanding of the determinants (eg. agglomeration forces) of interregional and international GDP level and growth disparities.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
⊗ LECON2314	Economic Geography	Olivier Finance	30h	5 Credits	2q	x	x
⊗ LECON2041	International Trade	Gonzague Vannoorenberghe	30h	5 Credits	2q	x	x
⊗ LECON2042	Globalization, firms and trade	Gonzague Vannoorenberghe	30h	5 Credits	2q	x	x
⊗ LECON2865	Trade Policy and International Cooperation - UNamur		30h	5 Credits	2q	x	x

ADVANCED ECONOMIC ANALYSIS I (SITES UCL-UNAMUR-KUL) [15.0]

L'option « Advanced Economic Analysis I » est réservée aux étudiants de la finalité approfondie, et leur est fortement recommandée. Elle offre la possibilité d'appliquer à des champs particuliers de l'économie les méthodes d'analyse les plus avancées.

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊙ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

Year

1 2

⊗ Cours avancés ESL (Economic School of Louvain)

⊗ LECON2342	Development theories		30h	5 Credits	2q △		x
⊗ LECON2600	Dynamical Methods in Economics	Rigas Oikonomou	30h	5 Credits	1q		x
⊗ LECON2601	Advanced Econometrics II - Time Series Econometrics	Zhengyuan Gao	30h	5 Credits	2q		x
⊗ LECON2602	Advanced Econometrics II - Microeconometrics	William Parienté	30h	5 Credits	2q		x
⊗ LECON2604	Advanced International Trade	Angelos Theodorakopoulos Malik Çürük	30h	5 Credits	1q		x
⊗ LECON2605	Capital Markets Theory	Olivier Scaillet	30h	5 Credits	2q △ ⊕		x
⊗ LECON2607	Public Economics	Jean Hindriks	30h	5 Credits	2q		x
⊗ LECON2608	Advanced Labour Economics	Muriel Dejemeppe Bruno Van der Linden Bruno Van der Linden (compensates Muriel Dejemeppe)	30h	5 Credits	2q		x
⊗ LECON2609	Game Theory	Vincent Vannetelbosch	30h	5 Credits	2q		x
⊗ LECON2610	Industrial Organization	Johannes Johnen	30h	5 Credits	2q		x
⊗ LECON2652	Advanced development Economics (M652 - UNamur)		30h	5 Credits	2q		x
⊗ LECON2655	Population and Family Economics	Fabio Mariani	30h	5 Credits	2q ⊙		x x
⊗ LECON2654	Advanced Monetary Economics - UNamur	Romain Houssa Yuliya Rychalovska	30h	5 Credits	2q		x x
⊗ LECON2374	Firm-Level analysis of labour and related issues		30h	5 Credits	2q △		x x

⊗ Cours avancés KUL

Offre de cours avancés sur le site de la KUL (Leuven)

⊗ LECON2620	Advanced Environmental and Transportation - KUL			5 Credits			x x
⊗ LECON2621	Advanced Industrial Economics - KUL			5 Credits			x x
⊗ LECON2622	Advanced Intern Monetary Eco - KUL			5 Credits			x x
⊗ LECON2623	Corporate Finance - KUL			5 Credits			x x
⊗ LECON2624	Current Development in European Integration - KUL			5 Credits			x x
⊗ LECON2625	Fixed Income Securities - KUL			5 Credits			x x
⊗ LECON2627	The Empirics of Financial Market - KUL		30h	5 Credits			x x

COURS AU CHOIX [15.0]

L'étudiant peut choisir ses cours au choix parmi l'ensemble des cours repris dans les 11 options de spécialisation, ainsi que parmi les cours repris dans les 4 groupes ci-dessous.

COURS AU CHOIX ESL (ECONOMICS SCHOOL OF LOUVAIN)

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊙ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
⊗ LECON2065	History of Economic Thought	Luca Pensieroso	30h	5 Credits	1q	x	x
⊗ LECON2067	Critical Analysis of Market Economies	Philippe Roman	30h	5 Credits	2q ⊙	x	x
⊗ LESPO2103	Environment and Global Economy	Thierry Bréchet Philippe Roman (compensates Thierry Bréchet)	30h	5 Credits	2q	x	x
⊗ LESPO2104	Seminar on management of environmental questions	Thierry Bréchet	30h	5 Credits	1q	x	x
⊗ LECON2740	Ethique de l'économie et des affaires - UNamur (L de BRIEY)		30h	5 Credits	2q	x	x
⊗ LECON2500	Mathematics and Statistics for Economics	Nezar Bennala (compensates Sébastien Van Bellegem) Julio Davila Muro Sébastien Van Bellegem	30h	5 Credits	1q	x	x
⊗ LECON2011	Interdependencies and Strategic Behavior		30h+12h	5 Credits	2q △	x	x
⊗ LECON2069	Ethics and Social Choice	François Maniquet	30h	5 Credits	1q ⊕	x	x

