

**MATH2M1**

2013 - 2014

Master [60] in Mathematics

**At Louvain-la-Neuve - 60 credits - 1 year - Day schedule - In french**Dissertation/Graduation Project : **YES** - Internship : **NO**Activities in English: **YES** - Activities in other languages : **NO**Activities on other sites : **NO**Main study domain : **Sciences**Organized by: **Faculté des sciences (SC)**Programme code: **math2m1** - European Qualifications Framework (EQF): 7**Table of contents**

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## MATH2M1 - Introduction

## MATH2M1 - Admission

***For the specific conditions of this program : refer to the French version***

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

## MATH2M1 - Information

### Learning outcomes

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### Teaching method

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The courses enable students to acquire mathematical tools. They will mostly be accompanied by work which forms the main part of the assessment. Individual work, group work and work in the library will be encouraged. The "research courses" are directly linked to the most advanced research areas in the Department.

### Evaluation

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Students will mainly be assessed on the basis of individual work (e.g. reading, consultation of databases and bibliographic references, writing monographs and reports, presentation of seminars, dissertation and work placement). Where necessary, students will also be assessed on how much they have learned from lectures. As far as possible, there will be continuous assessment, including regular 'open book examinations'. Certain activities will not be given a precise mark but will be officially certified. Assessment of the dissertation is in two stages : a 'progress report' at the end of the first year of the Master and the final presentation.

### Mobility and/or Internationalisation outlook

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### Possible trainings at the end of the programme

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The only university training directly accessible from the 60 credit Master is teacher training (30 credits). It is also possible, in one year, to gain the 120 credit Master in Mathematics. This gives access to doctorates and Advanced Masters. Students' attention is drawn to the fact that this progression will require the submission of two dissertations and may require up to 15 credits for additional courses.

## MATH2M1 - Contacts

### Curriculum Managment

Entite de la structure MATH

Acronyme	<b>MATH</b>
Dénomination	Ecole de mathématique
Adresse	Chemin du Cyclotron, 2 bte L7.01.02 1348 Louvain-la-Neuve Tél 010 47 31 52 - Fax 010 47 25 30
Site web	<a href="https://www.uclouvain.be/math">https://www.uclouvain.be/math</a>
Secteur	Secteur des sciences et technologies (SST)
Faculté	Faculté des sciences (SC)
Commission de programme	Ecole de mathématique (MATH)

### Jury

Président : **Luc Haine**  
Secrétaire : **Tom Claeys**

### Usefull Contacts

Secrétaire de l'Ecole de mathématique : **Roseline Van Dyck**

## MATH2M1 - Detailed programme

### Programme structure

The programme comprises core subjects of 30 credits and optional subjects (30 credits).

Core study

> [Core courses](#) [ en-prog-2013-math2m1-lmath210t.html ]

> [Cours au choix](#) [ en-prog-2013-math2m1-lmath320o.html ]

### Programme by subject

### Core courses [20.0]

● Mandatory

△ Courses not taught during 2013-2014

⊕ Periodic courses taught during 2013-2014

⊗ Optional

⊖ Periodic courses not taught during 2013-2014

‡ Two years course

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

● LMAT2998	Mémoire	N.		18 Credits	
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#### ● *Philosophy (2 credits)*

Two credits to choose between

2 credits to choose between

⊗ LSC2001	Introduction to contemporary philosophy	Nathalie Frogneux	30h	2 Credits	2q △
⊗ LSC2220	Philosophy of science	Alexandre Guay	30h	2 Credits	2q
⊗ LFILO2003E	Ethics in the Sciences and technics (sem)	N.		2 Credits	

## Cours au choix [40.0]

● Mandatory

△ Courses not taught during 2013-2014

⊕ Periodic courses taught during 2013-2014

⊗ Optional

⊖ Periodic courses not taught during 2013-2014

⊞ Two years course

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

⊗ LPHY2111	<a href="#">Introduction à la dynamique non linéaire</a>	Jean Bricmont	30h+15h	5 Credits	1q
⊗ LMAT2120	<a href="#">Galois theory and groups representations</a>	Pierre-Emmanuel Caprace, Jean-Pierre Tignol	45h+15h	5 Credits	2q
⊗ LMAT2130	<a href="#">Partial differential equations : Poisson and Laplace equations</a>	Augusto Ponce, Jean Van Schaftingen	30h+30h	5 Credits	1q
⊗ LMAT2140	<a href="#">Algebraic topology</a>	Pedro Dos Santos Santana Forte Vaz, Pascal Lambrechts	45h	5 Credits	2q
⊗ LMAT2150	<a href="#">Category theory I and foundations of mathematics</a>	Marino Gran, Enrico Vitale	45h	5 Credits	2q
⊗ LMAT2430	<a href="#">Lie theory and Riemannien geometry</a>	Pierre Bieliavsky	30h+15h	5 Credits	

