



Tempus

PhD@UP

Creating Capacities for PhD Reform at the University of Prishtina

Report - Analysis - Recommendations

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Impressum

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Preface

University of Graz

The University of Graz has a long-standing tradition of co-operation with South-Eastern Europe (SEE), which was underlined in the year 2000 by the definition of a university-wide focus on the SEE regions. As the first university in German-speaking countries to take this step, the University of Graz also plays an important role as a co-ordinator of a variety of transnational projects, due to its profound knowledge of the potential and needs of the partners in the region.

The contribution to capacity building and curricular reforms at the University of Prishtina are the major aims of the Tempus project “PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina - PhD@UP”. This implies not only support by the University of Graz as co-ordinating institution, but also means mutual learning about different realities to meet the needs of all involved. During the project lifetime, the project partners successfully implemented a doctoral program in “Food Science and Technology” as an interdisciplinary program involving three faculties at the University of Prishtina. In addition, various activities guaranteed a vital exchange of experiences and knowledge between colleagues from the EU partner institutions and the University of Prishtina.

The University of Graz regards itself as an international institution committed to research and teaching for the benefit of society. It is our policy to maintain freedom in research and tea-

ching, which permanently commits us to social, political and technological developments. Besides the ambition to create profile and visibility in a European and global context, it is above all one of our most outstanding characteristics that our University has acquired a special position in the South-Eastern European region. Therefore, the University of Graz is pleased to contribute to this project not only by acting as grant holder but also by guiding the two work packages leading to the present report. The long-standing cooperation between the University of Graz and the University of Prishtina constituted the perfect basis for starting this challenging project.

This publication not only describes and analyses the different systems for the implementation and organisation of doctoral education and highlights achievements attained by the project consortium, but also provides a feasible instrument for further action at the University of Prishtina. The close collaboration, which has contributed substantially to the success of the project, will be well remembered.

Univ.-Prof. Dr. Christa Neuper
Rector of the University of Graz



Preface

University of Prishtina

University of Prishtina (UP) is the first public higher education provider in Kosovo established in 1970. This institution of higher education is composed of 16 faculties, about 1.500 teaching staff, about 379 administrative staff and about 54.000 full time and part time students. The University of Prishtina is a full member of the Association of European Universities.

Knowing the fact that Kosovo has the youngest population in Europe, it will still be very difficult to absorb the number of young people who enter the labor market every year. In order to achieve that, Kosovo needs to start reforms in several areas, provide education for priority fields (food production, natural resources, mining, etc.) and identify its opportunities and competitive advantage.

In order to achieve this, UP has cooperation agreements with a large number of academic and research institutions in other countries in the region, in Europe and beyond, which have provided various opportunities for student mobility at the level of master or doctoral studies.

Since 2001, UP is making huge efforts to develop and adopt the principles of the Bologna Declaration. In line with this, many UP academic units (faculties) organize their studies based on the 3+2+3 system, where the European Credit Transfer System is applied.

In this light, UP together with partners (Technical University Munich – Germany (TUM), University of Granada – Spain (UG), University of Graz – Austria (KFU), World University Service - Austrian Committee (WUS Austria), University of Vaasa – Finland

(UOV), and Austrian Exchange Service (OeAD)), is implementing the doctoral program in Food Science and Technology which, among other, promotes: Academic cooperation with international partners, close consultation and involvement of students, ensuring consistency and quality through partnership and cooperation between them, knowledge exchange and peer reviews, the process of internationalization of research and teaching, interdisciplinary approach that is in line with strategic priorities of Tempus, the Kosovo Development Strategy, the Development Strategy of Higher Education (in the Framework of Kosovo Education Strategic Plan 2011-2016) and UP development strategy and current priorities of the EU.

Clearly, this project approach provides support to research sector, agricultural based policy, economic development, health and environmental aspects, European integration concept, as well as encourages and creates a mechanism for the development of PhD studies at the University of Prishtina based on the Bologna system.

Respectfully,
Ibrahim GASHI,
Rector of the University of Prishtina



Preface

WUS Austria – Its activities in Kosovo

World University Service (WUS) Austria is a politically independent, non-governmental organization committed to the promotion of the human right to education on the basis of academic freedom and university autonomy. Since its establishment in Graz in 1983, WUS Austria has been working all over the world. Today we have a regional focus on South-Eastern and Eastern Europe and employ two branch offices in Sarajevo and Prishtina. Other regions, such as the African, Caribbean and Pacific countries, Northern Africa, the Middle East and the Caucasus are also in the focus of our work. WUS Austria is a member of WUS International which gathers internationally recognized WUS committees from all over the world.

WUS Austria has been present in Kosovo since 1997 and has supported the University of Prishtina throughout the time of conflict in 1999 and in the aftermath. Since then, we also worked with the newly established private and public universities in Kosovo. WUS Austria, is proud of being a partner of the Kosovar Ministry of Science, Education and Technology (MEST) in capacity building measures, supporting national NARIC office and to be able to provide contribution to the strengthening of the Kosovo Accreditation Agency (KAA) as the key player in the process of assuring quality in higher education sector.

WUS Austria developed its activities in Kosovo over the years in order to respond to the current local needs. In the first decade of 2000 it provided a wide ranging support to the development of HE sector, especially of the University of Prishtina, with the funding from the Austrian Development Cooperation (ADC). This included development of new and modification of existing university courses and master programs. The missing capacities in teaching and research were filled by inviting emigrated scholars from Kosovo who were teaching abroad, which also contributed to brain gain. Student case study competitions, which included trainings and a job fair, offered the opportunity to students to

improve their soft skills and to get in direct contact with the local and international employers.

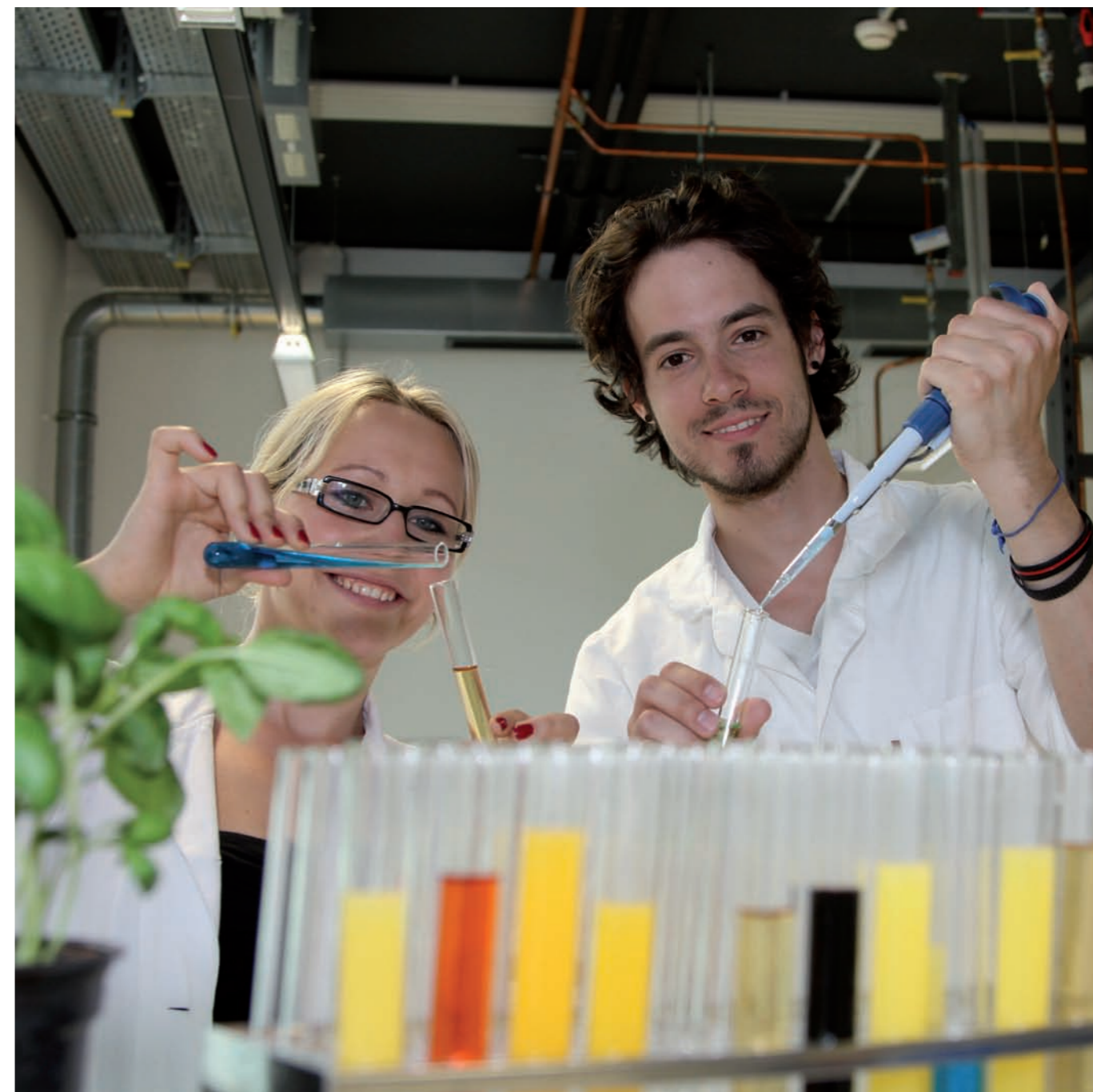
In cooperation with EU and regional partners, WUS Austria contributed to the development of structure and infrastructure at UP (Academic Development Office, R&D and Competence Observation centers). We have established a QA structures and have started to introduce quality culture at UP and other HE institutions in Kosovo.

We are still present in Kosovo and cooperate with the HE institutions as well as relevant stakeholders. Our biggest running project, funded by ADC, is “Higher KOS – Promoting institutional development in higher education and research in Kosovo”.

WUS Austria is very proud to be coordinator of the Tempus project PhD@UP which has, with the joint efforts of the whole consortium and especially of the University of Prishtina, successfully fulfilled its two main objectives: (1) A new PhD program in Food Science and Technology has been developed and implemented by professors from UP and partner EU institutions and has enabled student international mobility, and (2) it introduced different PhD models and has developed recommendations for the improvement of the PhD structure at UP.

WUS Austria is proud to have contributed to the development of the Kosovar society. We are happy to continue our work and efforts in Kosovo in order to create a knowledge based society in which universities have strong role and are drivers for innovation and sustainable economic development.

Almir Kovačević
Executive Director, WUS Austria



Methodology and Terminology

How to read this report?

First and foremost, the purpose of the present benchmarking report is to provide a summary of the conduct of the Joint TEMPUS Project “PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina - PhD@UP”, and its main results, conclusions and recommendations.

The report was elaborated within both a European and project context with focus on the used methodology and terminology.

The first section covers the project context by introducing the project and its conduct and methodology.

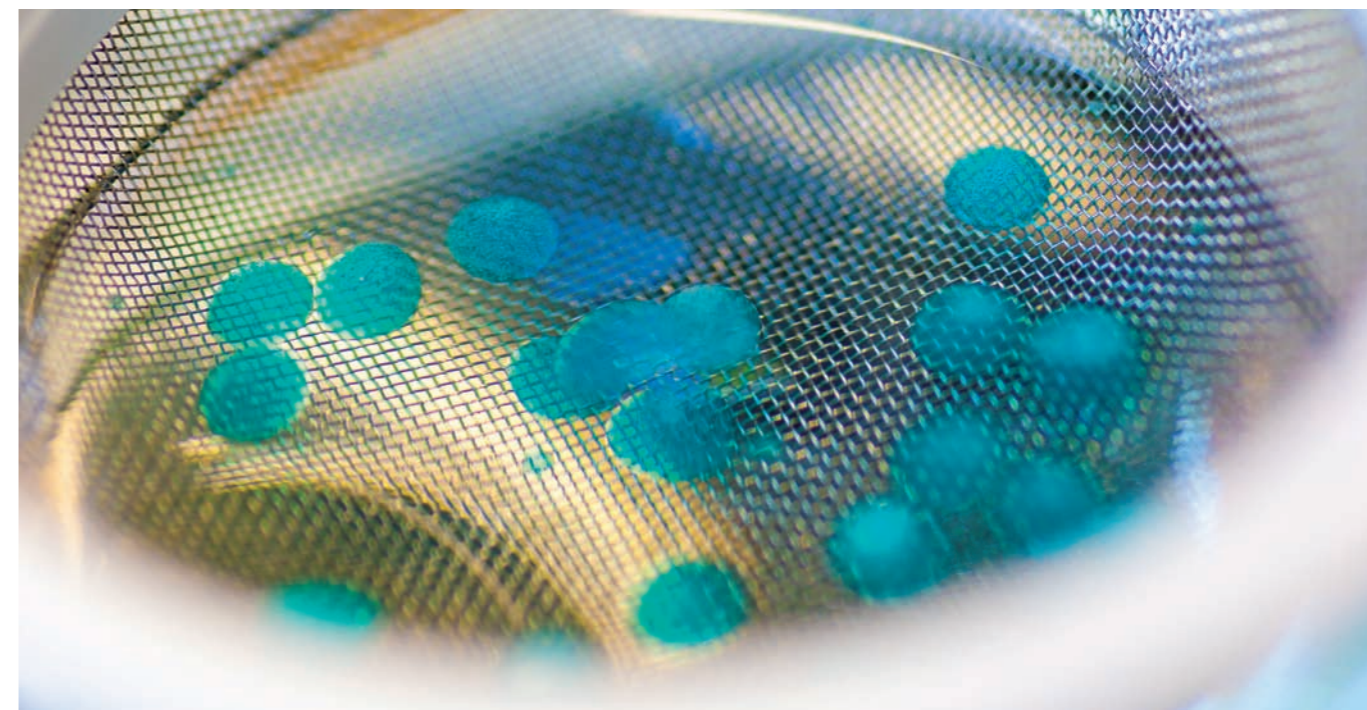
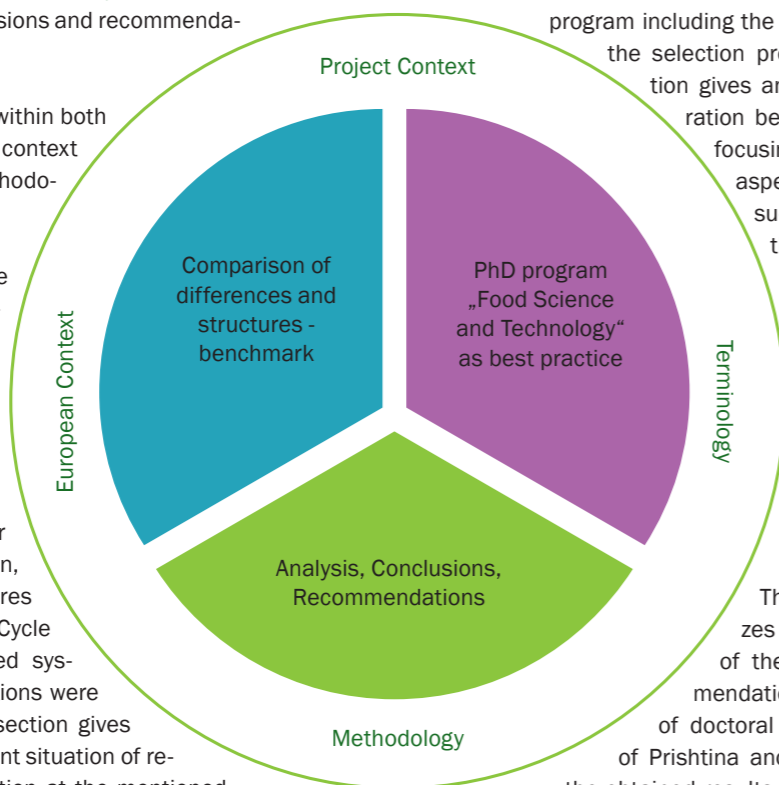
The second section focuses on the European context and the benchmark given by the European partner universities. For this section, differences and structures with focus on the Third Cycle education and implemented systems at the partner institutions were compared. Moreover, this section gives an overview about the current situation of research and doctoral education at the mentioned partner universities.

