



Master in Agricultural Sciences

## Major in Animal Sciences

The Master's degree in Agricultural Sciences is a professional qualification and offers access to the doctorate as well as a wide range of further employment possibilities. In choosing a major, students define the focus

of their personal education. In Animal Sciences, the focus is on the study of livestock. The students' educational profiles can be determined by specifically choosing a minor according to their individual interests.

### We offer

Farm animals are an essential part of the food value chain. They make a significant contribution to food security in Switzerland and around the world and secure the livelihood of the population, especially in rural areas. We want to allocate farm animals their adequate place in a sustainable agriculture. The Animal Sciences major consists of biology, genetics, breeding, physiology, nutrition, husbandry and behaviour of farm animals. It covers different topics relevant at individual animal, farm, national and global levels, thus ensuring a comprehensive education for a career both in Switzerland and abroad. Subjects in Animal Sciences address different scales ranging from cellular and molecular mechanisms to the management of entire populations in order to provide knowledge on the interaction between feeds, animals and the environment.

### Your career

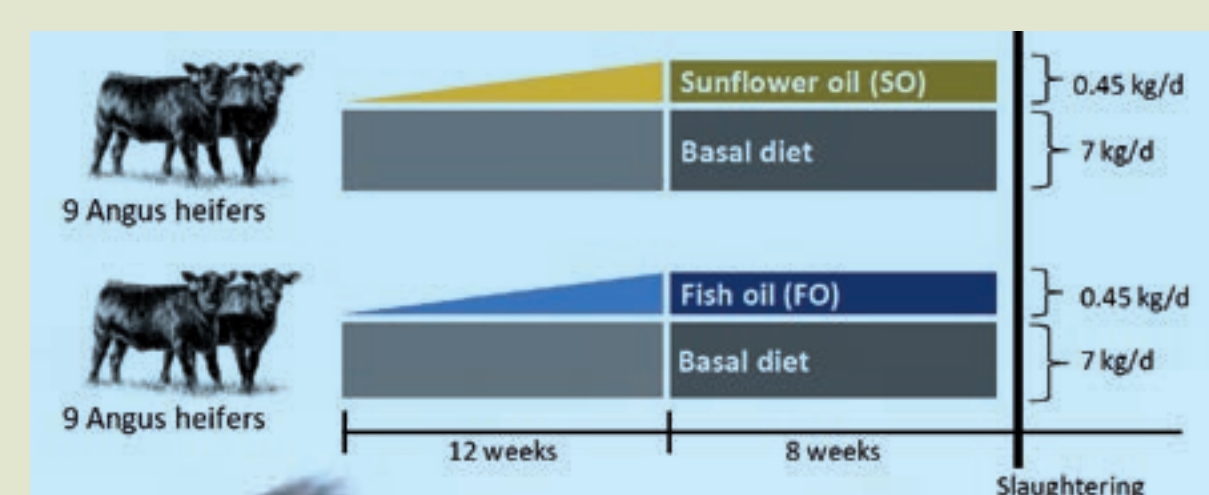
Typical careers of graduates include:

- Research associate at a research institute or university in Switzerland and abroad
- Expert position in competence centers for livestock improvement including breeding associations and artificial insemination centers
- Lecturer at a vocational college or university of applied science
- Expert adviser at an organisation for national politics and international cooperation
- Research assistant in the marketing department of a major supermarket chain
- Team leader of production guidelines for feed and food producing companies
- Consultant in the public or private agricultural sector

### Examples of recent Master's Theses

#### Effect of dietary rumen-protected n-3 and n-6 fatty acids on fatty acid profiles of bovine tissues

A differential allocation of n-3 ('omega-3') fatty acids, considered particularly valuable in human nutrition, to organs and tissues illustrated a different demand for these fatty acids, whereas no such differentiation occurred with the less desired n-6 fatty acids.



#### Intramammary pressure and udder firmness during milk ejection and dry-off

The non-invasive dynamometer measurement, a simple and convenient method for measuring udder firmness, showed to be effective and may be implemented to assess the risk of intramammary infection at dry-off.



### Structure of our Major Programme (120 CP)

#### Major Animal Sciences (40 CP)

The major defines the specific subject and is divided into a disciplinary and methodological competence field. The specialised knowledge is summarised in the disciplinary competence field (DK) and the analytical-quantitative education and communication & presentation/technical skills in the methodological competence field (MK).

- DK: Livestock Systems (≥ 10 CP)
- DK: Livestock Biology (≥ 7 CP)
- DK: Livestock Genetics (≥ 3 CP)
- MK: Methods for Scientific Research (≥ 5 CP)
- MK: Project Management in Scientific Research (≥ 5 CP)

#### 1st Minor (10 CP)

The minor consists of courses within or outside the selected major. The 7 minors available range from thematic foci on agricultural economics and policy, to plant, soil or animal sciences.

#### Electives or 2nd Minor (10 CP)

Students can choose a second minor or electives.

#### Internship (30 CP)

#### Master thesis (30 CP)

### Further information:

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