

## FIVE SCIENTIFIC UMBRELLA PROGRAMMES AT THE UNIVERSITY OF DEBRECEN CENTRE FOR AGRICULTURAL AND APPLIED ECONOMIC SCIENCES

### CLIMATE CHANGE AND ACTIONS Leader: Prof. Dr. János Nagy

Causes and expected trends of climate change and adaptation to climate change  
Project leader: Prof. Dr. János Nagy



Bases of crop production and its interactive technology development in different agroecological systems  
Project leader: Prof. Dr. Péter Papp

Study and moderation of the impacts of climate change in fruit and vegetable production  
Project leader: Prof. Dr. Zoltán Szabó

Research, development and applications in bioenergetics  
Project leader: Dr. Tamás Rátanyi

Conservation and development of biological bases with traditional and biotechnological methods  
Project leader: Dr. Judit Dobránszki

Development of products, technologies and services based on the study of biological and technical interactions  
Project leader: Prof. Dr. Botond Sinóros Szabó

Possibilities of environmentally-benign crop protection in sustainable farming  
Project leader: Dr. György Kövics

Development of the technological bases of ornamental plant growing and green area management  
Project leader: Prof. Dr. Miklós Fári

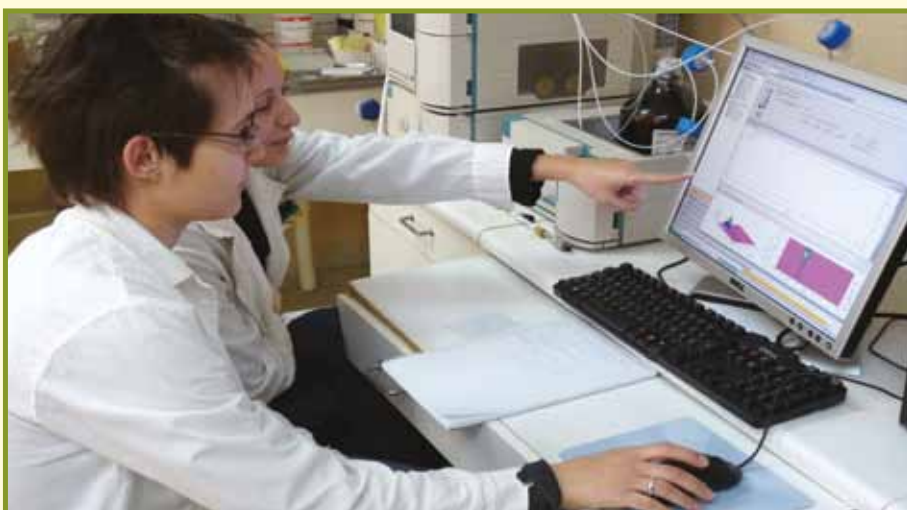
### HEALTHY NUTRITION Leader: Prof. Dr. Béla Kovács

Research for developing high-quality functional plant products and foods  
Project leader: Prof. Dr. Zoltán Győri

Development of analytical and microbiological methods for food products  
Project leader: Dr. Béla Kovács

Development of processing technologies for the reduction of food safety risks  
Project leader: Dr. Péter Sipos

In order to increase the centre's competitiveness and improve research potential, the 5 R+D+I programmes are successfully carried out by the faculties in close collaboration with their respective research institutes



### SUSTAINABLE AGRO-ENVIRONMENT Leader: Prof. Dr. János Tamás

Soil quality protection  
Project leader: Prof. Dr. Lajos Blaskó

Catchment-based integrated water stock management  
Project leader: Prof. Dr. János Tamás

Complex practical protection of agro-ecosystems  
Project leader: Dr. György Zsigrai

Material and energy-saving environmental technology  
Project leader: Dr. Csaba Juhász

Protection of sustainable biodiversity and habitats  
Project leader: Dr. Lajos Juhász



### ANIMAL HUSBANDRY, ANIMAL KEEPING, ANIMAL WELFARE Leader: Prof. Dr. András Jávor

Research on developing high-quality functional animal products and foods (nutrigenomics, molecular genetics)  
Project leader: Prof. Dr. András Jávor

Genetic, animal nutrition and keeping technology research for increasing the efficacy of quality animal husbandry  
Project leader: Prof. Dr. Sándor Mihók

Research on healthy foods of animal origin based on nutrition according to genetic parameters  
Project leader: Prof. Dr. László Babinszky

Keeping and breeding sheep meeting market requirements and adapted to the climate  
Project leader: Prof. Dr. András Kovács