The third section presents the main outcome of the project: the doctoral program in “Food Science and Technology” established as one of the new doctoral programs at the University of Prishtina in accordance with the Bologna system. This doctoral program shall serve as best practice of this benchmarking re-

port and provide proposals for improvements and sustainability of doctoral programs offered at Higher Education Institutions in Kosovo.

This section describes the content and structure of the doctoral program including the admission requirements and the selection process. In addition, this section gives an overview about the cooperation between the involved partners focusing on internationalization aspects, about the financial issues and the staff involved in the program. Moreover, it outlines the development and implementation of the doctoral program by reflecting on negative and positive aspects. The section closes with a summary about the current situation of this particular doctoral program.

The fourth section summarizes the analysis and conclusions of the project as well as recommendations for future improvements of doctoral education at the University of Prishtina and in Kosovo by representing the obtained results and findings in the course of the project, as well as its achievements. Furthermore, this section outlines the current European trends for the Third Cycle as part of the conclusions and completes with practical advices and examples of university experiences for the given recommendations which not only the University of Prishtina can take advantage of, but also each Kosovar University with the right to provide doctoral education.



Bologna Process

Before listing the terminology used in this report, it would be important to explain what is meant by “to be in line with the Bologna System” in order to follow and understand the following chapters and the report as a whole:

The Bologna process is designed to introduce a system of academic degrees that are easily recognizable and comparable, promote the mobility of students, teachers and researchers, ensure high quality teaching and incorporate the European dimension into higher education.

The Bologna Declaration involves six actions relating to:

1. *A system of academic degrees* that are easy to recognize and compare. It includes the introduction of a shared diploma supplement to improve transparency.
2. *A system based essentially on two cycles*: a first cycle geared to the labor market and lasting at least three years, and a second cycle (Master) conditional on the completion of the first cycle.
3. *A system of accumulation and transfer of credits* of the ECTS type used in the Erasmus exchange scheme.
4. *Mobility of students, teachers and researchers*: elimination of all obstacles to freedom of movement.
5. *Cooperation* with regard to quality assurance.
6. The *European dimension in higher education*: increase the number of modules and teaching and study areas where the content, guidance or organization has a European dimension.

Used terminology

Doctoral Candidate

A doctoral candidate is a student of a doctoral program / doctoral studies.

University of Graz

Doctoral Program

“[...] Doctoral programs consider themselves to be a union of five to a maximum of fifteen habilitated academics from the same, similar or completely different areas of specialization who provide additional high-quality and attractive offerings for a limited number of doctoral candidates within these studies and who shall promote professional exchange.”²

Doctoral Colleges

“Doctoral colleges serve as a place where doctoral candidates can specifically work on a common research programme funded by third parties in an organized manner.”³

Doctoral Schools

“Doctoral schools are special performance areas that supervise and educate all candidates as part of their doctoral studies.”⁴

University of Granada

Doctoral Program

“A doctoral program is a series of activities plus a research plan that lead to the acquisition of knowledge and skills necessary for obtaining the Doctorate degree. The program’s objective is the development of different training aspects of the doctoral candidate and establishes the procedures and lines of research for the development of doctoral theses.”⁵

Doctoral School

“A Doctoral School is a unit set up by one or more universities – and in possible cooperation with other national or foreign bodies, centers, institutions and entities active in R+D+i – whose fundamental object is the organization and the management of the doctoral studies.”⁶ Doctoral Schools are responsible of the doctoral programs in three areas of study (Sciences and Engineering, Health Sciences, and Social Sciences and Humanities).

University of Vaasa

Doctoral Program

“The doctoral programs are responsible for the field-specific development and implementation of doctoral studies.”

Graduate School

“The Graduate School is responsible for developing doctoral studies and for the quality of the operations and processes of the doctoral studies all the way from the application process to granting the doctorate degree. The Graduate School organizes general and introductory courses common to all post-graduates.”⁷

University of Prishtina

Doctoral Studies Council

At the level of an academic unit (the Faculty) = the Doctoral Studies Council of the academic unit.

At the level of University = the Central Doctoral Studies Council.⁸

Doctoral Studies Coordinator

A Doctoral Studies Coordinator is an employee with an academic-teaching degree, an artistic-teaching degree, or with an academic degree in the respective academic unit where the studies are carried out.⁹

The Project

PhD@UP “PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina

The Joint Tempus Project “PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina - PhD@UP” was designed as an interdisciplinary project, in line with the strategic priorities of TEMPUS, Kosovo’s development strategy, Higher Education development strategy, and the development strategy of the University of Prishtina as well as current EUA (European University Association) priorities. This is why it has been directly initiated by the University of Prishtina.

The project was jointly prepared by the consortium on the initiative of beneficiaries themselves and by capitalizing on experiences of consortium partners.

Project Aims

The project aimed at supporting curricular reform and capacity building at the University of Prishtina (UP) with support of the Ministry of Education, Science and Technology, the Kosovo Accreditation Agency and Student Unions. The project consisted of two main components:

One of these was to develop, accredit and implement an interdisciplinary doctoral program in Food Science and Technology. This objective included strengthening research capacities, as well as improving internationalization and mobility aspects within the third cycle.

As an interdisciplinary program, the doctoral program in Food Science and Technology involves the Faculties of Agriculture and Veterinary Sciences, Mathematics and Natural Sciences and Medicine at the University of Prishtina. The intention was to create a good practice model at this University, which demonstrates a doctoral model based on European standards in curriculum, research, internationalization and quality assurance. The program was accredited by the Kosovo Accreditation Agency and became an integral part of the University of Prishtina.

The second component was to bring the current institutional doctoral structure and processes at the University of Prishtina in line with the Bologna Process, European standards and recent trends in this field as a basis for curricular reform.

In two work packages dedicated to this goal preconditions for the introduction of the doctoral program were examined and documented. As a part of the capacity building measures trainings and site visits at EU partner institutions were organized. The analysis of the current situation in Kosovo as well as the comparison with systems and standards in the European Union should lead to adoption of needed structures and processes. In order to have optimal and sustainable impact – and as an added value of the project – the opportunity will be used to spread the results and impact of this process to the University as a whole.

These actions present a joint effort to improve the offer at doctorate level at the University and are one further step towards the integration of Kosovo into the European Higher Education Area (EHEA).

Partners



The composition of the project consortium was a logical “consequence” of the project idea which was initiated by the local partners. The consortium consisted of five local and six EU partners. As the main beneficiary, the [University of Prishtina](#) was intensively involved into all project activities. The project was based on the concrete need to develop an interdisciplinary doctoral program as the basis for further reforms of the structure and processes of the third cycle in Kosovo.

The two institutions mainly involved in the first component of the project were the [Technical University of Munich](#) and its [Centre for Food and Life Sciences](#) as well as the [University of Granada](#) and its [Institute of Nutrition and Food Technology](#).

Based on traditional cooperation with the University of Prishtina and the expertise in needed fields, both institutions contributed to the program design and the evaluation of courses (peer reviews). In addition, they hold trainings and send visiting professors for the co-teaching part in the curriculum. Furthermore, they invited UP professors for a study visits and received doctoral students for their 1-3 months research visits.

The work packages of component 2 were led by the project applicant, the [University of Graz](#). Austria as well as the University of Graz has a long-lasting cooperation with the University of Prishtina in various fields. A long-lasting cooperation between the Universities in Graz and Prishtina as well as many joint expe-

riences were basis to start the complex process of modernizing the structure for the third cycle at the University of Prishtina. The [University of Vaasa](#), the [University of Granada](#) and the [Austrian Exchange Service \(OeAD\)](#) contributed to this component by offering their expertise in the workshops, site visits and the analysis report.

Continuous exchange of experiences, expertise and information guaranteed that all partner institutions contributed to both project components.

As project coordinator and leader of the work package on quality control, [World University Service \(WUS\) Austria](#) had an important role in the project. WUS Austria has been supporting the reforms of Higher Education in Kosovo for 15 years. Its main role in this project was to offer and apply instruments, knowledge and lessons learned in order to assure knowledge and technology transfer, efficiency, quality, impact and sustainability of the project. The whole project was supported by important local stakeholders: the [Kosovo Accreditation Agency](#), the [Ministry of Education, Science and Technology](#) and the two local [Student Unions: Independent Union of Students at University of Prishtina](#) and [Student List Reforma](#). Their involvement in the project was a crucial factor for the sustainability and the institutionalization of the project results and their dissemination. They offered experts' input for steering the project, but also directly profited through undertaken capacity building measures.

Project Overview

Development, accreditation and implementation of the interdisciplinary PhD program “PhD in Food Science and Technology” at the UP

Milestones

- Design of the curriculum based on Bologna requirements
- Purchase of laboratory equipment for research
- Accreditation by the Kosovo Accreditation Agency
- Implementation: admission of 15 students
- Capacity building for all involved academic staff through two research trainings

Bring the current institutional PhD structure and processes at the UP in line with Bologna requirements

Milestones

- **Analysis** on PhD structure and processes and benchmarking
- **Capacity building** of key UP staff responsible for academic development through **three tailor-made trainings in the following thematic focus areas:**
 - **Training 1:** European context fundamentals, legal frameworks, comparison of national structures and principles
 - **Training 2:** Institutional situation, structures and procedures (design, implementation and accreditation procedures, organizational and academic issues, internationalization)
 - **Training 3:** Employability and career counseling
- Develop an analysis and benchmarking report incl. conclusions and **recommendations** for modernizing PhD structures and procedures

- Forward recommendations to UP Management, Senate and KAA for adoption
- **Public conference** in Prishtina for the presentation of the results of the project

Quality Control

Quality control of the project and its results was assured on the following levels:

- Quality assurance in curriculum development, syllabi, and in the teaching process
- Quality control through accreditation
- Quality of developed PhD procedures and structure assured through their adoption by UP management and Senate

Sustainability

Sustainability was assured through institutionalization of the main project results:

- Integration of the new PhD Program into the university curriculum
- Official acceptance of the “Recommendations for PhD cycle reform at the UP”

Dissemination

Dissemination measures are an integral part of all work packages and project activities and are conducted by all available means: printed materials, the project website, multiplication (through trainings) and most importantly, a public conference.



