Unravelling ecosystem dynamics in order to contribute to species protection and nature recovery

In this Master’s specialisation you’ll get insight in the relations between different communities within an ecosystem, and how they react to environmental stress. This fundamental knowledge can be applied in species protection and nature restoration. However, there are also industrial processes that heavily rely on natural processes. Think, for example, of water purification with microorganisms.

Why study this specialisation at Radboud University?

• You’ll get an extensive background in academic research.
• This specialisation is closely connected to the Institute for Water and Wetland Research ( IWWR), a leading institute in wet ecosystem and stress biology research.
• Radboud University has close connections with water authorities, counties, nature recovery spin-off companies, and other related organisations, such as Natuurplaza.
• You’ll get the chance to do a six-month internship abroad, to conduct research on ecosystems in for example Portugal, Spain or South-America.
• The courses and internships take place in a stimulating, personal setting.
Programme outline (2 years, 120 EC)
The programme of this specialisation consists of:
• Compulsory courses (15 EC)
• Specialisation electives (18 EC)
• Philosophy elective (3 EC)
• 2 Internships (2 x 36 EC)
• Literature thesis 1 (6 EC)
• Literature thesis 2 / Field course (6 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
• Orientation in Biology and Environmental Sciences (3 EC)
• Quantitative Conservation Biology (3 EC)
• Management of Ecosystems (3 EC)
• Biodiversity and Ecological Assessment (3 EC) / Microbiology of Wetlands (3 EC)
• Environmental and Ecological Modelling (3 EC)

Examples of specialisation electives
• Ecology and Management of Large Rivers (3 EC)
• Estuarine Ecology (3 EC)
• Integrated Water Management (3 EC)
• Population Ecology (3 EC)
• Microbial Physiology and Metabolism (3 EC)
• Microbial Cell Structure and Function (3 EC)

Research internship
During your internships, you will be responsible for your own experiments, under the supervision of one of our top researchers. At Radboud University, the most relevant research departments are:
• Aquatic Ecology & Environmental Biology
  (ru.nl/science/aquatic)
  > Prof. Leon Lamers
• Experimental Plant Ecology (ru.nl/plantecology)
  > Prof. Hans de Kroon
• Environmental Sciences (ru.nl/environmentalscience)
  > Prof. Jan Hendriks and Prof. Mark Huijbregts
• Animal Ecology and Physiology (ru.nl/animal)
  > Prof. Henk Siepel and Prof. Gert Flik
• Microbiology (ru.nl/microbiology)
  > Prof. Mike Jetten

You can also choose to perform an internship at another university, a company, or a research institute. There are, for example, close contacts with the Max Planck Institute in Germany. For other possibilities, you can always contact a lecturer or the student advisor (see 'More information').

Your advantages on the labour market
After graduation, our students quickly take up positions as researchers in universities, research institutes, government departments or companies. And – often after obtaining their PhD degree – they also apply their academic background to societal issues, for example as a communications or policy officer.

Admission requirements
You are required to have a Bachelor’s degree in Biology, Environmental sciences or a closely related discipline. You must also have a sufficient proficiency in English.

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.

Prospectus: www.ru.nl/prospectus/sciencefaculty

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www.ru.nl/masters/communitiesandecosystems