### FARMING AND RURAL DEVELOPMENT SUPPORTING REGIONAL INNOVATION Leader: Prof. Dr. András Nábrádi

Regional research related to the agricultural economy  
Project leader: Prof. Dr. Béla Baranyi

Research on applied informatics and methodology of economic analysis  
Project leader: Dr. Miklós Herdon

Transparency of the food supply chain: economic analysis of the horizontal and vertical phases  
Project leader: Prof. Dr. József Popp

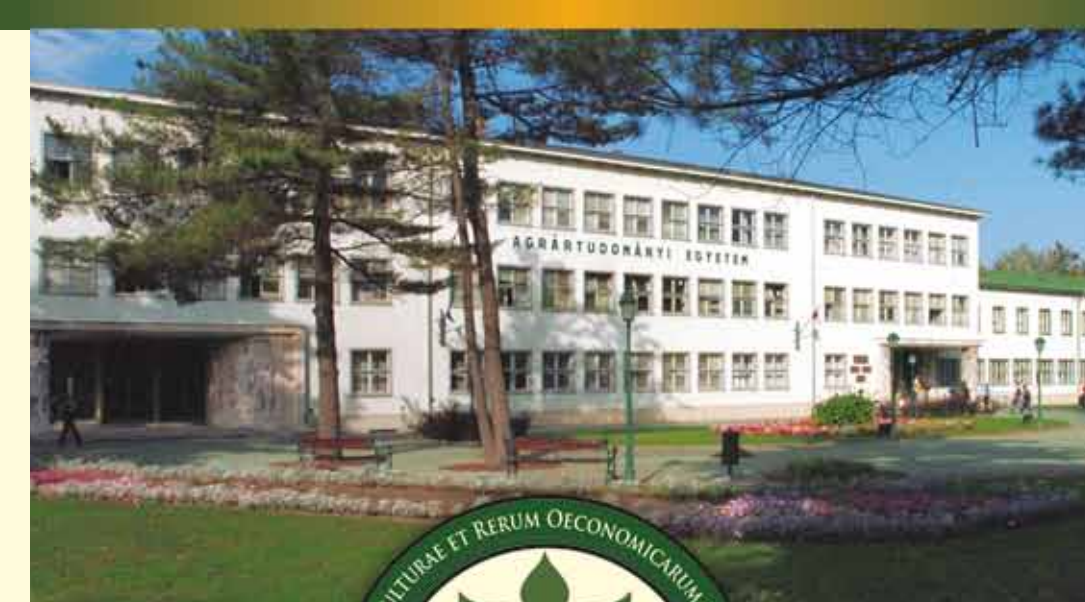
Regional resources of rural development and their utilization  
Project leader: Prof. Dr. Géza Nagy

Innovative management and organizational innovation  
Project leader: Prof. Dr. Csaba Berde

Research on marketing, farm business management and agribusiness sectors and product chains  
Project leader: Prof. Dr. András Nábrádi

Financial and accounting aspects of financing farming and rural development  
Project leader: Dr. Zoltán Bács

The centre actively participates in cross-border cooperation programmes. The University Knowledge Centre of Regional Development plays an important role in the improvement of the national consultant-system on water management, irrigation and technical development. The Water Management and Irrigation Centre, within the Regional Knowledge Centre of Central and Eastern Europe (in MAG house), provides farmers with data on weather conditions and water utilization, on the basis of which they can improve the conditions of farming, the efficiency of plant protection and irrigation.



UNIVERSITY OF DEBRECEN  
CENTRE FOR AGRICULTURAL  
AND APPLIED ECONOMIC SCIENCES

HUNGARY





**UNIVERSITY OF DEBRECEN**  
**Centre for Agricultural and Applied Economic Sciences**

Agricultural higher education in Debrecen dates back 145 years. The Centre for Agricultural and Applied Economic Sciences is a major centre and coordinator of agricultural higher education, research and extension. Its mission is to develop agriculture, the environment and rural areas. It has a unique educational profile in the fields of agricultural, applied economic and regional sciences. Students can select from 14 bachelors, 14 accredited masters and 4 higher vocational training courses at the two faculties. The centre's diverse network of connections with companies provide for a high-level practical training. Also highly supported and facilitated are talent management programmes in the Béla Tormay and Kálmán Kerpely Colleges for Advanced Studies. In 2013, 19 scientific research programmes are being carried out in the centre, financed by the European Commission or by national resources.

The faculties and research institutes of the centre work in close co-operation for the implementation of its five interdisciplinary programmes. The Centre co-operates successfully with prestigious European universities in five FP7 projects in the fields of land use, crop protection, food safety, precision agriculture and habitat mapping.