University of Graz



University Profile

As a comprehensive university and legal person under public law, the University of Graz regards itself as an international institution for education and research committed to research and teaching for the benefit of society. It comprises seven organizational units, i.e. six faculties and an administration and services department. The supreme bodies of the university are the University Council, the Rectorate, the Rector and the Senate. The University Act 2002 is the legal basis of the organization. Moreover, every university may pass by way of statutory instruments the required rules of order (Statute) in the frame of laws and regulations. The Rectorate, the University Council and the Senate are the governing bodies of the University. The University of Graz is a public university and mainly financed by the state. It is the University's policy to maintain freedom in research and teaching, which permanently commits the University to social, political and technological developments. Increasing flexibilization and globalization are the essential frame conditions. Besides its ambition to create profile and visibility in a European and global context, it is above all one of its most outstanding characteristics that the University has acquired a special position in the south-eastern European region. Research Basic and applied research belong to the University's excellences, based on the foundations of scientific and ethical integrity. The University fos-

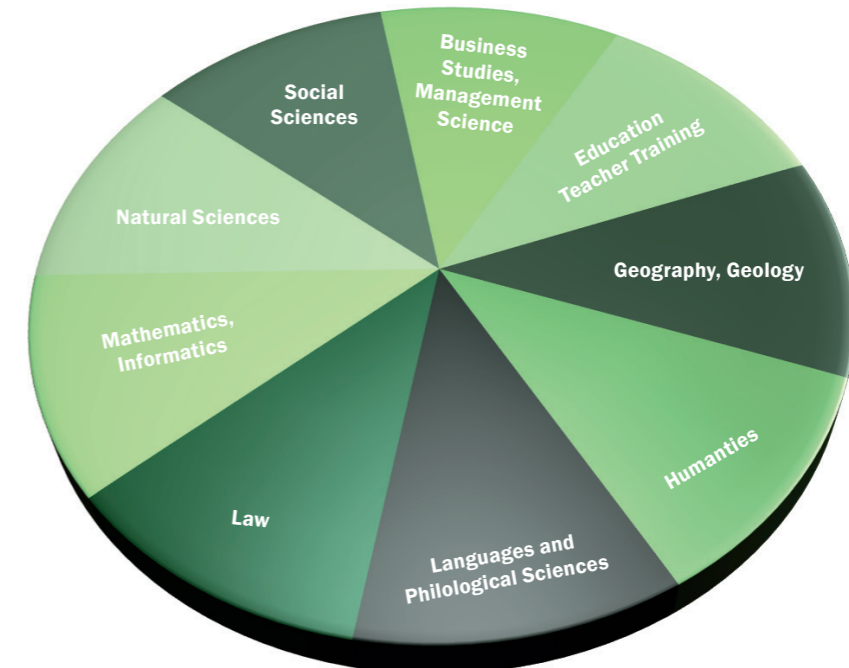
ters topical and methodological variety within an international cooperation network. It builds its profile by determining research focuses under the consideration of socially relevant research questions. Innovative interdisciplinary research and cooperation are amongst the subjects especially encouraged. The University involves its students in research in the context of research-based teaching. The University cooperates with excellent European and non-European universities and participates in important networks. It actively provides its knowledge and the results generated through research to society. At the University, students are trained to become autonomous and, as graduates with great technical and social skills, to acquire interdisciplinary and critical thinking. Teaching has the same value as research and is developed according to high quality standards. Research-based teaching allows for the needs of students and requirements of science, society and business. Innovative and interdisciplinary teaching plays a similarly important role as does student counselling and comprehensive education of students. The University acknowledges that students must take responsibility for their own learning processes and supports the principle of active participation in the further development of teaching. It encourages students' mobility by providing international mobility and mutual study programs.

Research Profile

Fields of strength at university are bundled across the faculties by way of academic research core areas. In this way, close cooperation is fostered – especially in the field of Humanities, Social and Cultural Sciences. The University of Graz strives to concentrate existing highly socially relevant disciplinary focuses at faculty level in university research core areas. The University of Graz pursues a strategy of optimizing its potential by cooperating with other universities in the region and uses synergy effects resulting from the concentration of resources and skills. Its research target is geared towards common fields of research – especially with Graz University of Technology and the Medical University of Graz – in order to achieve a critical mass. Its current interuniversity cooperation NAWI and prospective cooperation BIOTECHMED are essential for Graz as a scientific hub. Important aspects of this development are the harmonized research core areas of the participating universities in relation to their locations.

The university also identified core research areas: Brain and Behavior, Heterogeneity and Cohesion, Cultural History and Interpretation of Europe, Learning – Education – Knowledge, Models and Simulation, Molecular Enzymology and Physiology, Environment and Global Change.

Funding: There is a variety of funding opportunities outside the global budget of the university: FWF, OeNB, EU Research Framework Program etc. The University also has several cooperations with non-university research partners. Over 20 research centers are aggregated at the University of Graz, as well as at the Christian Doppler Laboratory and four Ludwig Boltzmann Institutes. Further research cooperations: NANONET-Styria = Styrian Nanotechnology Network; GEN-AU = Genome Research in Austria; GEN-AU = „GOLD – Genomics of Lipid-associated Disorders“; Competence Centers: Austrian Centre of Industrial Biotechnology; Know-Center GmbH; evolaris next level Private Foundation; Research Center Pharmaceutical Engineering GmbH.



Doctoral Education

“The education of early stage researchers shall increasingly take place within the framework of structured doctoral Programs and schools as well as initiatives for interdisciplinary and international networking.”¹⁰

Doctoral studies at the University of Graz are in line with the Salzburg Principles as well as with the Third Cycle scheme according to the Bologna Reform. All programs last three years (min. study duration) and demand a dissertational thesis which provides an original contribution to the field of research it is located in. Further, all doctoral programs aim at educating doctoral researchers in the main skills necessary for surviving in the academic shark tank. The establishment of three-year doctoral education started in 2007 (doctoral studies in Natural Sciences). Doctoral studies at the other faculties were restructured according to plan in 2009. In addition, the Joint Doctoral Program “Diversity Management and Governance” was introduced at the Faculty of Law. In October 2011, the three doctoral curricula at the Faculty of Environmental, Regional and Educational Sciences came into effect. The University of Graz thus offers the following doctoral studies (as of January 2014): Doctoral Studies in Natural Sciences, Doctoral Studies in Philosophy, Doctoral Studies in Social and Economic Sciences, Doctoral Studies in Religious Studies, Doctoral Studies in Theology, Doctoral Studies in Law, Doctoral Studies at the Faculty of Environmental, Regional and Educational Sciences (Philosophy, Natural Sciences, Interdisciplinary PhD Program), Doctoral Studies in Teaching Methodology, Joint Doctoral Degree in Diversity Management and Governance (Joint Doctoral Program). Additionally to the traditional/regular doctoral studies the University of Graz offers three different formats for structured doctoral education at the University of Graz: doctoral programs, doctoral schools and doctoral colleges. All three forms of education provide an excellent qualification for early stage researchers. Doctoral programs at the University of Graz are research-based. The University of Graz offers doctoral programs in each of which are from one to all six faculties of the University actively involved.

Doktoratsstudierende und Doktoratsabschlüsse 2011/12

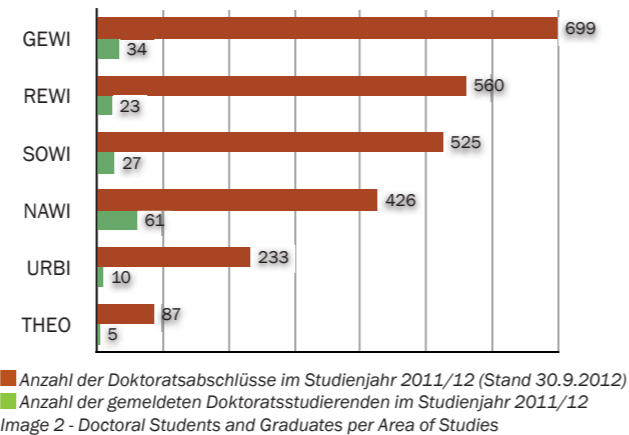


Image 2 - Doctoral Students and Graduates per Area of Studies

The implementation and organization of a doctoral program is laid down in the curriculum. There is a standard procedure for the implementation of new curricula: A curricula commission (professors and students) works on a new curriculum in permanent exchange with the Vice Rector for Teaching and Studies (i.e. his curricula development team) and other experts (e.g. DocService). They base the structure of the curriculum to be developed on already existing doctoral curricula at the University of Graz. In a long and intense process a final version of the new curriculum is drafted and handed in at the Senate of the University. Then a team of experts examines the curriculum and forwards a statement containing recommendations etc. to the curricula commission. After all problematic aspects are omitted the curriculum will be discussed and approved by the Senate (before the summer break) and will come into being on the 1st of October in the following year of study. Among other aspects, the curriculum regulates the format of the dissertation. Generally, a dissertation is presented as a monograph research work. Yet some doctoral studies give candidates permission to write a paper-based dissertation. With regard to the examination and evaluation process, some curricula prescribe a defensio, others a defensio plus an oral exam (on broader issues of the field of research). Usually, the examination senate consists of one chairperson and two examiners. Chairpersons may be examiners and chairperson in one, but this is not necessarily the case. In some curricula external examiners (i.e. not working at the University of Graz) are suggested.

At the University of Graz several administrative units are dealing with doctoral matters, such as the Admission and Examination Office and the Dean's Offices (each faculty counts with an office), the Director of Studies and his/her expert in University Law, the Deans of Studies, the chairpersons of the curricula commissions, etc. Academic staff: The master-disciple relationship is now broken up in favor of a more team-based approach. Structured doctoral education should also provide a group of supporting researchers for each doctoral candidate. Some curricula also distinguish between supervisor and mentor – a mentor is a person not involved in examining the candidate but is merely there to offer support and mediation (if there are problems e.g. with the supervisor). *“Doctoral colleges serve as a place where doctoral candidates can specifically work on a common research program funded by third parties in an organized manner.”¹¹*

As rule, doctoral colleges are funded by the Austrian Science Fund (FWF). Usually the funding covers the salaries of the candidates but not the infrastructure (offices, computers etc.). Doctoral students may apply for different kind of grants during their doctoral studies.



Image 3 - Grants a Doctoral Student can apply for

In average, there are 200 doctorate graduates per year at the University of Graz and they usually start to work in the following areas: The following table shows the number of employed doctoral



Image 4 - Employability sectors where usually Doctoral Graduates start to work

candidates at the University of Graz on the 31st of December 2012 (source: LQM [Leistungs- und Qualitätsmanagement] University of Graz):

Category	Austria			EU		
	F	M	Total	F	M	Total
Scientific staff financed by third parties	75	85	160	6	6	12
Other scientific staff	123	86	209	9	4	13
Others	17	17	34	1	1	2
Total	215	188	403	16	11	27

Category	Third Countries			Total		
	F	M	Total	F	M	Total
Scientific staff financed by third parties	6	4	10	87	95	182
Other scientific staff	4	4	8	136	94	230
Others	0	0	0	18	18	36
Total	10	8	18	241	207	448

Doctoral programs and their curricula at the University of Graz are linked to the society, the economy and the labor market. Each curriculum contains a section on the qualification profile of graduates and on the connection between the skills provided by the study program and the demands of the labor market. The University of Graz entertains much collaboration on institutional, regional, national and international level. According to a survey conducted in summer 2013, the University of Graz enumerates 115 collaborations with institutions in Austria or its neighboring countries which involve doctoral candidates. These collaborations include research, joint seminars, joint supervision, joint thesis reviewing etc. It is possible to obtain a doctoral degree via a Co-tutelle Agreement. Furthermore, the University of Graz has introduced the strategic project “Nachwuchsförderung” [“Promotion of Early Stage Researchers”] which deals specifically with the support and internationalization of early stage researchers (research visits, study visits, conferences etc.).



University of Granada

University Profile

As a public institution, the University of Granada provides tuition, research, services and promotes local development. The University is one of the oldest universities in Spain, founded in 1531. The management of the University operates through several collegiate bodies, such as the Faculty and the Governing Council, as well as individual bodies, such as the Rector, Vice-Rectors' Offices, Management and General Secretariat. The University of Granada offers 75 different degrees to its over 60.000 undergraduate and postgraduate students plus another 20.000 students in additional studies at its 28 faculties and schools. *The University covers all research areas through its 14 Research Institutes and 3 Research Centers which hold 346 research groups that are linked to the business world.* In addition, the University of Granada has got five campuses in the city of Granada, and two additional campuses in the cities of Ceuta and Melilla, in Northern Africa. The University's policy of using buildings of historical and cultural value has enriched its heritage, as well as promoting the restoration and maintenance of these buildings. In addition to this emphasis on more traditional elements, *the BioTic International Campus of Excellence that links the university with local, regional, national and international institutions and enterprises demonstrates the strong commitment to innovation by promoting interaction with technological bio-health*

companies and favoring high-quality healthcare and biomedical knowledge. The *Scientific Instrumentation Centre (CIC)* offers various services to *support research, focusing in particular on experimental subjects.* Collaboration on international projects, as well as seeking resources and partners, is managed through the *International Projects Office (OPI).*

For many years, the University of Granada has promoted a significant international activity thanks to its over 600 mobility agreements signed with European higher education institutions and the ERASMUS mobility programs. The University is also involved in major exchange programs with universities in the United States, Canada, Latin America, Central and Eastern Europe, the Middle East, Mediterranean countries, Australia, Oceania and Asia. At the University of Granada, one can find *28 teaching centers and 116 departments*, a Postgraduate School that coordinates the *68 master's courses and 29 doctorate programs*, as well as *113 additional courses.* Summer courses are organized by the Mediterranean Centre. Throughout the year, the Modern Languages Centre offers Spanish, teaching methodology and foreign language courses which are open to the general public. The Open Centre for Lifelong Learning offers courses for mature students where no previous academic qualifications are required. And the Virtual Teaching Centre organizes virtual training.

Research Profile

The University of Granada is safeguarding its future by developing high-quality research. Promoting traditional lines of research, providing significant support in other areas which, although less developed, may be of interest to a changing society and maintaining links with the companies and institutions are the criteria that underpin the research the University carries out. These ideas have proved to be successful, allowing an increase of funds earmarked for research and open up solid prospects for the future that did not previously exist. The growth in the scientific sector ensures that the University maintains its position amongst the leading Spanish universities. The flourishing relationships with public and private companies throughout the country, through research contracts and the provision of services, are guarantees for the future.

Furthermore, all research areas at the University of Granada follow the same research strategy

1. Excellence for all doctoral programs. The goal is to keep the citation of excellence given by the Spanish Quality Accreditation Agency (ANECA) in these programs and to obtain it in other cases.

2. Professional skills. The reform of doctoral programs has among its objectives the training of doctors whose professional horizon lies not only on academic level but also on institutional and company level linked to research.

3. Interdisciplinary relationships. One of the objectives of the reform of doctoral programs and the creation of doctoral schools is favoring the interdisciplinarity in training and promoting relations between students of different disciplines.

4. Internationalization. Both international and institutional research is essential, and it is therefore an objective to increase the number of collaborations with doctoral programs abroad and to promote the supervision of dissertations and theses with international mention.

5. Establishment of stable ties with organizations outside the University. The objective is to create a stable relationship with companies and institutions national and international wide. With regard to the funding, the University of Granada receives funding from the National and Regional Government, as well as from international programs. Furthermore, the research groups receive also funding according to their productivity.