COURS AU CHOIX HORS ESL (ECONOMICS SCHOOL OF LOUVAIN)

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
⊗ LSTAT2110	Data Analysis	Johan Segers	22.5h +7.5h	5 Credits	1q	x	x
⊗ LSTAT2130	Introduction to Bayesian statistics	Philippe Lambert	15h+5h	5 Credits	2q	x	x
⊗ LSTAT2140	Non parametric statistics	Eugen Pircalabelu	15h+5h	5 Credits	1q	x	x
⊗ LSTAT2150	Nonparametric statistics: smoothings methods	Rainer von Sachs	15h+5h	5 Credits	1q	x	x
⊗ LSTAT2170	Times series	Rainer von Sachs	22.5h +7.5h	5 Credits	2q	x	x
⊗ LSTAT2100	Discrete data analysis.	Anouar El Ghouch	30h+7.5h	5 Credits	2q	x	x
⊗ LSTAT2200	Survey and Sampling	Marie-Paule Kestemont	15h+5h	5 Credits	2q	x	x
⊗ LLSMS2225	Derivatives pricing	Frédéric Vrins	30h	5 Credits	1q	x	x
⊗ LLSMS2012	Macro Finance	Leonardo Iania Konstantijn Maes	30h	5 Credits	2q	x	x
⊗ LLSMS2226	Credit and interest rate risk	Frédéric Vrins	30h	5 Credits	2q	x	x
⊗ LLSMS2013	Investments (in English)	Jean-Yves Gnabo Leonardo Iania Anh Nguyen	30h	5 Credits	1q	x	x

COURS DE LANGUES (SITE UCL)

● Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

						Year	
						1	2
⊗ LMULT2411	Economic, legal, social and political issues in German-speaking countries	Dany Etienne	30h+15h	5 Credits	1q	x	x
⊗ LMULT2414	Oral business communication techniques in German 1	Hedwig Reuter	15h+15h	5 Credits	1q	x	x
⊗ LMULT2223	Reading comprehension and vocabulary extension: economic and commercial texts in English	Sylvie De Cock	22.5h	5 Credits	1q	x	x
⊗ LMULT2421	Economic, legal, social and political issues in English-speaking countries	Paul Arblaster	30h+15h	5 Credits	1q	x	x
⊗ LMULT2424	Oral business communication techniques in English (Part 1)	Sylvie De Cock	15h+15h	5 Credits	1q	x	x
⊗ LMULT2233	Reading comprehension and vocabulary extension: economic and commercial texts in Dutch	Marlène Vrancx	22.5h	5 Credits	1q	x	x
⊗ LMULT2431	Economic, legal, social and political issues in Dutch-speaking countries	Philippe Hilgsmann	30h+15h	5 Credits	1q	x	x
⊗ LMULT2434	Oral business communication techniques in Dutch (Part 1)	Anne Goedgezelschap	15h+15h	5 Credits	1q	x	x
⊗ LMULT2213	Reading comprehension and vocabulary extension: economic and commercial texts in German	Marie-Luce Collard	22.5h	5 Credits	1q	x	x

COURS DE LANGUES (SITE UNAMUR)

L'étudiant peut choisir maximum 2 cours parmi l'offre suivante : EELVM411 Anglais perfectionnement (speaking) EELVM412 Anglais perfectionnement (writing) EELVM413 Anglais avancé EELVM421 Néerlandais I : perfectionnement EELVM422 Néerlandais II : perfectionnement EELVM431 Allemand I EELVM432 Allemand II EELVM441 Espagnol I EELVM442 ESPAGNOL II

Course prerequisites

A document entitled (nb: [not available](#) for this programme econ2m) specifies the activities (course units - CU) with one or more prerequisite(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 UCLouvain 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?"*

ECON2M - Information

Admission

General (<https://uclouvain.be/en/study/inscriptions/admission-requirements-master-s-degree.html>) and specific admission requirements for this program must be satisfied at the time of enrolling at the university.