**Management:**

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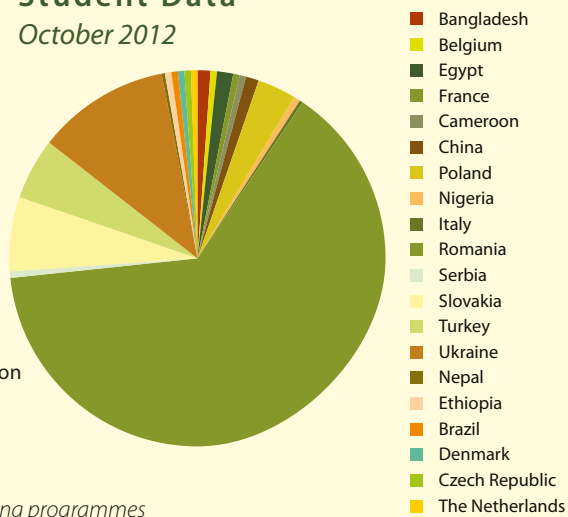
**Degree programmes at the University of Debrecen**  
**Centre for Agricultural and Applied Economic Sciences**



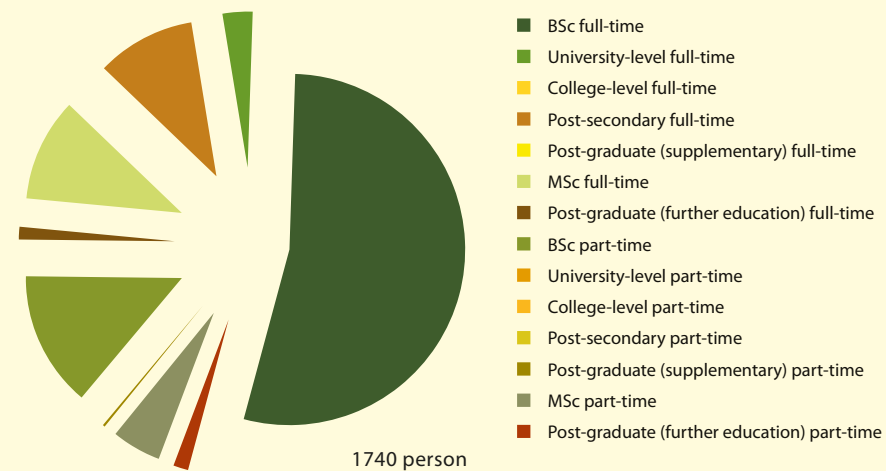
Besides the conservation of the high standard of education and the rationalization of its education programmes, the centre's main strategic goal is the promotion of its English language programmes.

**Student Data**  
 October 2012

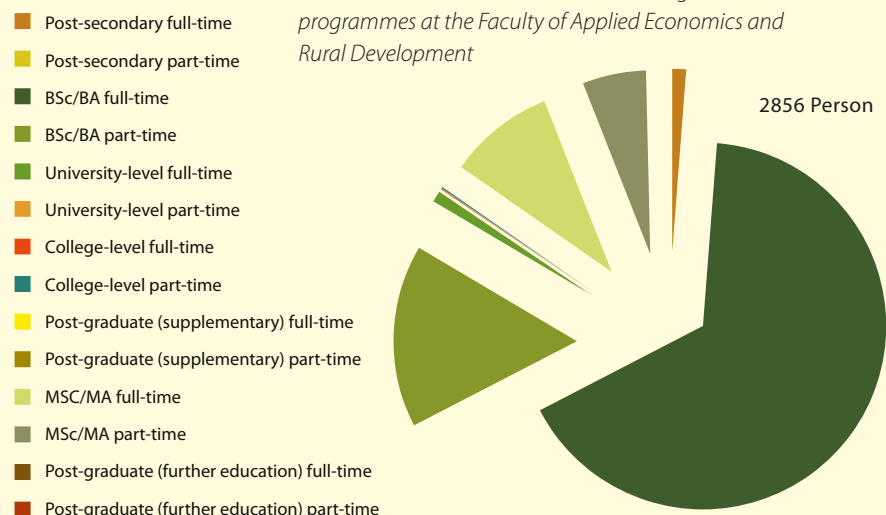
*The number of international students in the Centre for Agricultural and Applied Economic Sciences of the University of Debrecen*



*Number of students in the different training programmes at the Faculty of Agricultural and Food Sciences and Environmental Management*