Main Research Areas University of Granada

- Agriculture Science
- Architecture, Urban and Regional Planning
- Art and Design
- Business Studies, Management Science
- Education, Teacher Training
- Engineering, Technology
- Geography, Geology
- Humanities
- Languages and Philological Sciences
- Mathematics, Informatics
- Medical Sciences
- Natural Sciences
- Social Sciences
- Communication and Information Sciences

Doctoral Education

The Escuela Internacional de Posgrado is responsible for the management and coordination of all postgraduate studies as well as for Doctoral studies. *Its objectives are to provide complementary training of practical nature for obtaining the corresponding degree; to promote the acquisition of specialized professional skills for the entrance into the labor market; to allow the professional retraining in order to enrich the professional profile and to improve the current career path.*

At the University of Granada, there has been a reduction in the number of doctoral programs from more than one hundred in 1999 to 29 in 2013. Nowadays, the doctoral programs have been grouped in three Doctorate Schools: *Health Sciences:* Biomedicine, Biochemistry and Molecular Biology Molecular; Pharmacy, Clinical Medicine and Public Health; Nutrition and Food Science; Physical Activity and Health; Multidisciplinary Research and Innovation in Processes of Disability, Dependency and End of Life. *Social Sciences, Law and Humanities:* Economic and Business Studies; Educational Sciences; Legal Sciences; Social Sciences; Migration Research; Philosophy; History and Fine Arts; Languages, Texts and Contexts; Female and Gender Studies; Learning/Teaching Methodologies and Development of Educational Institutions. *Natural Sciences, Technology and Engineering:* Fundamental and Systems Biology; Earth Sciences; Dynamic of Biogeochemical Flows and its Applications; Statistics and Applied Mathematics; Physics and Space Sciences; Physics and Mathematics; Civil Engineering; Chemistry; Doctoral Program in Information and Communication Technologies; Civil Engineering and Architecture.

All doctoral programs are research-based. At the University of Granada, both administrative and academic staff members work for the doctoral programs. There is an Academic Committee and a Coordinator that are responsible for the design, the update, the quality and the coordination, as well as the admission of the candidates. They are also in charge of the progress of research and training and the authorization of the presentation of the

thesis of each student of the program. The directors of thesis are responsible of the conduct of the whole doctoral student research tasks. And the tutors are responsible of the adequacy of the student's training to the principles of the program.

The University of Granada does not receive funding for its doctoral programs. New doctoral programs are developed by initiatives of academics, especially due to the existence of productive research groups, partnerships with other universities, as well as the existence of a coherent area for development in relation to the national and international market. When developing a new doctoral program, the regulation foresees an application for the approval at the Doctorate School as a first step, then an application of approval to the University Government Council followed by an application for verification of the program to the National Agency of Accreditation (ANECA).

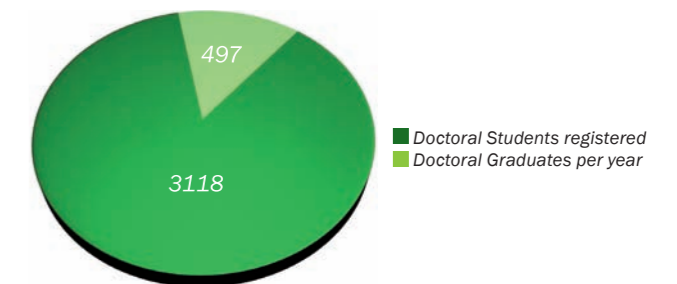


Image 5 - Doctoral Students registered and Doctoral Graduates per year; University of Granada

Many programs create networks for cooperation. Whereas there is a trend to reduce the programs to those more productive ones or with more impact, with regard to the excellence concept, and that are prioritized in terms of available grants for doctoral students.

The implementation and organization of a doctoral program is laid down in the “*Programa Oficial de Doctorado*” of each doctoral program. It includes the structure of the program, the admission criteria and procedure, possible lines of research, information about the director and coordinators, as well as about the doctoral thesis and its presentation. A doctoral thesis can be presented as a memorandum or as a collection of published articles. The examination consists of the following parts: the oral presentation of the doctoral thesis by the doctoral candidate outlining the applied methodology, the undertaken research and obtained results as well as the conclusions, by making special mention to his/her original contributions; the examination board composed of five members evaluates the doctoral thesis; the doctoral candidate comments on and replies to the evaluations and questions asked by the examination board during the evaluation or after all members of the examination board have finished their evaluation of the doctoral thesis; doctors present at the public event are allowed to ask questions afterwards. Completed the examination and after the deliberations of the members of the examination board and the debate on the qualification of the thesis, the President will inform the candidate the overall rating granted to the thesis in terms of ‘suitable’ or ‘not suitable’. Members of the examination board will issue a secret vote on the suitability, or otherwise, of the thesis to obtain the mention of „cum laude“, to be obtained if the vote is issued accordingly positive unanimously.

At the University of Granada, the strategy of the doctoral programs is to cover a broad research area larger than a degree program. They are also developed on a multidisciplinary and transdisciplinary level and have to be linked to the stakeholders. Moreover, the University of Granada offers postdoctoral internships to its doctoral graduates and counts with different joint initiatives.

Doctoral students are able to apply for different kind of grants during their doctoral studies.

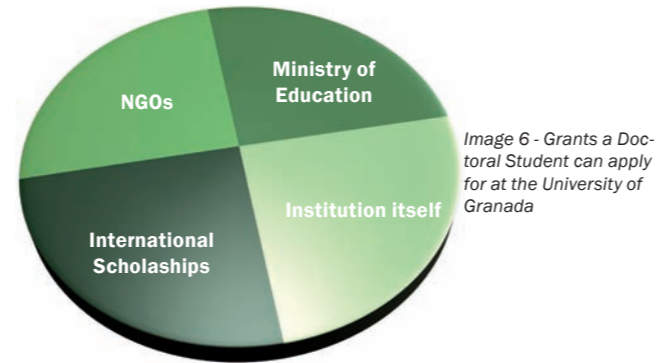


Image 6 - Grants a Doctoral Student can apply for at the University of Granada

In average, the approximately 500 doctorate graduates per year at the University of Granada usually start to work in the following areas:

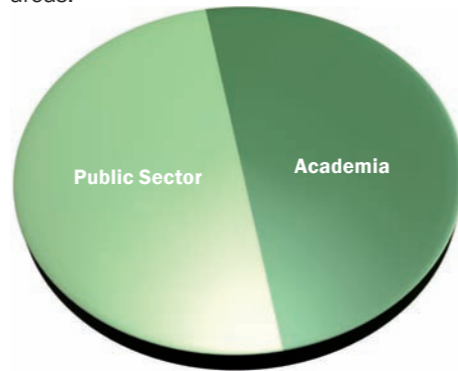
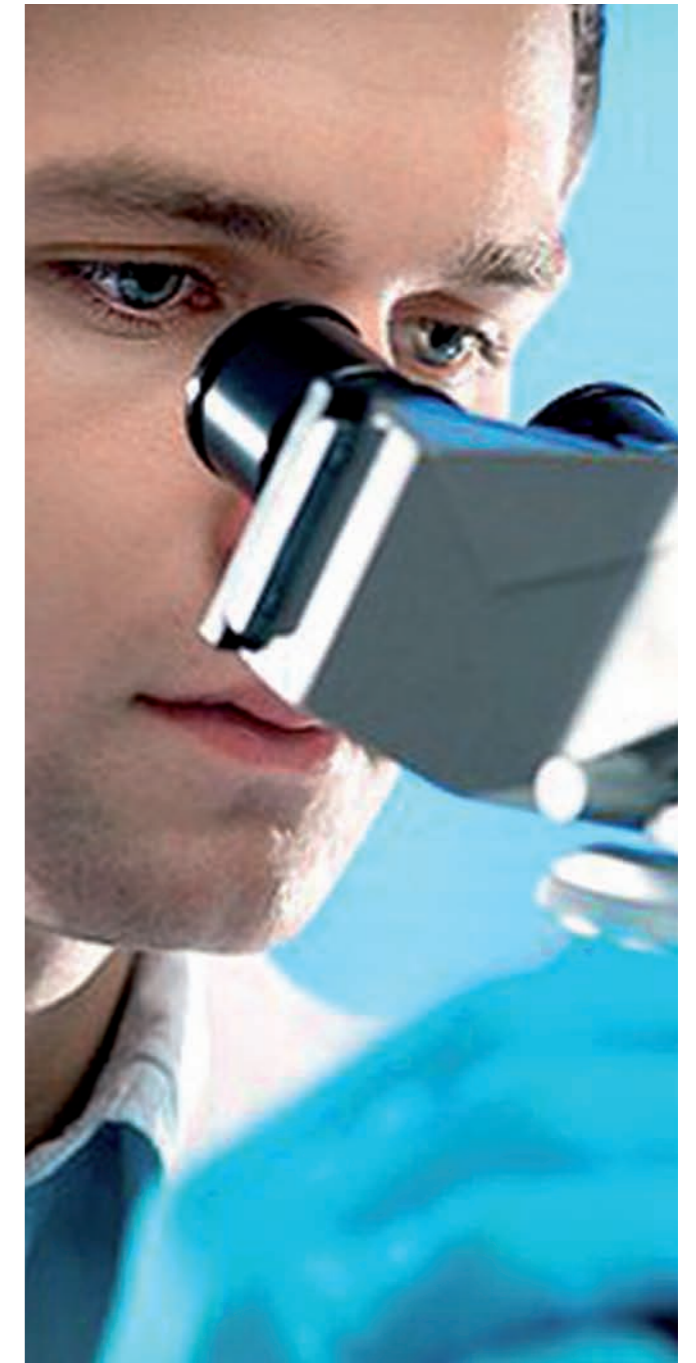


Image 7 - Employability sectors where usually Doctoral Graduates start to work; University of Granada

The following statistic shows the figures of teaching and research staff members employed at the University of Granada (source: *Memoria Académica 2012/2013, University of Granada*):

Hired teaching and research staff	
Assistant	7
Associate professor	382
Associate professor Health Sciences	211
Assistant professor	152
Assistant lecturer	190
Professor	320
Professor emeritus	8
Guest lecturer	17
Other categories	109
Total	1396





University of Vaasa

University Profile

The University of Vaasa is an autonomous university governed by public law. It educates responsible leaders and experts for international assignments. The fields of the University are Administrative Sciences, Business Studies, Languages and Communication Technology. The strategic areas of the University of Vaasa are Finance, Management, Energy and Multilingualism. These strategic areas are multidisciplinary themes in teaching and research, which the University has chosen and on which they focus in particular. *The University's research is strongly connected to its time and it produces scientific knowledge of high quality about issues which are useful for society and the business world.*

The University responds to modern demands by also providing its students with skills for international tasks and business competence. The strength of the University is the community spirit which promotes multidisciplinary studies and prepares graduates for tasks requiring responsibility in working life. *The University of Vaasa educates competent experts for the needs of the future.* In the University of Vaasa one can complete a degree at Bachelor, Master or Doctoral level. Students can also study in the Open University or, if they are already working, they can undergo further training

by taking courses in the Levón Institute. The University also offers several master's programs completely in English.

The University of Vaasa employs more than 500 staff members and educates more than 5.000 undergraduate and master students, as well as around 380 doctoral students.

The highest decision-making body of the University is the Board which is appointed by the University Collegium. The University operations are led by the Rector chosen by the Board. The Rector is supported in their tasks by the Steering Group which consists of the Deans and the Rector, who acts as the chair.

The University counts with three faculties: Faculty of Philosophy, Faculty of Business Studies and Faculty of Technology. The Faculty Council and the Dean of each respective faculty are responsible for its administration. Affiliated Institutions of the University are the Levón Institute and the Tritonia Academic Library. The operations of the Affiliated Institutions are led and supervised by a director appointed for this task. Administrative services for the University's faculties are provided by the University Services.

Research Profile

Research at the University of Vaasa is done according to contemporary standards in research groups which are often international and multidisciplinary. The University of Vaasa is committed to follow the guidelines for responsible conduct of research published by the *Finnish Advisory Board on Research Integrity (TENK)*.

The University's research operations are arranged to be conducted by discipline-specific and multidisciplinary research groups which realize research projects and supervise doctoral students. The University's research focus areas are Energy, Finance, Management and Multilingualism. The strategic goals for research are:

1. *Research and postgraduate education will become more international.*
2. *The national share of the University in postgraduate education, international publication activity, and research funding of all fields will increase.*
3. *The best research groups will reach a high, internationally recognized, standard.*

These strategic goals will be realized through research groups, graduate schools, the tenure track model, and publication activity.

The research funding is covered with 75% by the Ministry of Education (objectives & results based funding, agreed during negotiation rounds every three years between University and Ministry), and with 25% by external funding sources such as national research funding agencies (for instance Tekes, Academy of Finland), private foundations, private companies, the European Union, and other public funding agencies.

The research groups consist of professors, postdoctoral researchers, doctoral students finishing their dissertations and project researchers. The research groups are often part of national as well as international networks.

The University of Vaasa enumerates 200 research projects, whereas Technobothnia and the Vaasa Energy Institute can be highlighted as principle research projects. Technobothnia is a joint teaching and research laboratory of three higher education institutions in Vaasa. The Vaasa Energy Institute is a joint research platform for three higher education institutions: University of Vaasa, Vaasa University of Applied Sciences, and Novia University of Applied Sciences.