SUMMARY

- > [Specific Admission Requirements](#)
- > [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](#)
- > [Access on the file](#)
- > [Admission and Enrolment Procedures for general registration](#)

Specific Admission Requirements

DIRECT ENTRY

Holders of a first university degree including at least the following subjects :

- Microeconomics (5 credits)
- Macroeconomics (5 credits)
- Statistics in Economics and Management II (5 credits)
- Mathematics in Economics and Management II (5 credits)
- Econometrics (5 credits)
- -1("1" appears as such in the French version) from : Public Economics (5 credits), Industrial Economics (5 credits), European Economics (5 credits), Game Theory and Information Economics (5 credits)

Individually tailored access

It is up to the academic coordinator to agree both equivalences between subjects and any additional components. If the total of prerequisite subjects is more than 15 credits, entry to the Master programme is conditional on the successful completion of a preparatory year and gaining a maximum of 60 credits

University Bachelors

Diploma	Special Requirements	Access	Remarks
UCLouvain Bachelors			
Bachelor in Business Engineering		Direct Access	
Bachelor in Economics and Management		Direct Access	
Others Bachelors of the French speaking Community of Belgium			
		Direct Access	
Bachelors of the Dutch speaking Community of Belgium			
		Direct Access	
Foreign Bachelors			
			Based on application: accepted, conditional on further training, or refusal

Non university Bachelors

> Find out more about [links](https://uclouvain.be/fr/etudier/passerelles) (<https://uclouvain.be/fr/etudier/passerelles>) to the university

Holders of a 2nd cycle University degree

Diploma	Special Requirements	Access	Remarks
"Licenciés"			
Licence en sciences économiques		Direct Access	Pré-requis : Mathematics and Statistics for Economists Econométrie appliquée
Licence en sciences économiques appliquées Ingénieur de gestion		Based on application: accepted, conditional on further training, or refusal	Pré-requis : Microéconomie du tronc commun Macroéconomie du tronc commun
		Based on application: accepted, conditional on further training, or refusal	
Masters			
Master [60] in Economics : General		Direct Access	Accès direct à la 2ème année de la Finalité spécialisée
Master [60] in Economics : General		Access with additional training	Accès à la Finalité Approfondie moyennant compléments de formation Pré-requis à la FA : Mathematics and Statistics for Economists Econométrie appliquée
Code inconnu:iag2m Master [120] in Business Engineering		Access with additional training	Accès à la 2ème année de la Finalité Spécialisée moyennant compléments de formation Pré-requis à la FS : Microéconomie du tronc commun Macroéconomie du tronc commun
Master [120] in Business Engineering		Access with additional training	Accès à la Finalité approfondie moyennant compléments de formation Pré-requis à la FA : Micro du tronc commun Macro du tronc commun Mathematics and Statistics for Economists Econométrie appliquée
Autres masters		Direct Access	
		Based on application: accepted, conditional on further training, or refusal	Compléments de formation pouvant aller jusqu'à une inscription à l'année préparatoire au master en économie (ECON1PM)

Holders of a non-University 2nd cycle degree

Adults taking up their university training

> See the website [Valorisation des acquis de l'expérience](https://uclouvain.be/fr/etudier/vae) (https://uclouvain.be/fr/etudier/vae)

It is possible to gain admission to all masters courses via the validation of professional experience procedure.

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 on the file

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

Supplementary classes

To enrol for this Masters, the student must have a good command of certain subjects. If this is not the case, they must add preparatory modules to their Master's programme.

○ Mandatory

△ Courses not taught during 2018-2019

⊕ Periodic courses taught during 2018-2019

⊗ Optional

⊖ Periodic courses not taught during 2018-2019

■ Activity with requisites

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

⊗ Cours de base

⊗ En économie

en fonction des connaissances de départ, au moins un cours parmi :

⊗ LECGE1212	Macroeconomics	Etienne De Callatay Fabio Mariani	45h+15h	5 Credits	1q
⊗ LECGE1222	Microeconomics	Tanguy Isaac Louis Larue François Maniquet	45h+15h	5 Credits	2q
⊗ LECGE1115	Political Economics <i>au Q1 avec P. Dehez</i>	Pierre Dehez Rigas Oikonomou	45h+15h	5 Credits	1q

