UCLouvain

## **Imat2920**

2018

## Advanced topics in mathematics 2

| 6 credits | 30.0 h | Q2 |
|-----------|--------|----|

| Teacher(s)                  | Monteil Antonin ;  |  |  |  |  |
|-----------------------------|--|--|--|--|--|
| Language :                  | English  |  |  |  |  |
| Place of the course         | Louvain-la-Neuve   |  |  |  |  |
| Main themes                 | The topic considered varies from year to year depending on the research interests of the course instructor.  |  |  |  |  |
| Aims                        | Contribution of the course to learning outcomes in the Master in Mathematics programme. By the end of this activity, students will have made progress in:  - Show evidence of independent learning.  - Analyse a mathematical problem and suggest appropriate tools for studying it in depth.  - Begin a research project thanks to a deeper knowledge of one or more fields and their problematic issues in current mathematics. He will have made progress in:  Develop in an independent way his mathematical intuition by anticipating the expected results (formulating conjectures) and by verifying their consistency with already existing results.  Ask relevant and lucid questions on an advanced mathematical topic in an independent manner.  Learning outcomes specific to the course.  The course aims to initiate research in the field under consideration. Specific learning outcomes vary depending on the field.   The contribution of this Teaching Unit to the development and command of the skills and learning outcomes of the programme(s) can be accessed at the end of this sheet, in the section entitled "Programmes/courses offering this Teaching Unit". |  |  |  |  |
| Evaluation methods          | The course is taught through lectures. During sessions, students are asked to give their contribution in the form of questions or of presentations of parts of the course as previously established by the teacher.  |  |  |  |  |
| Teaching methods            | The course is taught through lectures. During sessions, students are asked to give their contribution in the form of questions or of presentations of parts of the course as previously established by the teacher.  |  |  |  |  |
| Content                     | This activity consists in introducing one or more advanced subjects in mathematics.  The topic considered varies from year to year depending on the research interests of the course instructor.   |  |  |  |  |
| Faculty or entity in charge | MATH   |  |  |  |  |

| Programmes containing this learning unit (UE) |         |         |              |      |  |  |
|---|---------|---------|--------------|------|--|--|
| Program title                                 | Acronym | Credits | Prerequisite | Aims |  |  |
| Master [120] in Mathematics                   | MATH2M  | 6       |              | ٩    |  |  |