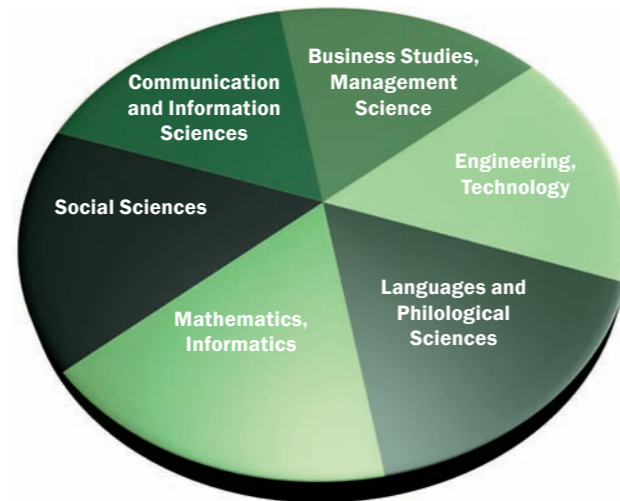


Image 8 - Main Research Areas University of Vaasa



Doctoral Education

In 2011, the University of Vaasa founded a Graduate school with four doctoral programs: Administrative Sciences, Languages and Communication, Business Studies and Technical Sciences. The goal of the graduate school is to ensure that all doctoral students at the University of Vaasa have the opportunity to pursue a high quality doctoral program. At the same time the graduate school supports the planning of doctoral studies, research work and the progression of doctoral studies. Before that, doctoral education was more tailor made at the faculties, however, the same degree structure (240 ECTS) was applied. All doctoral students belong to the graduate school and to one of the doctoral programs. Each doctoral program is headed by a professor from the main subject area. Other professors act as supervisors for the corresponding doctoral students. Post docs candidates and other research group members work as (unofficial) mentors. There is also research staff teaching the doctoral study courses, while the administrative staff is responsible for study counseling, course organization and registration, study credits, preparing the dissertation process, publication of thesis etc. All doctoral programs at the University are research-based. The University of Vaasa receives funding from the Ministry of Education whereas the money is not ear-marked for doctoral education, yet it is up to the University to decide how to organize the doctoral education within the overall budget of the University.

In order to obtain a doctoral degree, the doctoral student needs to acquire 240 ECTS of these 180-200 ECTS is work on the doctoral thesis, while 40-60 ECTS entail doctoral study courses. 240 ECTS is a general norm and the objective is to finalize the doctoral program in four years' time.

Doctoral students work as members of universities research groups. Most research groups have active collaboration with the surrounding society and economy (e.g. joint research projects). The University of Vaasa also offers international opportunities to its doctoral students in terms of international contacts and international projects of the research groups they belong to. Students are encouraged to participate in international conferences and to carry out research mobility periods during their doctoral studies. Furthermore, national joint graduate schools offer joint doctoral study courses, workshops and seminars for students coming from different universities.

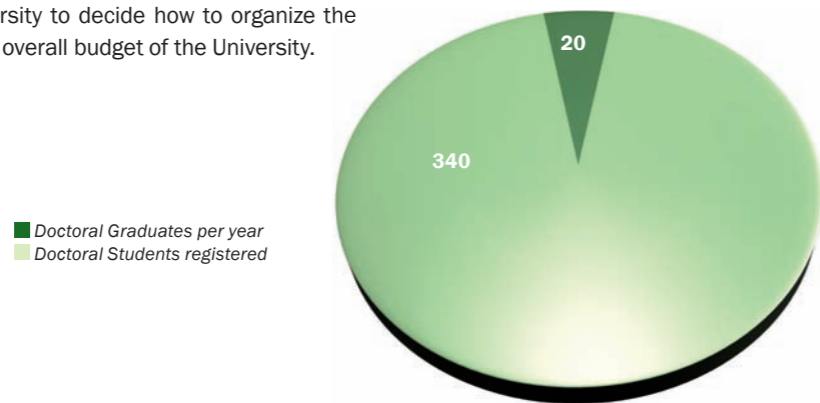


Image 9 - Doctoral Students registered and Doctoral Graduates per year at the University of Vaasa

With regard to the doctoral dissertation, this can either be one single research (monograph) or several academic publications or manuscripts accepted for publication. Dissertations consisting of several publications can either be article-based or essay-based doctoral dissertations. According to the Degree Decree (794/2004, Section 22), an acceptable dissertation may consist of scientific publications or manuscripts accepted for publication that concern the same research problem the number of which is deemed sufficient by the University, and a summary written on those publications, or another work that meets the corresponding scientific criteria. The publications can also be joint publications if the doctoral candidate's independent part of the work is clearly visible in them.

The faculty board appoints at least two pre-examiners for the research who must be from outside the faculty. Based on the pre-examiners' statement, the faculty board decides on granting the right to defend the dissertation. The doctoral candidate is given an opportunity to respond to the pre-examiners' statements. After granting the permission, the faculty board appoints one or two opponents to examine the dissertation and a professor or assistant professor to be the Custos in the dissertation proceedings. After the public examination, the opponent appointed by the Board of the Faculty must give a written statement about the dissertation within the period the faculty determines. The candidate must be given a possibility to respond to the Opponent's statements. The faculty board makes the decision of approving or rejecting the dissertation and evaluates the dissertation by giving the final grade.

The doctoral programs at the University of Vaasa and their curricula are linked to the society, the economy and the labor market. In average, there are 20 doctorate graduates per year at the University of Vaasa and they usually start to work in the following areas:

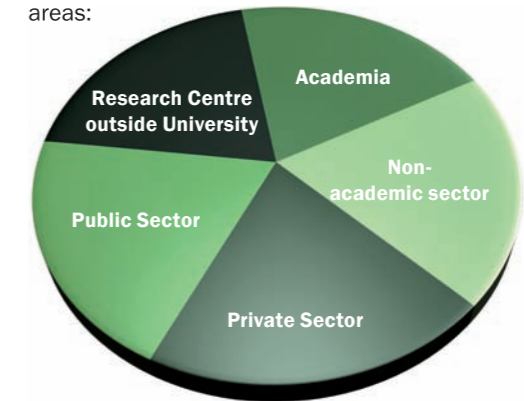


Image 10 - Employability sectors where usually Doctoral Graduates start to work University of Vaasa

Doctoral students of the University of Vaasa are able to apply for different kind of grants during their doctoral studies, such as:

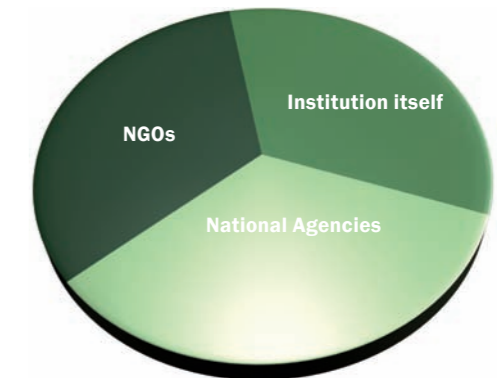


Image 11 - Grants a Doctoral Student can apply for at the University of Vaasa



University of Prishtina

University Profile

The University of Prishtina is an autonomous public institution for higher education, *engaged in academic education, scientific research, artistic work, expert consultancy and other fields of academic activity*, and the most important educational, scientific and cultural institution in Kosovo. It is the only university that offers doctoral studies.

Even though it is a relatively young institution, its educational, scientific and artistic activities have yielded considerable, undeniable and historically important results. In addition, the University of Prishtina is among the first Higher Education Institution in the region to begin the reform process according to the Bologna Process. The implementation of the reforms started in the academic year 2001/2002 and continues to date.

The University has 14 faculties with about 2.000 employees, out of which about 1.600 are teaching and approximately 400 are administrative staff. The University has about 52.000 full time and part-time students at all levels of study (about 80% undergraduates, about 19% at master and about 1% at doctorate level).

The University consists of academic and organizational units. The academic units of the University are: 1. Faculties, and 2. Faculties of Applied Sciences. The following faculties operate within the University: Faculty of Philosophy; Faculty of Mathematical-Natural Sciences; Faculty of Philology; Faculty of Law; Faculty of Economy; Faculty of Construction and Architecture; Faculty of Electrical and Computer Engineering; Faculty of Mechanical Engineering; Faculty of Medicine; Faculty of Agriculture and Veterinary Medicine; Faculty of Arts; Faculty of Physical Education and Sports; and Faculty of Education. The Faculties of Applied Sciences is the Faculty of Technical Applied Sciences in Ferizaj. The organizational units within the University are the International Relations Office, the Information Technology Office, the Academic Development Office, the Gender Equality Unit, and the Academic Affairs Office. Moreover, the University counts with the following structures:

- 1. University Clinical Centre (managed by the Ministry of Health);
- 2. Human Rights Centre;
- 3. Teaching Excellence Centre; and
- 4. The Centre for Career Development “CCD”.

Currently, *the government allocates about 70% of the budget* while the rest of the revenue is generated from student tuition fees with a small contribution from the services provided by the institutes, particularly the technical ones. There are therefore a number of limitations on how the University chooses to spend money. The Rector allocates an annual budget for the activities of the Student Parliament and Student Councils, following consultations with the University Board. The University Board issues the regulation for the work of the Student Parliament and Student Councils based on the proposal of the Senate.



Research Profile

Despite any difficulties, there is evidence of *modest scientific, artistic research initiatives*, mainly taking the shape of *doctoral studies* and *cooperation with international institutions*.

The University of Prishtina focuses its main research strategy on:

1. Development of human capacity:

- 1.1. Support University's academic units developing doctoral programs based on the Bologna system.
- 1.2. Establish scholarship schemes for short-term research visits abroad for academic staff.
- 1.3. Encourage inter-disciplinary approaches in scientific and artistic research activities.
- 1.4. Develop criteria for providing material incentives for the staff involved in scientific research and artistic work.
- 1.5. Encourage inclusion of expertise from the Diaspora.
- 1.6. Draft and approve contractual obligations of the academic staff.

2. Improve and enhance infrastructure:

- 2.1. Design a database for the current capacity of infrastructure at the University.
- 2.2. Establish mechanisms and procedures for shared utilization of laboratories and facilities within the University.
- 2.3. Sign agreements for utilization of research infrastructure.
- 2.4. Provide needed infrastructure.
- 2.5. Provide access to relevant electronic libraries.

3. Internationalization:

- 3.1. Establish strategic partnerships with reputable international institutions.
- 3.2. Organize training and offer technical assistance on project development.
- 3.3. Allocate funds to co-finance implementation of international projects.
- 3.4. Publish/distribute information on opportunities for international cooperation.

4. Cooperation with the public and private sector:

- 4.1. Establish a database on cooperation projects with the public and private sector.
- 4.2. Develop mechanisms and instruments needed to provide professional programs of various lengths to better meet market needs.
- 4.3. Encourage inclusion of social and economic entities in the drafting and implementation of research oriented academic programs.

There is no specific budget addressed only for research yet. However, according to its financial capacity the University of Prishtina supports each year some basic infrastructure laboratory facilities and research methods, publications and participation in conferences, small facilities for research bases mainly for education purposes.

Main research activities are based on cooperation with international research communities (joint projects, support projects, etc.) and national grants (Ministry of Education Science and Technology – through the National Program for Research, other governmental funds) and very little from the cooperation with industry.

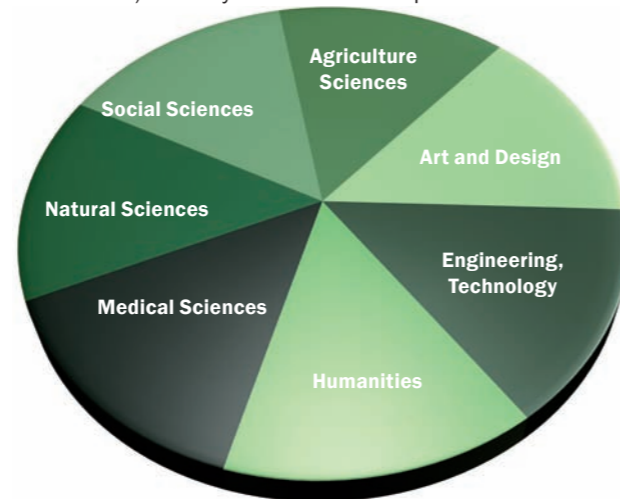


Image 12 - Main Research Areas University of Prishtina

Doctoral Education

- (1) To build up and improve knowledge, to develop new and relevant artistic practices and to implement all of these;
- (2) To educate distinguished researchers and scholars in designated fields of science and art;
- (3) To enable doctoral candidates to do independent work in sciences or art, to do independent research and to do critical evaluations of other people's work.
- (4) To acquire knowledge, experience and skills that shall enable doctors of sciences to find creative ways, on the bases of their research, of solutions to complex economic and social problems;
- (5) To internationalize the research/artistic work that is done at the University

are the objectives of doctoral studies at the University of Prishtina.¹²

At the beginning, a doctoral program at the University of Prishtina was 100% dissertation work. In 2008 for the first time, the University developed a regulation on doctoral studies mainly with the aim to develop a framework of doctoral process. Under Article 49, point 8 of the Statute of the University of Prishtina, the Senate of the University approved in September 2010 the new regulation on doctoral studies which regulates the organization and implementation of doctoral studies at the University of Prishtina and which was reviewed in 2013 in order to follow the Bologna trends for higher education. Nowadays, the 24 offered doctoral programs are research-based; they cover the following areas of study: Agriculture Science, Engineering and Technology, Humanities, Languages and Philological Sciences, Law, Mathematics and Informatics, Medical Sciences, Natural Sciences, as well as Social Sciences.

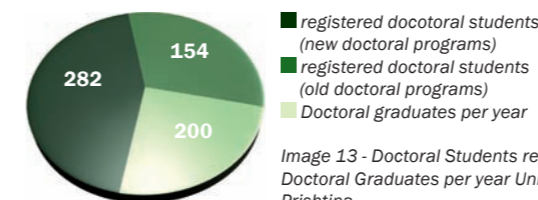


Image 13 - Doctoral Students registered and Doctoral Graduates per year University of Prishtina

The University's doctoral programs and their curricula are linked to the society, the economy and the labor market.

The University of Prishtina does not receive explicitly funding for its doctoral programs. However, students are able to apply for different kind of grants:



Image 14 - Grants a Doctoral Student can apply for at the University of Prishtina

In order to ensure quality and promoting mobility of doctoral candidates and teachers, doctoral studies are open to any form of cooperation with similar institutions at home and abroad. The doctoral studies are led by the council of doctoral studies.

There are different forms of doctoral studies available at the University of Prishtina: 1. Doctoral studies where the responsible institution is only one academic unit or the University itself; 2. Joint studies carried out by two or more universities, but only one is the responsible institution; 3. Sandwich model whereby the doctoral candidate enrolls in doctoral studies in one university but conducts research in several institutions and have several co-mentors, but get the degree from the responsible institution; and 4. Joint studies whereby the doctoral program is accredited at two or more universities and the doctoral candidate may get a joint diploma of two or more universities, or only one diploma of the university where he/she has been enrolled.