⊗ En statistiques

en fonction des connaissances de départ tout ou partie de :

⊗ LECGE1224	Economics and Management Statistics	Cédric Heuchenne	30h+15h	5 Credits	2q
⊗ LECGE1316	Econometrics	Muriel Dejemeppe	30h+15h	5 Credits	1q
⊗ LECGE1335	Applied Econometrics	Nezar Bennala (compensates Zhengyuan Gao) Sébastien Van Bellegem	30h+15h	5 Credits	2q
⊗ LCOPS1114	Statistics and Bases of Probability Theory	Marie-Paule Kestemont	30h+30h	5 Credits	1q

⊗ En méthodes mathématiques

en fonction des connaissances de départ tout ou partie de :

⊗ LECGE1112	Mathematics in economy and management	Pascal Lambrechts Pascal Lambrechts (compensates Mathieu Van Vyve) Mathieu Van Vyve	45h+30h	6 Credits	1q
⊗ LECGE1230	Mathematics in Economics and Management II	Julio Davila Muro	45h+30h	6 Credits	1q
⊗ LECGE1333	Game theory and information in economics	Julio Davila Muro	30h+10h	5 Credits	2q

⊗ Cours spécifiques

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

⊗ LECGE1121	Economic and Social History <i>au Q1 chez JM Yante</i>	Emmanuel Debruyne	30h	4 Credits	1q
⊗ LECGE1216	Growth and Development	David De la Croix	30h	5 Credits	1q
⊗ LECGE1217	History of Economic Theories	Luca Pensieroso	30h	5 Credits	2q
⊗ LECGE1228	Regional Economics	Olivier Finance	30h+10h	5 Credits	2q
⊗ LECGE1312	Public Economics	Jean Hindriks	30h+15h	5 Credits	2q
⊗ LECGE1330	Industrial organization	Paul Belleflamme	30h+15h	5 Credits	1q
⊗ LECGE1331	European Economy	Gonzague Vannoorenberghe	30h+15h	5 Credits	2q

⌘ Séminaire

en fonction des connaissances de départ, un parmi :

⌘ LECGE1226	Seminar-workshop: Labour Economics	Muriel Dejemeppe	30h+10h	5 Credits	2q
⌘ LECGE1227	Seminar-workshop: International Economics and European Integration	Vincent Bodart	30h+10h	5 Credits	2q
⌘ LECGE1232	Seminar: Development and Poverty	William Parienté	30h+10h	5 Credits	2q
⌘ LECGE1323	Seminar-Workshop: Industrial Economics and Competition Policy	Elisabeth Van Hecke	30h+10h	5 Credits	2q
⌘ LECGE1324	Seminar-workshop: Social Economy and Transition	Marthe Nyssens Philippe Roman (compensates Marthe Nyssens)	30h+10h	5 Credits	2q
⌘ LECGE1334	Seminar International Economy : trade	Gonzague Vannoorenberghe	30h+10h	5 Credits	2q

Teaching method

- The programme is made up of three components : (i) a solid and wide-ranging base of core subjects, which provides high-level training for general economists ; (ii) the selection of a focus which allows the training to become personalized and include professional perspectives; (iii) the selection of options which introduce related disciplines such as law, management, demography, sociology and statistics linked to the chosen specialisation). This combination of core subjects/focus/related options enables future economist to place their analyses in a wider context and to go on to work with specialists in other fields.
- The teaching methods are designed to train economists who are able to explain and communicate their analyses to different audiences. Through seminars, group work, study reports or work placement reports and writing a dissertation, students develop skills in writing and expression which are vital for practising economics at a professional level.
- To reinforce students' ability to make the link between theory and practice, work placements and external study visits (particularly in developing countries) are available.

Evaluation

The evaluation methods comply with the regulations concerning studies and exams (<https://uclouvain.be/fr/decouvrir/rgee.html>). 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 done 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. Work placements are assessed by a supervisor and also by means of a written work placement report. 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

The objective of the programme is to train economists with an outward looking world view and who are used to international contacts.

o Since the core subjects are divided with each subject being taught both in French and English, students may if they wish follow a programme entirely in English. This allows foreign students to attend; it enables Belgian students to acquire an excellent command of professional English alongside students of different nationalities. It is also possible to take courses in professional German, English or Dutch.

o Students who wish to study for an extended period at a foreign university, either in Europe or further afield, may take part in the Erasmus exchange programme. Students are required to follow courses worth a total of 30 credits at the host university. (This replaces the work placement and the four optional subjects).

