GHENT UNIVERSITY

## Study Programme

Academic year 2024-2025

## Faculty of Sciences

## Exchange Programme in Mathematics (master's level)

## Language of instruction: English

Programme version 9

## General Courses

[^0]|  | Course |  | CRDT | Ref | MT1 | on |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | C004549 | Advanced Topics in Group Theory <br> Tom De Medts -- Department of Mathematics: Algebra and Geometry | 6 |  |  | (A:2) ${ }^{\text {d }}$ | 165 |
| 2 | C002678 | Statistical Inference <br> Oliver Dukes -- Department of Applied Mathematics and Computer Science | 6 |  |  | A:2 | 165 |
| 3 | C 002950 | Survival Analysis <br> Els Goetghebeur -- Department of Applied Mathematics and Computer Science | 5 |  |  | A:2 | 150 |
| 4 | C004413 | Causal Machine Learning <br> Stijn Vansteelandt -- Department of Applied Mathematics and Computer Science | 6 |  |  | A:2 | 180 |
| 5 | C004547 | Logic II <br> Andreas Weiermann -- Department of Mathematics: Analysis, Logic and Discrete | $\begin{gathered} 6 \\ \text { te Mathe } \end{gathered}$ | atics |  | A:2 | 165 |
| 6 | C 003668 | Quantum Computing <br> Frank Verstraete -- Department of Physics and Astronomy | 6 |  |  | A:2 | 180 |
| 7 | C 003758 | Machine Learning <br> Yvan Saeys -- Department of Applied Mathematics and Computer Science | 6 |  |  | A:1 | 180 |
| 8 | C004109 | Functional Analysis Jasson Vindas Diaz -- Department of Mathematics: Analysis, Logic and Discrete | 6 <br> Mathen |  |  | $A: 1^{\text {a }}$ | 180 |
| 9 | C 003080 | Programming <br> Peter Dawyndt -- Department of Applied Mathematics and Computer Science | 5 | UKV |  | C:1 | 150 |
| 10 | C002337 | Finite Geometry <br> Bart De Bruyn -- Department of Mathematics: Algebra and Geometry | 6 |  |  | $(\mathrm{A}: 2)^{\text {d }}$ | 165 |
| 11 | C003013 | Linear Algebraic Groups <br> Tom De Medts -- Department of Mathematics: Algebra and Geometry | 6 |  |  | A:2 | 165 |
| 12 | C004109 | Functional Analysis Jasson Vindas Diaz -- Department of Mathematics: Analysis, Logic and Discrete | 6 <br> Mathen |  |  | $A: 1^{\text {a }}$ | 180 |
| 13 | C003824 | Analytic Number Theory [en, nl] Jasson Vindas Diaz -- Department of Mathematics: Analysis, Logic and Discrete | 6 <br> Mathe |  |  | A:2 | 165 |
| 14 | C000802 | Partial Differential Equations <br> Michael Ruzhansky -- Department of Mathematics: Analysis, Logic and Discrete | 6 <br> Mathem |  |  | A:1 | 165 |
| 15 | C003549 | Analysis of High Dimensional Data <br> Lieven Clement -- Department of Applied Mathematics and Computer Science | 5 |  |  | A:1 | 150 |
| 16 | C004550 | Measure Theory [en, nl] <br> Andreas Weiermann -- Department of Mathematics: Analysis, Logic and Discrete | 6 <br> e Mathe | matics |  | $(\mathrm{A}: 1)^{\text {d }}$ | 165 |
| 17 | C004451 | General Relativity <br> Archisman Ghosh -- Department of Physics and Astronomy | 6 |  |  | A:1 | 180 |
| 18 | C004506 | Quantum Field Theory <br> Thomas Mertens -- Department of Physics and Astronomy | 6 |  |  | A:1 | 180 |


| 19 C003711 | Computational Challenges in Bioinformatics <br> Peter Dawyndt -- Department of Applied Mathematics and Computer Science | 6 | A:2 | 180 |
| :--- | :--- | :--- | :--- | :--- |
| 20 C003401 | Statistical Genomics <br> Lieven Clement -- Department of Applied Mathematics and Computer Science | 5 | A:1 | 150 |
| 21 C003242 | Research Project | 0 | A:1, C:J, B:2 | 0 |

## Teaching

When a course is not taught (solely) in the programme's language of instruction, the effectively used languages are indicated in square brackets following the cours name, using the following ISO codes:

| bg: Bulgarian | de: German | es: Spanish | ja: Japanese | pl: Polish | sh: Kroatian/Serbian | zh: Chinese |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| cs: Czech | el: Greek | fr: French | nl: Dutch | pt: Portuguese | sl: Slovene |  |
| da: Danish | en: English | it: Italian | no: Norwegian | ru: Russian | sv: Swedish |  |

## Semester

Semesters are indicated by their number (1 or 2); semester 3 represents the summer period and J indicates a course spanning semesters 1 and 2 .
When a capital letter precedes a semester number, the course has multiple offerings. The letter indicates the offering concerned.
When a semester is shown in brackets, the course in not offered this year in the specific offering
The offering frequency and first year of offering are indicated by the following codes:
a: bi-annually
c: annually, from 2025-2026
b: tri-annually
d: bi-annually, from 2025-2026
e: tri-annually, from 2025-2026
f: annually, from 2026-2027
g: bi-annually, from 2026-2027
h: tri-annually, from 2026-2027
: annually, from 2027-2028
j: bi-annually, from 2027-2028
k: tri-annually, from 2027-2028


[^0]:    The exchange programme contains a preferred list of English courses taught at UGent of the Master of Science in Mathematics. Most of the courses in the main programme are taught in Dutch; in such cases, English course material and guidance can sometimes be provided. Internships are not possible for incoming mathematics Erasmus students.
    Tips for completing your Learning Agreement:

    - Please check the departmental rules for incoming students.
    - A minimum number of 20 ECTS per semester (or 40 ECTS per year) should be chosen from the mathematics programme.
    - Short or long term (up to 1 year) research projects can be chosen. Students should have an agreement with a promoter at the faculty of Sciences (UGent) prior to sending their learning agreement, and include the letter of acceptance with their application.