The University's doctoral studies are organized into six semesters: **1st semester** – students shall accumulate 30 ECTS credits from three subjects in narrow fields of studies they have enrolled in; **2nd semester** – students need to acquire 30 ECTS credits from seminars of three cluster groups of three subjects of studies; **3rd semester** – students will obtain 30 ECTS credits for the project

proposal for dissertation which has been attested positively and ratified by the Academic Unit Council of Doctoral Studies and by the Central Council of Doctoral Council and after the appointment of the mentor by the Senate; 4th semester – students accumulate 30 ECTS credits by publishing a part of their dissertation results in an internationally reviewed journal in the respective field or by participation in and presentation at an international scientific gathering; 5th and 6th semester – students will acquire 60 ECTS for the public defence of their dissertation.

The dissertation, accompanied by the mentor's written and signed consent and opinion on the conducted research and on the achievement of original scientific contribution, is officially handed in in electronic and in printed form by the doctoral candidate to the faculty or University. In the case of artistic doctoral work, the doctoral candidate, besides public presentation of the work, needs to submit the theoretical part, as well as the required documents for the evaluation.

The Doctoral Studies Council of the academic unit reviews the mentor's justification and proposes to the Council of academic unit to appoint a Commission for dissertation evaluation or to refuse the appointment. The mentor's justification is given to the members of the Commission and will be considered for their assessment. In addition, the service of doctoral studies of the academic unit has to attest in written form that the doctoral candidate has met all obligations as determined by the program of doctoral studies.

The Council of the academic unit upon the proposal of Doctoral Studies Council appoints the dissertation evaluation Commission which is comprised of three or five members that must have at least the academic title of Professor Assistant (Prof. Ass.). It is encouraged to include at least one member from a foreign University. The mentor cannot be a member of the Commission. At the time of appointment of the dissertation evaluation Commission the University publishes the title and the summary of the dissertation written in Albanian and English on the University web page, enabling the work to be subject to be public scientific and professional critique. Members of the Commission and all of those who have had the possibility to review the dissertation are obliged to treat the data with confidentiality prior to the publication of the dissertation evaluation with the purpose of protection of the scientific contribution of the dissertation as an intellectual property.

The Commission is requested to draft a written report of the evaluation of the dissertation. The chair of the Commission prepares a report on the basis of written opinions of the members. All members have to sign the report afterwards. However, each member of the Commission has the right to present a separate individual evaluation. The Commission makes a proposal for: 1. acceptance of the dissertation by an explicit statement on the original scientific or artistic contribution, or 2. revision of the dissertation and final evaluation, or 3. rejection of the dissertation work, in which case the doctoral candidate loses the right to earn the doctoral degree of sciences or of art through the presented work. A justification is a mandatory part of the report. The Council of the academic unit in the first subsequent session makes a proposal to the Senate upon the proposal of Council of Doctoral Studies appointment of Commission of dissertation defence.

The Doctoral Candidate can defend the dissertation after the Faculty Council has approved the positive evaluation of the Commission for the dissertation, which needs to be ratified by the Senate within two months from the day of its submission to the Central Doctoral Studies Council. The doctoral candidate shall agree with the Dean of the academic unit and the Commission of Defence on the time of the dissertation defence.

The dissertation defence Commission is also comprised of three or five members. The Commission of defence may be the same as the evaluation Commission, except the mentor. The mentor participates in dissertation defence on the side of doctoral candidate but has no voting right. The dissertation defence is public. An announcement of the public defence must be published at least eight days prior the date of defence in one of the local daily newspapers. The defence has to be organized within the University premises of the academic unit, in the same language the work has been written in. In cases of joint dissertations the defence may be organized in another university. The procedure of defences is regulated by protocol.

The Commission of defence evaluates the dissertation immediately after the public defence. The evaluation can be: 1. has defended successfully or 2. has not defended. The decision is taken by the majority vote of the members, attested by their signatures.

Graduates of the University of Prishtina usually start to work in the following sectors:



Image 15 - Employability sectors where usually Doctoral Graduates start to work University of Prishtina



The PhD program „Food Science and Technology” at the University of Prishtina

(1) The Program

There is a worldwide necessity for highly qualified experts in food science, production and processing and especially in Kosovo. Due to these needs, the doctoral program in Food Science and Technology was developed within the Tempus project “*PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina - PhD@UP*” and in cooperation between the University of Prishtina and the European universities: University of Graz, Technical University Munich, University of Granada, and University of Vaasa, as well as local and international institutions. The *interdisciplinary PhD program* involves the Faculty of Agriculture & Veterinary Sciences (FAV), the Faculty of Mathematics & Natural Sciences (FMNS) and the Faculty of Medicine (FM) at the University of Prishtina.



Structure, Development and Implementation

The PhD program “Food Science and Technology” is a three year program which carries a total of 180 ECTS – 60 ECTS in courses and 120 ECTS in research – and is structured in the following way:

During the *first semester* eight elective modules are offered out of which three must be completed by each student with a workload of a total of 30 ECTS (10 ECTS per module). Each student can choose among the following eight modules:

- A) Nutrition and Public Health
- B) Biotechnology
- C) Food Production
- D) Chemical and Physical Food Analysis
- E) Food and Beverage Technology
- F) Environmental Measure Techniques
- G) Food Quality and Safety
- H) Food Policies, Strategies and Legislation in EU and in Kosovo.

During the *second semester* eight elective seminars are offered out of which three must be completed by each student which presents a workload of a total of 30 ECTS (10 ECTS per seminar). Each student can choose among the following eight seminars:

- A) Food Microbiology
- B) Journal Club and Bioinformatics
- C) Clinical Nutrition
- D) Applied Genetics
- E) Physical Chemistry
- F) Experimental Nutrition
- G) Nutritional Education and Promotion

The remaining *120 ECTS* are dedicated for *research and the preparation of the doctoral thesis*.

With regard to the supervision of the dissertation projects, that a mentor from the University of Prishtina as well as co-mentors from the partner universities supervise each dissertation project. Usually this is done by ordinary and associate professors and only in case of lacking professors from the field assistant professors or emeritus professors will carry out this task.

The *partner universities are directly involved in the implementation of the doctoral program by guest lecturing, practical training on research capacities and equipment use* carried out by professors of the University of Munich and the University of Granada. University of Graz, University of Vaasa and ÖAD contributed to

the organization of the program by offering their expertise during study visits and trainings.

The program has been *accredited* by the Kosovo Accreditation Agency. The necessary equipment for research and the teaching process has been delivered and installed at the Faculty of Agriculture and Veterinary Sciences.



Application and Selection Procedure

The first call for application of the doctoral program “Food Science and Technology”, open to public, was published on the website of the University of Prishtina and in the daily newspapers and was open from 1st to 15th of December 2012.

This program targeted students from the area of *Natural Sciences* (Agriculture, Veterinary Medicine, Medicine, Biology, Nutrition and others) with *interest in food science and technology*, who will upon its completion acquire the title of Doctor of Science.

Additional criteria for the selection were the students’ grade average, the number of publications and their English language skills. In total, the University of Prishtina received 74 applications out of which 40 applications passed the technical evaluation. Finally, 15 students (8 females and 7 males) were selected and admitted to the doctoral program. The selection was based on the students’ motivation letters which had to be written about a topic in the field of food science and technology, as well as on the interviews that were conducted as the last step in the evaluation process.

The selection committee consisted of four professors of the University of Prishtina (Faculty of Agriculture & Veterinary Sciences; Mathematics & Natural Sciences; Medicine) and one of the University of Granada.

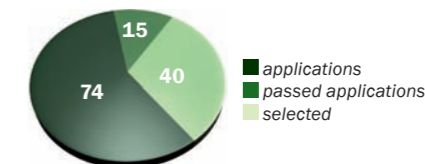


Image 17 - Overview applications PhD program „Food Science and Technology”

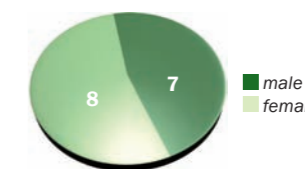


Image 18 - Selected students by gender for the PhD program “Food Science and Technology”

Students

The first generation of students of the doctoral program “Food Science and Technology” are mainly Albanians from Kosovo who have finished their graduate studies in different universities in Kosovo and abroad. Eight of them finished their studies at the University of Prishtina, four at the University of Tirana, one in London, one in Zürich and one at the University of Sarajevo.

Six students have a background in Natural Sciences (three in Biology and three in Chemistry), four in Human Medicine (two in Doctor of Medicine and two in Pharmacy), three in Veterinary Medicine and two in Food Technology.

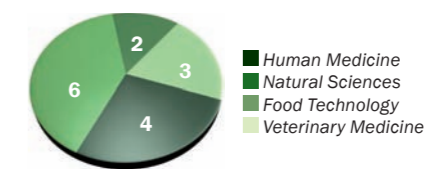


Image 18 - Selected Students’ Background – PhD program “Food Science and Technology”

During their doctoral studies, the students have to carry out a mobility stay at one of the partner universities between 1 to 3 months for which the students receive a grant co-financed by the TEMPUS project and the University of Prishtina. The aim of the mobility is to enable students to actively collaborate with the research groups at the respective institution.

Finance

The implementation of the program was co-financed by the corresponding TEMPUS project. With the support of the TEMPUS project a specific research laboratory at the Faculty of Agriculture and Veterinary Sciences was equipped adequately. It also supports the students research stays at the partner universities for 1-3 months and partly covers the co-teaching and co-supervising in the form of an initial funding. These costs have to be borne by the University of Prishtina or additional funding has to be secured in the future. For this edition of the program, the University of Prishtina covers the salary of all lecturers in the 1st and 2nd semester and the salaries of mentors and members of different committees involved in the procedure of the doctoral theses preparation and defense.

Internationalization

This program pursues a *high level of internationalization* by developing a *joint doctoral program* and involving several national and international universities and institutions.

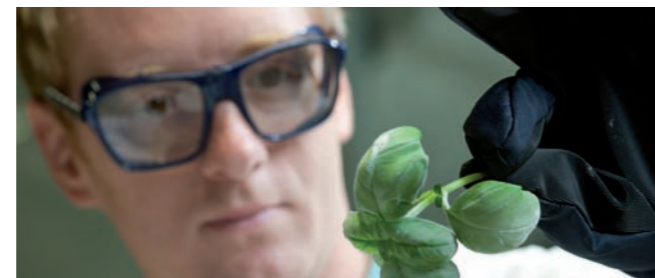
To sum up, involving experts from the field of food science and technology, on the one hand, and from the area of development of doctoral programs and structures, on the other hand, led to the development of a *high quality doctoral program in line with Bologna standards*.

This international trend will be continued in the process of implementation of the doctoral program by offering *joint teaching and research* involving teaching staff from the University of Prishtina, the Technical University Munich and the University of Granada. Consequently, *all modules and seminars had been jointly developed* and are implemented by the teaching staff of the mentioned universities.

In addition, all doctoral students are required to conduct a *research stay* of at least one to three months *at one of the partner universities*. This internationalization measure will not only improve their chances on the labor market but will offer many opportunities to expand their academic network and to gain diverse experiences in their research fields. This research stay takes place after the second semester and is covered by project funds.

“Ingredients for a successful pilot project”

In short, an accurate *needs analyses* as well as the definition of a *precise qualification profile* in combination with a *clear outlook on future job perspectives* if it is in academia, research or the private labor market, are important preconditions for the implementation of a high quality doctoral program. In the case of the doctoral program in “Food Science and Technology”, young researcher profit not only from an *interdisciplinary* program but also from a *high level of internationalization* and the cooperation of various universities which have a long standing tradition in doctoral education.



(2) Experiences with the development and implementation process

“PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina” project is promoting the academic cooperation with international partners, consultation and involvement of students, public and private partnerships, ensuring consistency and quality through partnership and cooperation between them, knowledge exchange and peer reviews, the process of internationalization of research, teaching and interdisciplinary approach.

The project approach provides support to research sector, agricultural based policy, economic development, health and environmental aspects, and European integration concept. It also encourages and creates a mechanism for the development of PhD studies at the University of Prishtina based on the Bologna system.

During the development and implementation of this doctoral program difficulties and positive aspects were experienced. The doctoral program is currently having difficulties in terms of co-financing and project-sustainability where improvements are still needed. The positive aspects up to date have been the knowledge and experience transfer with all partners within the project. Also, the University of Prishtina has gained an enormous support especially in the curricular reformation and in the initiation of fundamental research work. In addition, it is the first doctoral program organized at the University of Prishtina at the level of competence and internationalization that resembles to doctoral programs offered in the surrounding regional universities.

Current Situation

The implementation of the second year is in process and joint lecturing with partners is ongoing. At the beginning of 2014 the students started their mobility phase with duration of minimum 1 month. Also joint mentorships for their doctoral theses (based on the University of Prishtina regulation on doctoral studies) were discussed. About twenty local academic staff members have participated/are participating in the teaching and research process. Furthermore, about ten European professors and as-

sistants have participated/are participating in the knowledge exchange, guest lecturing and research processes.