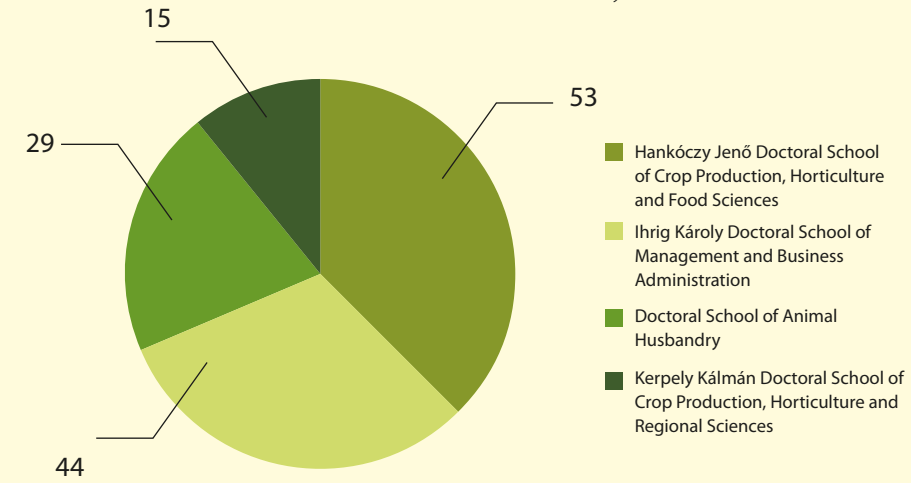
*Number of students in the different training programmes at the Faculty of Applied Economics and Rural Development*



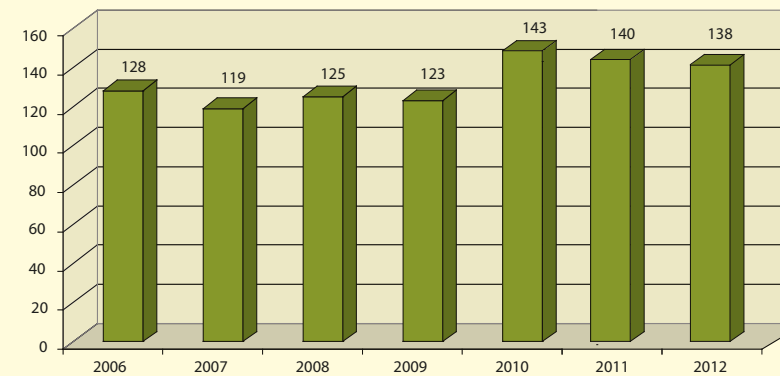
**PhD training at the UD CAES**

The four doctoral schools of the Centre perform high-level, internationally and nationally acknowledged scientific and educational activities in their respective scientific fields. The founding members, teachers and supervisors participating in the doctoral training under the guidance of the heads of the doctoral schools and the leaders of the doctoral programmes guarantee a high-quality level education.

*The number of PhD students by doctoral school*



*The number of PhD students*



**Research cooperation with member states of the European Union in EU projects**

The University of Debrecen Centre for Agricultural and Applied Economic Sciences participates in five FP7 projects including one that is co-ordinated by the Centre.

- FP7-REGPOT-2010-1 Improving research potential of the Institution for Land Utilization, Technology and Regional Development on the field of GIS, precision agriculture, land use and regional development**  
 Beneficiary: Hungary  
 Project leader: Prof. Dr. János Nagy  
 EU partners: Germany, Belgium, Austria, United Kingdom, Poland



- FP7-REGIONS 2010-1 Countering diet-related diseases through competitive regional food- and physical activity clusters**  
 Beneficiary: Germany  
 Project leader: Dr. Zoltán Bács  
 EU partners: Hungary, Belgium, Poland, The Netherlands, United Kingdom, Spain



- FP7-KBBE-2010-4 Pesticide use-and risk reduction in European farming systems with integrated pest management**  
 Beneficiary: France  
 Project leader: Prof. Dr. Imre Holb  
 EU partners: France, United Kingdom, Denmark, The Netherlands, Italy, Germany, Slovenia, Spain, Poland
- FP7-NETGROW-2010-5 Enhancing the innovativeness of food SME's through the management of strategic network behaviour and network learning performance**  
 Beneficiary: Belgium  
 Project leader: Dr. János Felföldi  
 EU partners: Hungary, Ireland, The Netherlands, Sweden, Denmark, Italy, France, Germany
- FP7-PEOPLE-2009-IEF Network for Habitat Monitoring by Airborne-supported Field work – An innovative and effective process in implementation of the Habitat Directive**  
 Beneficiary: Germany  
 Project leader: Prof. Dr. János Tamás  
 EU partners: Austria, Hungary, Germany, Poland