

Brief description of the

**UNIVERSITY OF AGRONOMIC SCIENCES AND
VETERINARY MEDICINE**

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**FACULTY OF LAND RECLAMATION AND
ENVIRONMENTAL ENGINEERING**

FLREE

The Faculty of Land Reclamation and Environmental Engineering was established in 1970 within the University of Agronomic Sciences and Veterinary Medicine of Bucharest.

Our faculty is focused on Interdisciplinary studies, as follows:

- Land and Environmental Sciences (irrigation-drainage, soil erosion and conservation, river engineering, civil engineering),
- Environmental Protection and Hazardous Phenomena.

The fields of specialisation in the graduate programme are:

- Land Reclamation and Rural Development;
- Agricultural Environmental Engineering;
- Cadastre – Surveying;
- Economic Engineering in Constructions.

- On this axis, the main goal of FLREE is to assure high quality education and training in its field of expertise according to the specific demands and exigencies of national economy.
- Thus, the MSc programme provides specialist training in Environmental Protection in relation with Land Engineering works.
- Some members of our teaching staff are also PhD supervisors in several domains.
- In parallel, our faculty runs research and consulting programmes aimed at developing and enhancing cooperation with education, research and business communities as critical factors that ensure the funding of the activities and their relevance for the societal needs.
- Participation in and organisation of scientific meetings and conferences, symposiums and events are types of activities focusing on the dissemination of the results from our numerous international & national research projects.
- International cooperation consists in horizontal activities of initiating and developing partnerships under various forms with foreign universities, companies and other institutions.

The FLREE approaches various topics in national projects that are run, coordinated and developed in partnership with specialist organisations and institutions:

- integrated and multisectorial operational decision-making support system for the sustainable use of water resources;
- informatic system for the evaluation of the climatic change impact upon the efficiency of the agricultural ecosystems;
- instruments, guides and indicators for the integration of environmental issues in agricultural, forestry and water management policies in the rural area;
- management and integrated control system for water and soil resources according to the sustainable development concept applied in Europe;
- integrated database applications for adapting and restructuring natural and artificial environmental protection factors in farms;
- spatial distribution model to forecast the tillage–influenced soil agrophysical condition;
- informatic system for agricultural management consulting in the areas susceptible to nitrate pollution from agricultural resources;

- integrated software methodology based on GIS and numerical analysis programmes applied for safety increase purposes to industrial and agricultural units;
- energetic biomass valorisation in the context of the sustainable development of the renewable energy resources;
- non-polluting technologies for the integrated use of wine-making waste to obtain highly valuable economic products;
- research on the sustainable agricultural development and result transfer to agricultural producers by applying the Community Aquis;
- products and technologies for establishing a sustainable agricultural system and agroecological resource protection in the area of Moldavian Plateau;
- PCB emission evaluation in socio-economic activities and database for the assessment of the impact upon human health and the environment;
- advanced pyro-gasification thermal procedures for urban waste with energy production;
- technology of using agricultural and forestry solid biomass to obtain clean energy and reduce gas emissions with greenhouse effect;
- simulation and modelling by advanced informatic technology of the parameters defining short- and medium-term prognosis, warning and planning of drought control actions.

Main tasks of Partner 10

- In task 2.1, FLREE will work to provide the choice of the most common non-food (bioenergy) crops for the specific agricultural conditions of Romania.
- In task 7.2, in month 15, FLREE will organise, together with CRES, the 3rd *Project Workshop* in Bucharest, in the premises of the UASVMB-FLREE. The participants in the workshop will represent the following segments:
 - Farmers (to be decided),
 - Research institutes and laboratories (National Research Institute for Agricultural Machinery; National Research and Development Institute for Soil Sciences, Agrochemistry and Environmental Protection; National Research Centre for Biotechnologies; National Research Institute for Bioresources, etc.),
 - Local authorities (Ministry of Agriculture and Forestry; National Agency for Agricultural Consulting; Environmental Agencies, etc.),
 - Universities with similar concerns (The Bucharest Polytechnic University – Faculty of Energetics; The Universities of Agricultural Sciences of Iasi, Cluj and Timisoara; The “Dunarea de Jos” University of Galati),
 - End-product or potential processors and users (PETROM; ROMPETROL, etc.),
 - Environmental groups (Romanian Federation for Rural Development; Regional Association for Environmental Protection of Galati, etc.),
 - Market actors (to be decided)

- In task 7.3, FLREE will perform other dissemination activities such as:
 - Participation in national and international conferences and symposiums;
 - Publication of articles and information on the project in specialised journals and reviews;
 - Connections with relevant research institutions and organisations in Romania;
 - Synthetic information about the project on the FLREE website (<http://www.fifim.ro>), with a link to the main website created by the project partners.