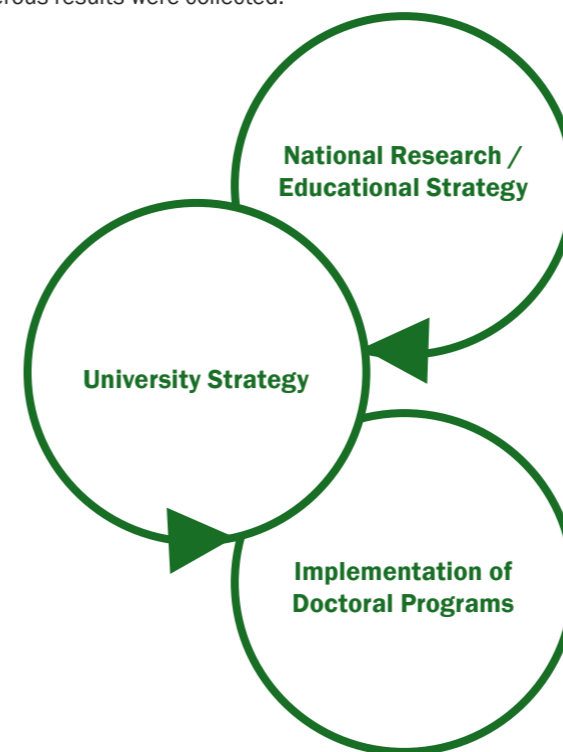
In addition and within the TEMPUS Project as well as for the purpose of the implementation of the doctoral program at the University of Prishtina, a laboratory for molecular biology and biotechnology has been equipped. Moreover, the University of Prishtina disposes of the KIKT centre which was recently funded and equipped within another TEMPUS project, also containing relevant research equipment. Moreover, the necessary literature for the purpose of the implementation of this study program was purchased and is available to the students at the University’s library. All these facilities are at the disposal of the doctoral students to support their research activities. What is more, the Rector of the University of Prishtina has instructed the management of the Faculty of Agriculture and Veterinary Sciences to make all the efforts for the recruitment and registration of the next generation of students in the doctoral program “Food Science and Technology”.





Results & Conclusions

During the implementation of the presented TEMPUS project and the doctoral program in „Food Science and Technology“ numerous results were collected.



In order to better illustrate how the different levels interlink, this chapter of the report has been organized accordingly. Thus the results were organized by levels: on national level: national research / educational strategy; on university level: university strategy; and on practice level: the implementation of doctoral programs.

National Research / Educational Strategy

Even though “research and technological development (RTD) is still a marginal undertaking in Kosovo”, both the MEST as well as the National Research Council took a very important step forward by providing a structural and legal framework for the enhancement of research activities in Kosovo. Moreover, universities and non-university research organizations identified the need for significant increase of research and technological development as a “vital instrumental importance for the economic and social development of Kosovo”¹³.

“*The National Research Programme of Kosovo*”¹⁴ that was approved by the National Research Council in 2010 for a period of five years, therefore lists 5 plus 1 priorities which are:

1. Natural Resources, Energy and Environment
2. Agricultural Production and Food Safety
3. Medical Research
4. Social and Economic Studies
5. Linguistic, Cultural and Historic Studies
6. Cross-horizontal Research in Information and Communication Technologies

However, the Research Institute of Development and European Affairs stated in its report about the state of research in Kosovo in 2012 that *only a low volume of research and research activities* can be found.¹⁵ Moreover, there is no structured system which requires that relevant institutions to organize and report their research activities.

The following main challenges were identified¹⁶:

- According to the European Commission Progress Report there is no *investment in research*
- There is an urgent *need to establish a research fund* to support activities of researches and *build the capacity of research institutions*¹⁷
- There is a *lack of scientifically qualified personnel, low number of PhD students, insufficient laboratory equipment and inadequate technical know-how*

- In addition, Kosovo is allocating only 0.1 per cent of its GDP for science and research. Ministry of Education, Science and Technology allocates 1.000.000 Euro which should be used to fund research projects in the six priority fields.
- *Doctoral programs* at the University of Prishtina were *not research based*
- Numerous strategic papers and action plans were drafted by the local authorities; nonetheless no major steps were undertaken to implement them.

Among these challenges the lack of funding is mentioned as the major problem according to European Commission report 2012.¹⁸

University Strategy

Even though “the higher education system in Kosovo is characterized by a marginalization of scientific research”¹⁹ on institutional level, one of the milestones has been the development of the Regulations on Doctoral Studies at the University of Prishtina in 2010 and its modification in 2013. These regulations which are based on the Statutes of the University of Prishtina provide the legal, structural and organizational framework for the introduction of doctoral studies which are in line with the Bologna System, European and international standards.

However, in the next years the major challenge will be the implementation of as well as the realization of the doctoral programs according to these regulations.

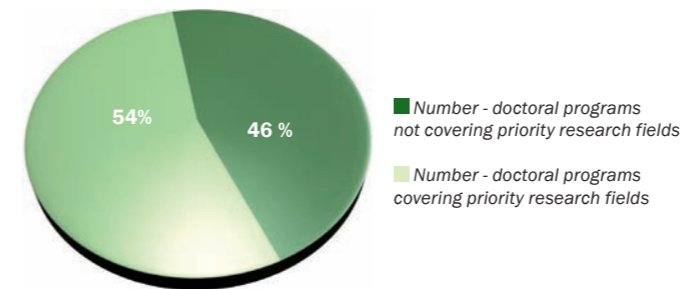
The Kosovo Accreditation Agency (KAA) was established by the Ministry of Education, Science and Technology of Kosovo (MEST) through the Administrative Instruction: MEST [I] 11/2004, 16.02.2004. The role of KAA is to assess and accredit the quality of Education and Science activity, professional services of Institutions on Higher Education (IHE) in Kosovo, guaranteeing teaching quality in all Public Institutions (PI) and Private Institutions (PI) on Higher Education (HE). In order to ensure the fulfillment of the criteria for accreditation of the institutions and their programs of study, as defined by the National Quality Council, Office of Kosovo Accreditation Agency drafted the guide that includes all the requirements that need to be met by the applying institution, confirmed in writing as part of the Assessment Re-

port and other documentation. In this case, UP has developed all the necessary mechanisms to adapt to all study programs and provides guidelines for the design based on the Self-Assessment Report (SAR) for institutional assessment and their study programs (G1).

It can be observed that at present more than fifty percent of the newly implemented doctoral programs, which are all *in line with the Bologna System and accredited by the Kosovo Accreditation Agency*, cover the proposed *priority research fields* within the National Research Program and within the Kosovo Education Strategic Plan 2011-2016 (see table next page):



	Priority Research Fields	Doctoral Programs at
1.	Natural Resources, Energy and Environment	Biology of Organisms and Ecology
2.	Agricultural Production and Food Safety	Food Science and Technology
3.	Medical Research	Public Health Clinical Medicine Preclinical Medicine Dentistry Experimental Biomedicine
4.	Social and Economic Studies	Finance and Accounting Management and Informatics Marketing Economics
5.	Linguistic, Cultural and Historic Studies	Linguistics History
		Chemistry Literature Communication Science and Journalism Telecommunication Computer Science Automatic Civil Rights Penal Law Administrative Constitutional Law Financial Law International Law
<i>doctoral programs not classified within the priority research fields</i>		



Furthermore, it can be said that, following the *Strategy for Development of Higher Education in Kosovo (2005-2015)*, the aim of facilitating the integration of Kosovo in the European Higher Education Area by aligning the national higher education system with the principles of the Bologna Declaration is on its way and partly achieved. Even with regard to the *Quality Assurance* as a key term in the Strategy for Higher Education, the University of Prishtina is fulfilling this process by offering doctoral programs accredited by the Kosovo Accreditation Agency (KAA).

With its modification in 2013, the Regulations on Doctoral Studies of the University of Prishtina applied several changes that led to improvement, such as:

1. *Number of members of the Council of Doctoral Studies Academic Unit* decreased from 17 to 5-7 members. This change implies a more organized structure in terms of, for instance, decision taking.
2. *Doctoral studies can be founded and implemented only in those scientific fields in which the responsible institution is internationally recognized* for scientific results or scientific/artistic research or for artistic creativity which is to be confirmed upon their accreditation by National Qualification Authority. This change is a further step to internationalization of research projects and doctoral programs at Kosovar higher education institutions.

3. *Mentor can supervise up to three candidates* (number increased from not more than two to three candidates). That involves a more profound formation for the mentor and a wider inter- and exchange of research profiles within the doctoral candidates and doctoral thesis proposals.

In terms of internationalization within research projects and with regard to the academic offer, the University of Prishtina participates in and benefits from various activities, projects and initiatives in order to increase the possibilities to offer an *education on international level* that includes courses taught by visiting professors, providing adequate equipment, offering introductions in using the corresponding technology and laboratories as well as research stays at one of the partner institutions.

As mentioned in the preceding pages, the University of Prishtina started to implement new doctoral programs that are in line with the Bologna System and accredited by the Kosovo Accreditation Agency.

Moreover, all 28 old doctoral programs are discontinued with its last generation of students of the academic year 2011/2012.

In comparison with the new doctoral programs, it can be observed that the University of Prishtina exchanges part of the old doctoral programs by offering completely new and different programs (please see comparison below). Furthermore, it can be observed that the University of Prishtina *does not yet combine (prior) doctoral programs into one or two new doctoral programs with the option of several lines of research* like its partner institutions within this TEMPUS project. Thus, there is a *big overlapping of different programs*. As an example, in the field of Law, the University of Prishtina offers 5(!) different doctoral programs (see list below, programs marked in green).

New doctoral programs Since October 2012	Old doctoral programs Until 2011/2012
Biology of Organisms and Ecology	
Doctoral Studies in Chemistry	Chemistry
Doctoral Studies in Linguistics	Studies in Linguistics
Doctoral Studies in Literature	Studies in Literature
Doctoral Studies in Science Communication and Journalism	
Public Health	
Clinical Medicine	Surgery
Preclinical Medicine	Preclinical
Dentistry	Dentistry
	Intern Medicine
	Preventive Courses
	Pharmacy
Experimental Biomedicine	
Telecommunication	
Computer Science	Computer Sciences
Automatic	Automatics
History	History
The Civil Rights	Civil Direction
The Penal Law	Criminal Direction
The Administrative Constitutional Law	Constitutional Administrative
The Financial Law	
The International Law	
Banking, Finance and Accounting	
Management and Informatics	International Management
Marketing	
Economics	
Food Science and Technology	
	Sociology
	Mathematics
	English Literature
	French Language and Literature
	German Language and Literature
	Fundamental Engineering Courses
	Electronics
	Department of Mines
	Chemical Engineering
	Environmental Engineering
	Materials Management
	Metallurgy Management

The example of the partner institutions within this project showed that there should be much *more collaboration within the University* but also with other (international institutions). *More interdisciplinary studies* implying several faculties and departments would facilitate this inter-University collaboration.

Too many individual initiatives and too much bottom-up mark the development process of new programs. These initiatives should be *better steered and guided by the University management's strategy*.

Thus, the University of Prishtina should implement and cement institutional strategies through a unanimously agreed-upon development plan.

In addition, there is an *urgent need for an optimization of infrastructure* due to the lack of equipment and research facilities.

In its study on the organization of doctoral studies in European Union neighboring countries issued in 2010²⁰, Technopolis group stressed that when it comes to downstream barriers, it can be noticed that *doctoral programs are not linked to the market* and are not designed after the private sector needs.

Currently, most of the doctoral programs only educate for one main purpose, namely to *train students to become a University teacher*. Very few graduates find jobs in the private sector or in research. Furthermore, many doctoral graduates apply to post-doc positions abroad.

Challenges are also twofold: the *introduction of market issues in doctoral programs* and the *involvement of the private sector in the design and conduct of doctoral studies*.²¹



Furthermore, all initiatives for the quality assurance of doctoral programs rely on the *increase of research capacity in Kosovo in general and at the University of Prishtina in particular*.

The Ministry of Education, Science and Technology of Kosovo outlines in its Kosovo Education Strategic Plan 2011-2016²² that Kosovo has got the youngest population in Europe and that the human capital is the most important asset that will support future development of Kosovo. Therefore, research is an important ingredient to good quality of teaching and learning.

Implementation of Doctoral Programs

European universities currently display a marked trend towards a more structured approach. As has been noted by the EUA in the 2010 Trends report “at the Doctoral level, the last decade has been characterized by the rapid expansion of Doctoral schools and more attention is being paid to the supervision and training of Doctoral students”²³.

Universities such as the University of Graz, University of Granada and the University of Vaasa embrace greater interlinkage and exchange between hitherto separated entities. Ultimately, they aim at increasing and intensifying their *potential for interdisciplinarity*. Within the four universities at the center of the report identified fields of study along which they arrange their programs. In clustering, their doctoral offer they subscribe to the above mentioned trend and move towards *greater internal integration* and a more structured *approach*.

Overall it might be noted that along the dimension of *duration of doctoral studies* all four universities adhere to a commonly accepted European consensus. Thus, the University of Prishtina positions itself right with the European mainstream.

In this respect, all universities display a tendency to *implement and cement institutional strategies* through a unanimously agreed-upon development plan. The University of Prishtina is fully in line with marked European trends.

It should be pointed out that it might be advisable for the University of Prishtina to emulate the trend of increased *inter-institutional cooperation*. On the basis of current European developments and the examples provided by the European institutions it is recommended to the University of Prishtina to enable *greater interdisciplinary exchange and dialogue*.

By providing prominent links and offering avenues of communication which were previously barred, scientific progress and an element of innovation might be provoked and stimulated. Any measure to move in this direction should be considered and welcomed. The most visible and significant element to characterize the trans-

formation of the PhD is its structured form compared to a more loose approach a few years ago. One of the prevailing structural manifestations is the so-called *doctoral school*. Accordingly EUA diagnoses the “changes in doctoral education over the past years: creating structures, such as doctoral/research or graduate schools, in order to provide a dynamic research environment and create reliable quality standards for supervision and support”²⁴.

The analysis shows that the three European universities gear their programs towards *greater inter-institutional integration, interdisciplinary exchange and a higher degree of structure* within the programs on offer.

All three European universities strictly adhere to what has been hailed as the great paradigm shift, the *change from a teacher-focused to a learner-focused approach*. An overarching European framework provides the respective meta-level. The increased awareness for *the need of transferable skills training* provides further evidence of these trends. As EUA notes “an increased recognition of the importance of transferable skills training for all doctoral candidates can be detected”²⁵. For the University of Prishtina it can be attested that the new curriculum “PhD in Food Science and Technology” which has been developed within the framework of this project follows this approach of a higher degree of structure (e.g. course work 60 ECTS, research 120 ECTS).

The three European universities display a clear frame of reference in relation to *supervision and assessment*. Predominantly this takes the form of a supervision agreement, mapping out both rights and duties of all actors involved. Though the granularity of rules and regulations differs, a general framework has been installed everywhere.

