Connecting to the forefront of pure mathematics and its applications

The Master’s specialisation in Algebra and Topology strongly focuses on research developments in pure mathematics. It introduces students to a broad range of techniques and concepts that play a central role in modern mathematics. In addition to providing a strong theoretical basis, the programme offers excellent opportunities for a further specialisation focusing on applications of pure mathematics or on interactions with other fields.

Why study this specialisation at Radboud University?
• We will introduce you to top-notch international research.
• The Mathematics department at Radboud University is known and respected for its high-quality theoretical research.
• We offer a large number of subjects, covering a broad spectrum in this field. You can benefit from closely related Mathematics Master’s specialisations.
• With the national Mastermath programme, you can follow the best mathematics courses in the Netherlands, regardless of the university that offers them.
• Teaching takes place in a stimulating, collegial setting with small groups. Staff members are approachable and you’ll get plenty of one-on-one time with your thesis supervisor.

change perspective

Radboud University
Programme outline (2 years, 120 EC)
The programme of this specialisation consists of:
• Compulsory courses (15 EC)
• Major electives (15 EC)
• Minor electives (24 EC)
• Free mathematical electives (16 EC)
• Professional preparation (1 EC)
• Philosophy (3 EC)
• Free electives (6 EC)
• Master’s thesis (40 EC)

Courses
Below you can find an overview of the compulsory courses and some examples of electives. Please have a look at the online prospectus (see ‘More information’) for more detailed information.

Compulsory courses
• Differential Geometry or Algebraic Topology 1 (6 EC)
• Algebraic Geometry 1 (6 EC) or Riemann Surfaces (6 EC) or Elliptic Curves (6 EC)
• Master Seminar (3 EC)

Examples of specialisation electives
• Algebraic Number theory (8 EC)
• Semisimple Lie Algebras (8 EC)
• Computer Algebra (6 EC)
• Coxeter Groups (6 EC)
• Commutative Algebra (8 EC)

Mastermath programme
Radboud University takes part in the Dutch Master’s Degree Programme in Mathematics, or Mastermath for short. This is a national programme: every semester the Departments of Mathematics of Dutch universities organise joint courses in mathematics. These joint courses offer you the highest quality of instruction and allow you to meet and interact with mathematics students and researchers from universities all over the country. If you wish to pursue a PhD programme after completing your Master’s programme, Mastermath increases the range of options open to you.

Master’s thesis
With your Master’s thesis, you further specialise in a mathematical topic that matches your interests, and you may take up the challenge of doing research yourself. Our staff members can offer a broad range of topics that are suited for a project, and we are also open to research suggestions you yourself bring. Have a look at www.ru.nl/science/ca for more information on the research of the Algebra and Topology department.

Your advantages on the labour market
The skills learned during this Master’s will help you find jobs even in areas where your specialised mathematical knowledge may initially not seem very relevant. This makes your job opportunities very broad and is why many graduates of a Master’s in Mathematics find work very quickly. Possible careers include: researcher (at research centers or within a company), teacher, risk model validator, consultant, policy maker and analyst.

Admission requirements
You are required to have a Bachelor’s degree in Mathematics or a closely related discipline. You must also have a sufficient proficiency in English. For details, please visit the website or contact the student advisor (see ‘More information’).

Application procedure
The programme starts in September. The application deadline is 1 April for students from non-EU/EEA countries and 1 May for students from within the EU/EEA.
You apply for the Master’s programme in Mathematics via www.studielink.nl. After admittance to the Master’s programme, you can enrol for the specialisation in Algebra and Topology.

>>> More information

Prospectus: www.ru.nl/prospectus/sciencefaculty
Mastermath: www.mastermath.nl

Student advisor Mathematics: Ina de Vries
> mathematics@ru.nl / +31 (0)24 365 23 86