Possible destinations for students at UCL (Louvain-la-Neuve):

<https://uclouvain.be/en/faculties/espo/esl/destinations.html> (<https://uclouvain.be/en/faculties/espo/esl/destinations.html>)

- Germany (Mannheim)
- Latin America (Lima in Peru ; Sao Paulo in Brazil)*
- Austria (Vienna)
- Canada (Laval)
- Spain (Barcelona, Madrid)
- Italy (Bologna, Rome, Venice)
- Netherlands (Amsterdam, Tilburg)
- Portugal (Lisbon)
- United Kingdom (Glasgow)
- Czech Republic (Prague)

* Exchange visits to Latin America may, exceptionally, last one year. In this case, the study programme must comprise 30 credits for courses in the host university, 10 for a work placement and 20 for the dissertation. Further details on this can be obtained from the Student Office at the Economics School of Louvain (ESL).

Possible destinations for students at FUNDP (Namur):

- Germany (Hanover, Karlsruhe)
- Belgium (Antwerp, Ghent)
- Spain (Alicante, Barcelona, Madrid, Zaragoza)
- Finland (Tampere)
- France (Dijon, Grenoble)
- Hungary (Budapest)
- Italy (Bologna, Bolzano, Milan)
- Norway (Trondheim)
- Netherlands (Maastricht, Rotterdam)
- Poland (Poznan, Warsaw)

- United Kingdom (Glasgow)
- Switzerland (Geneva, Fribourg, Lausanne)
- Turkey (Marmara)

o Joint programmes (leading to a joint degree) are available with the following institutions^[1] (https://uclouvain.be/vi-prog-2008-econ2m.html#_ftn1) :

- Warsaw University (Poland)
- Bocconi University (Milan, Italy)
- Maastricht University (Netherlands)
- University of Geneva (Switzerland)
- University of Paris I / Sorbonne (France)
- Clemson University (USA)

On graduation, (having studied for one year in the partner university) students will receive a joint degree.

o The research focus, entirely in English, usually attracts a high number of foreign students, the majority of whom then go on to do a PhD at Louvain. Cooperation with KUL means that advanced level subjects (all in English) are available in a wide variety of different areas in economics.

[1] (https://uclouvain.be/vi-prog-2008-econ2m.html#_ftnref1) For further details, please contact the ESL office - Géraldine Carette.

Possible trainings at the end of the programme

- Advanced Master : Master in International Economics and Development (University Development Commission - Commission universitaire au développement – CUD): <http://www.fundp.ac.be/facultes/eco/enseignement/desdev/>
- Doctoral Programme :
 Doctorate in Economic Science : <https://uclouvain.be/fr/facultes/espo/faire-un-doctorat-en-sciences-economiques-et-de-gestion.html>
<https://uclouvain.be/fr/facultes/espo/faire-un-doctorat-en-sciences-economiques-et-de-gestion.html>

Contacts

Attention, you are currently reading an archived page: below contact informations were for program study 2018-2019 only. To get current contact informations please got to [current program study site](#).

Curriculum Management

Entity	
Structure entity	SSH/ESPO/ECON
Denomination	(ECON) (https://uclouvain.be/repertoires/entites/econ)
Faculty	Faculty of Economic, Social and Political Sciences and Communication (ESPO) (https://uclouvain.be/repertoires/entites/espo)
Sector	Human Sciences (SSH) (https://uclouvain.be/repertoires/entites/ssh)
Acronym	ECON
Postal address	Place Montesquieu 3 - bte L2.06.01 1348 Louvain-la-Neuve Tel: +32 (0) 10 47 39 53 - Fax: +32 (0) 10 47 32 90 http://www.uclouvain.be/econ.html
Web site	http://www.uclouvain.be/econ.html
Other academic Supervisor(s)	
	<ul style="list-style-type: none"> • Jean Hindriks • Fabio Mariani
Jury	
	<ul style="list-style-type: none"> • Président: Mathias Hungerbuhler (Tel: +32(0)81/72.48.61) • Fabio Mariani
Useful Contact(s)	
	<ul style="list-style-type: none"> • Marie Gilot

Attention, you are currently reading an archived page: below contact informations were for program study 2018-2019 only. To get current contact informations please got to [current program study site](#).