Concerning teaching and supervision it is warmly welcomed that the University of Prishtina has introduced in its new program “PhD in Food Science and Technology” the approach of joint teaching in the courses and seminars of this program. Thus, all lectures and seminars will be delivered jointly by two professors or lecturers, one of the University of Prishtina and one of the European partner universities.

When it comes to specific schemes to promote interdisciplinary training and the development of transferable skills the European universities subscribe to the above mentioned heightened sense for recognition of the importance of transferable skills. Employability, awareness raising for the enormous benefits of highlighting transferable skills within the doctoral curriculum and specific guidance on *career paths and career planning* range among top priority topics within the modern European university.

All three European universities promote a high level of internationalization in their doctoral education.

EUA's Trends report states that “internationalization has been identified by HEIs as the third, most important change driver in the past three years and is expected to move to first place within the next five years. More institutions are developing an integrated *internationalization approach* to teaching and *research*”²⁶.

At the University of Prishtina, there is an urgent need for more collaboration with European and international universities. This could not only imply joint curriculum development or joint research activities but also joint supervision of doctoral thesis or lectures offered by visiting professors.

Furthermore, this could lead to a jointly organized doctoral program where graduates benefit from a joint degree awarded by all cooperating universities.

When it comes to the global competition for the best students and researchers one subcutaneous feature is striking: promotion and information policy. Websites, as a first global port of call for students, need to be transparent, user-friendly and information-driven (as opposed to mirroring university structures). They need to inform about educational offers, the institutional portfolio, plans and strategies and they need to do so in a way understandable to the interested international student. Critically all vital information needs to be provided in English; information should be easy to process and easy to navigate. In a nutshell: ideally as student-centred as possible.

For the University of Prishtina future considerations might benefit from scanning best practice provided by its European counterparts. With the benefit of hindsight future PhD structures can be modelled on what has been tried and tested in its partner universities. It is furthermore worth pointing out that the existing efforts in *boosting international, national and regional collaboration* between universities shall be pursued vigorously in order to firmly position the University on the European and global higher education map.

The next paragraph will give a short comparison of the three European universities as a summary of the key facts described in the precedent chapters on the examined levels: University Profile, Research Profile and Doctoral Education. Based on this, the next chapter will then present recommendations.



Recommendations and how to translate them into practice

By drawing up the present report and after collecting all results and conclusions obtained during the implementation of the TEMPUS Project “PhD in Food Science and Technology & Creating Capacities for PhD Reform at the University of Prishtina - PhD@UP” several recommendations for improvement and sustainability were made by the partner institutions. The added value of this chapter is the presentation of proposals how to translate the given recommendations into practice.

Even though the local authorities took important steps forward by providing a structural and legal framework, effort should be made to implement the measures in order to provide a better financial framework and adequate facilities.

On University level, the project consortium makes the following eight recommendations:

(1) Strengthen the strategic level

It is recommended to the University of Prishtina to complement existing actions with greater internal centralization and streamlining of initiatives for doctoral programs. The current report shows that there are too many individual initiatives. This should be better steered and guided by the University management by means of a development plan for doctoral programs unanimously agreed-upon by all decision making bodies of the Faculties and University. There are several regulations and policy papers in place. However, the relevant decision making bodies need to make sure that the implementation as well as the realization of these plans are put into effect. Thus, an efficient evaluation plan should guarantee the quality of the implementation process.

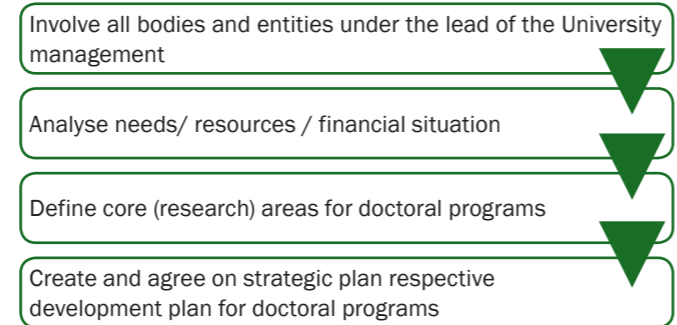
A good balance between bottom-up and top-down initiatives should be ensured. Individual initiatives should be welcomed as long as they fulfill the quality criteria and fit in the University's overall development plan.

The report showed that there is a lack of financial resources, especially in terms of research funds. Thus, it is of utmost importance to have a concrete financial plan in place and to allo-

cate funds according to a strategic plan for the research in connection with doctoral programs.

Taking into consideration the current organizational structure of the University of Prishtina, this consortium suggests involving all legally and financially independent entities, such as faculties and centers offering doctoral education in order to guarantee a successful implementation. Consequently, consent has to be reached between all representatives of all decision making bodies. Additionally, they have to ensure full support of all measures taken by the University management.

Measures and activities:



(2) Increase inter-institutional convergence

On the basis of current European developments and examples provided by the European institutions it is recommended to the University of Prishtina to enable greater interdisciplinary exchange and dialogue. By providing links and offering new forms of communication, scientific progress as an element of innovation will be provoked.

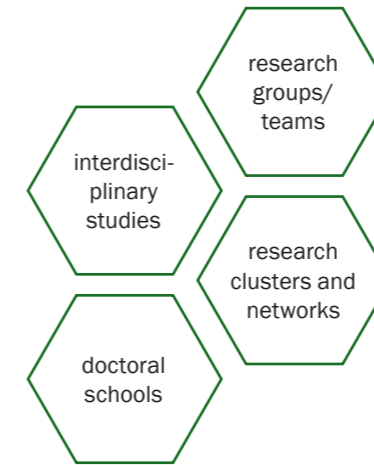
More interdisciplinary studies implying several faculties and departments would facilitate this inter-University collaboration. Moreover, the establishment of more research groups, clusters and networks would lead to interdisciplinary projects that would

bring together doctoral candidates from different faculties and doctoral programs. Support for research teams of doctoral candidates and undergraduate students would build teamwork and offer the opportunity of sharing research experience.

One measure to achieve this could be the creation of doctoral schools.

In order to translate this into practice, the University of Prishtina should take the context of its organizational structure into consideration and should create new structures that allow better inter-institutional collaboration. According to the above mentioned strategic development plan, this should also include new possibilities for collaboration between legally and financially independent bodies such as Faculties. If needed, the organization plan of the University of Prishtina should be revised.

Measures:



(3) Allocate funds according to strategic plan & optimize infrastructure

The current report showed that there is an enormous lack of equipment and research facilities. Thus, there is an urgent need for an optimization of infrastructure. The University Statute already states in Article 58 that the “budget allocation shall take into consideration specific needs and duties of academic units for teaching, research and artistic creation”. Therefore, it is advised to include concrete information on how the budget is allo-

cated to the various prior identified core research areas and to doctoral programs of the University in the University's research development plan.

A strong and close collaboration with the Ministry is needed in order to align measures with regard to research funding and to streamline the development of research according to the National Strategic Plan. In this respect, the University of Prishtina, as the main institution in Kosovo offering research based doctoral education, relies on the execution of the National Research Plan and the allocation of research funds respectively.

Additional funds should be raised by the University with the objective to staff research centers, to provide research facilities and to finance research development. Potential investors may come from the economy, e.g. local or international companies that have an interest in investing in local research with the aim to enhance Kosovo's economic location attractiveness. Therefore, it is suggested to create partnerships with the local sector.

Supplementary funds can also be allocated by applying for national, European and international research development grants or program schemes.

A workable sustainability plan has to be prepared and agreed upon before starting the program if additional funds, which are provided for a limited period of time, are used in order to finance doctoral education. This should include the planning of all organizational and financial measures undertaken after the external funding is exhausted in order to ensure the continuation of the respective program.

Measures and activities:



(4) Create capacity through (international) collaboration

Even though the University Prishtina already participates in and benefits from various activities, projects and initiatives with the aim to increase the possibilities to offer an education on international level, it is recommended to further boost international, national and regional collaboration within doctoral programs. These projects should not only be used to enhance existing linkages and developing new ones, but also to build new research capacities by offering joint doctoral programs, courses taught by visiting professors, providing adequate equipment, offering introductions in using the corresponding technology and laboratories as well as research stays at one of the partner institutions. Furthermore, joint doctoral programs are a possibility to offer high-quality doctoral education.

It is advised to better link those collaborations in order to benefit from shared experiences, to avoid overlapping activities and to profit from synergy effects resulting from the concentration of resources and skills.

In addition, the University should also focus on international mobility within doctoral programs and inter-institutional collaboration; so that candidates can apply for mobility grants in order to participate in conferences or summer schools.

Measures

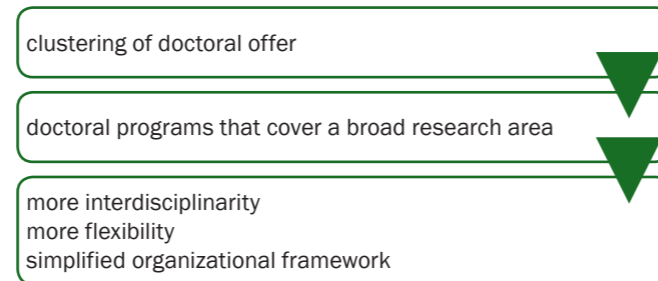


(5) Reduce the number of doctoral programs – Grouping of programs in bigger schools

It was observed by the project partners that the University of Prishtina implemented new doctoral programs and exchanged part of the old programs but did not combine (prior) doctoral programs into one or two new doctoral programs with the option of several research lines or specialization tracks like the European partner institutions of this TEMPUS project. Thus, there is a big overlapping of different programs. It is advised to create doctoral programs that cover a broad research area larger than a single degree program. This not only creates a more interdisciplinary perspective but will also allow reaching more potential students. In addition, this will lead to a more simplified organizational framework.

At the European Universities, a rapid expansion of doctoral schools has been witnessed. With clustering the doctoral offer they move towards greater internal integration and a more structured approach.

Measures:



(6) Implement Research Based Education

In order to be able to implement research based education, the research capacity of the University has to be enhanced. All doctoral programs should be research-based with only some academic activities with the objective to complement the research and professional skills. Doctoral candidates should not be seen as students but as early-stage researchers and be supported accordingly.

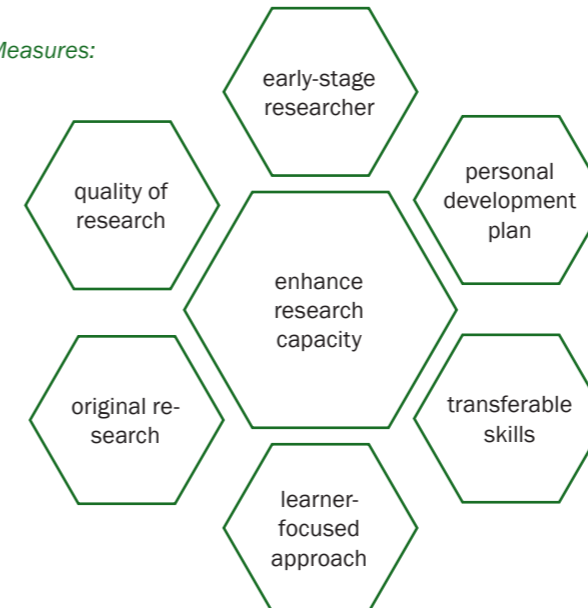
The quality of the research and its relevance to the transformation of knowledge and innovation should be in the center of the doctoral education in order to become a driver of social and economic progress. Hence, original research should be encouraged.

All three European partner universities strictly adhere to what has been hailed as the great paradigm shift, the change from a teacher-focused to a learner-focused approach which should be an example for the University of Prishtina to adapt. An overarching European framework provides the respective Meta level.

The programs at the doctoral level should also comprise lectures and seminars on transferable skills which are central to occupational competence such as project management, leadership, communication and working in teams. Possibly, attainment and awareness of such generic skills enhance career prospects of graduates and might therefore constitute an essential element within the educational mission of any higher education institution.

The establishment of a personal development plan for each individual doctoral candidate would help the candidates to recognize and to articulate skills and competences which they acquire throughout the course of completing their studies. Moreover, the plan specifies the training schedule in terms of both scientific and generic skills based on crucial needs of each candidate, as well as it is self-reflective, developmental and its “ownership” resides with the doctoral candidate and is a growing practice in many universities.

Measures:



(7) Link doctoral programs to the market

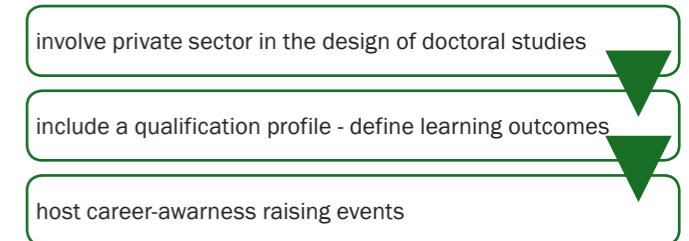
Currently, most doctoral programs at the University of Prishtina only educate for one main purpose, namely to train students to become a University lecturer. In order to link the doctoral programs to the market, it is important to involve the private sector in the design and implementation of doctoral studies to a certain extent.

Doctoral programs and their curricula should be linked to the society, the economy and the labor market. In order to guarantee this, the curricula should include a section on the qualification profile of graduates and on the connection between the skills provided by the doctoral program, for instance the learning outcomes, and the demands of the labor market.

Employability, awareness raising for the enormous benefits of highlighting transferable skills within the curricula of doctoral programs and specific guidance on career paths and career planning range among top priority topics within the modern European university.

In order to facilitate a stronger cooperation with external partners such as industry, companies and NGOs or to reinforce existing cooperation with stakeholders, the University of Prishtina is advised to host career-awareness raising events.

Measures



(8) Scan best practice provided by the European counterparts

Future doctoral structures can be modelled on what has been tried and tested at the partner universities. It is furthermore worth to point out that the existing efforts in boosting international collaboration shall be pursued vigorously in order to firmly position the university on the European and global higher education map.

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