



Czech University of Life Sciences Prague
**Faculty of Tropical
AgriSciences**

Master's Degree Study Programme

Agri-food Systems and Rural Development (ASRD)

Agri-food Systems and Rural Development (ASRD) is two-year Master's study programme taught in English. The aim of this programme is to prepare graduates to work in agri-food systems and sustainable rural development with specific focus on developing countries and tropical areas. The programme is based on the interdisciplinary approach focused on food production systems in tropics, food processing and use of suitable agricultural technologies based on renewable energy resources. An important component of the program is food security, which plays a key role in sustainable rural development in all developing countries. The students study courses addressing various agricultural production systems, bioresource technology in agriculture, food processing technology, food security, and economic and social aspects of rural development in developing countries. Faculty provides many opportunities for students to gain hands-on experience and practical skills through participation on different international projects. Students are highly encouraged to elaborate their master's thesis in connection to these international projects or with a local or partner institutions situated in developing countries. The studies are terminated by State exam and defence of the Master's thesis. Students get the degree „Inženýr“ - Ing.

Examples of Master's theses:

- Life cycle assessment of small-scale biogas technology in Vietnam
- Influence of glazing of direct solar drier on final product quality
- Assessment of guava (*Psidium guajava* L.) wood biomass for energy purposes
- Evaluation of physical properties of rice cultivars grown in Kyrgyzstan
- Optimization of small farmers production in Georgia



Indicative study plans

Obligatory courses

- ✓ Tropical Crop Production
- ✓ Animal Production in Tropics
- ✓ Management of Energy Resources
- ✓ Global Food Security
- ✓ Agricultural Policy in Developing Countries
- ✓ Aquaculture
- ✓ Human Nutrition and Prevention of Food-Borne Diseases
- ✓ Renewable Energy for Food Processing
- ✓ Practical Training
- ✓ Principles of Food Preservation

Courses are supplemented by obligatory Scientific Seminars and preparation of Master's theses. The **Practical Training** is located off-campus in either governmental or non-governmental sector whose scope covers research, development and/or pedagogical activities with special regard to tropical regions, developing countries and/or agricultural education worldwide.

Required optional courses – group A

- ✓ Introduction to Engineering
- ✓ Quality, Storage and Processing of Plant Products
- ✓ Quality, Storage and Processing of Meat Products
- ✓ Economic Botany
- ✓ Social and Demographic Aspects of Rural Development
- ✓ Rural Development
- ✓ Environmental Engineering (Инженерия окружающей среды) *
- ✓ Agroforestry
- ✓ Rural Communication and Extension
- ✓ Resource Ecology
- ✓ Organic Waste Management

Students select at least 4 courses from this group.

** Course can be also studied in Russian.*

Required optional courses – group B

- ✓ Project Monitoring and Evaluation
- ✓ Processing and Interpretation of Biological Data
- ✓ Project Cycle Management
- ✓ Cooperatives and Farmer Associations
- ✓ Economics of Farming Systems
- ✓ Focus Group Discussion
- ✓ Tropical Products Marketing
- ✓ Summer Sports
- ✓ Personal Security and Risk Management
- ✓ Management of Tropical Land-Use Systems
- ✓ Gender in Agriculture and Rural Development
- ✓ Applied Research Methods in Agriculture
- ✓ Winter Sports
- ✓ Fair Trade and Ethical Business in International Trade
- ✓ Agricultural Market Information Services (Маркетинговые информационные системы и услуги в аграрном секторе) *

Students select at least 2 courses from this group.

** Course can be also studied in Russian.*

Optional courses

Students select other courses which are taught in English from the actual offer of the Czech University of Life Science Prague or courses can be passed at foreign universities as part of Erasmus+ exchange programs.

State exam

State exam consists of Master's thesis defence and examinations from 2 obligatory and 1 optional topics.

Obligatory topics:

- Food Production Systems
- Food Security

Optional topics:

- Bioresource Technology for Rural Development
- Food Processing
- Sustainable Development Strategies

Detailed study plans are available in the University Information System (UIS) – is.czu.cz