

## SUSTAINABLE AGRICULTURE, B. Sc.

### INFORMATION ABOUT STUDY PROGRAMME

How can conventional agriculture make the transition to a more sustainable form? This is the question at the heart of Sustainable Agriculture B.Sc. It focuses on designing agricultural and horticultural production systems with ecology in mind by engaging in detailed analyses of these systems and developing of appropriate strategies for optimising their efficiency and sustainability. This international degree programme also examines the effect of the agricultural industry on the ecological, economic and social aspects of sustainability from a global perspective.

*Sustainable Agriculture B.Sc.* combines the natural and social sciences with economics and technology. This creates a broad curriculum that includes not only classic agricultural subjects such as soil science, botany, and livestock management, but also modern topics such as precision and urban farming, renewable resources and value chain analysis. A variety of interdisciplinary projects, practicals and excursions ensure many opportunities to apply new concepts within a real-world context and better understand how they are interlinked.

### CAREER PATHS AND SKILLS

By combining the study of sustainability assessment methodologies, a global focus and the flexibility for individual specialisation, *Sustainable Agriculture B.Sc.* produces graduates qualified for a broad range of career paths. These career paths can lead to companies in agricultural consulting, the nutrition industry, manufacturers of feed, fertilizers, pesticides and seeds, agricultural machinery firms, or associations and agencies dedicated to environmental protection, sustainable development or agriculture.



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## STUDY PROGRAMME SUMMARY

**Place of study:** Kleve

**Start date:** Winter semester

**Duration of study:** 7 semesters

**Study model:** Full-time studies

**Degree awarded:** Bachelor of Science, B. Sc.

**Language:** English

**Study or Internship abroad:** mind. 20 weeks

**Restricted admission:** No

## COURSE SCHEDULE

### 1st Semester

- Basics of Biology and Agroecology I
- Sustainable Learning – Learning Sustainability
- Agricultural Engineering I and Energy Use in Agriculture
- Principles of Economics
- Analysis and Interpretation of Data I
- Agricultural Chemistry
- Soil Science and Tillage

### 3rd Semester

- International Markets, Trade and Agricultural Policy
- Climate Change and Water Management
- Crop Physiology and Nutrition
- Crop Health I
- Analysis and Interpretation of Data II
- Animal Husbandry and Health

### 5th Semester

- Ethics in Life Sciences
- Sustainability and Agri-food Chains
- Natural Resources and Environmental Economics
- Animal Welfare
- Elective Modules 2

### 7th Semester

- Academic Methods and Principles
- Elective Modules 3
- Bachelor Thesis
- Colloquium

### Elective Modules 2:

- Focus Field Animal Sciences and Aquaponics II
- Focus Field Plant and Soil Sciences II
- Focus Field Analysis of Sustainability and Food Sciences II
- Focus Field Economics and Social Sciences II
- Module from any Bachelor Study Course of the Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

### 2nd Semester

- Soil Science and Tillage
- Organic and Biochemistry, Biotechnology
- Biology and Biodiversity
- Agricultural Engineering II and Agrotechnology
- Agricultural Economics and Farm Management
- Basics of Animal Sciences

### 4th Semester

- Agroecology II and Agronomy
- Rural Development and Sustainable Behaviour
- Horticulture and Agroforestry
- Project
- Elective Modules 1

### 6th Semester

Internship or study abroad (mind. 20 weeks)

### Elective Modules 1:

- Focus Field Animal Sciences and Aquaponics I
- Focus Field Plant and Soil Sciences I
- Focus Field Analysis of Sustainability and Food Sciences I
- Focus Field Economics and Social Sciences I
- Module from any Bachelor Study Course of the Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

### Elective Modules 3:

- Project reg. Academic Principles and Methods in Preparation of Bachelor Thesis
- Language Course
- Module from catalogue 1 and 2 of Study Programme
- Module from any Bachelor Study Course of the Faculty of Life Sciences at Rhine-Waal University of Applied Sciences

## Contact

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