

University of Hohenheim

## LEADING AGRICULTURAL UNIVERSITY IN GERMANY

The University of Hohenheim is one of Europe's leading universities in the field of agricultural sciences and natural resource management with a history of 200 years. Its Master's programs in agriculture are all accredited and internationally recognized. Hohenheim is a relatively small university with approximately 10.000 students.

The campus with its castle, park and botanical garden is one of the most beautiful campuses in Germany. All university facilities are within walking distance. There are additional leisure facilities, such as our own sports center and a large number of cultural events.

All students get assistance from the course coordinator throughout their studies, from the application process to the graduation ceremony. Part-time jobs are offered to students by many departments and research centers, allowing students to become involved in top research projects.



## AT A GLANCE

<b>Degree</b>	Master of Science (M. Sc.)
<b>Language</b>	English
<b>Credits</b>	120
<b>Duration</b>	4 semesters
<b>University places</b>	30
<b>Requirements</b>	<ul style="list-style-type: none"><li>• An above-average Bachelor's degree in Agricultural Sciences, Natural Sciences or a related program</li><li>• Solid knowledge of plant physiology and plant breeding, as well as a good foundation in statistics and computer applications</li><li>• Result of the Crop Sciences pre-test</li><li>• Proof of English language skills</li></ul>
<b>Selection procedure</b>	<ul style="list-style-type: none"><li>• Grades and ranking in previous studies</li><li>• Letter of recommendation from professors</li><li>• Stay abroad lasting 3 months or longer</li><li>• Letter of motivation</li></ul>
<b>Application deadlines</b>	<b>Only possible for the winter semester!</b> German, EU citizens: 15 July Non-EU citizens: 15 March
<b>Application</b>	Online at <a href="http://www.uni-hohenheim.de/en/application">www.uni-hohenheim.de/en/application</a>

### Contact

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UNIVERSITY OF  
HOHENHEIM



CULTIVATED PLANTS FOR A SUSTAINABLE FUTURE

## Crop Sciences

Master of Science



Master of Science

# CROP SCIENCES

## Study Program

Crop science is the basis of agricultural production. The goal is to develop crops and cropping systems with highest efficiency in converting light and supplemental resources into food, feed and fiber. Crop scientists breed crops and develop cropping systems that are profitable and ecologically sustainable. In light of the growing world population with a limited amount of cultivatable area, this goal is and remains a key challenge.

The program seeks to apply biological, physiological, molecular genetic and biometric principles to crops and cropping systems to increase their efficiency. Graduates are prepared to creatively solve the changing problems in modern crop development, production and management. This requires a greater breadth of understanding, from basic biology, physiology, and ecology to bioinformatics and expert systems.

Crop sciences majors at Universität Hohenheim concentrate on the interrelationships among the physiological and biological factors regulating crop productivity. Students have to choose between two specializations within the Crop Sciences program: **Plant Breeding and Seed Science** or **Plant Nutrition and Protection**.

The two-year M.Sc. program is comprised of four semesters during which students complete 15 thematic modules (6 credits each) and a master thesis (30 credits). Admission for the program is each winter semester, which begins in October. The language of instruction is English.

## Study Contents

### Plant Breeding and Seed Science

Students will be trained in the entire repertoire of classical and modern technologies in plant breeding, breeding methodological thinking, biometry in plant breeding as well as in seed science.

### Plant Nutrition and Protection

In the first semester students get a deeper understanding of plant quality and physiology, molecular biology, and biostatistics. In the following semesters students can choose from a broad spectrum of elective modules according to their interests and career aspirations.

## Career Opportunities

Graduates acquire in-depth knowledge in their chosen field, develop critical thinking skills and conduct original, cutting-edge research. They may proceed with a Ph.D. in the Crop Sciences area at Hohenheim or elsewhere.

Crop scientists are employed within the private sector by agrichemical, seed, grain or greenhouse companies.

### PLANT BREEDING AND SEED SCIENCE

1st semester	2nd semester	3rd semester	4th semester	120 ECTS
Methods of Scientific Working	Selection Theory	Elective module	Master Thesis	
Population and Quantitative Genetics	Advanced Statistical Methods for Metric and Categorical Data	Elective module		
Breeding Methodology	Seed Research	Elective module		
Elective module	Planning of Breeding Programmes	Elective module		
Elective module	Elective module	Elective module		

### PLANT NUTRITION AND PROTECTION

1st semester	2nd semester	3rd semester	4th semester	120 ECTS
Methods of Scientific Working	Elective module	Elective module	Master Thesis	
Quantitative Methods in Biosciences	Elective module	Elective module		
Plant Quality	Elective module	Elective module		
Crop Stress Physiology	Elective module	Elective module		
Molecular Aspects of Plant Protection	Elective module	Elective module		

Compulsory module

Elective module