



Case study:
**Doctoral education at the Karl-Franzens-University of
Graz, Austria**

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Overview



- Karl-Franzens-University of Graz
- Programmes for young academics
- Framework for doctoral studies KFUG (Bologna process, regulatory framework)
- Curricula: Structure of a doctoral curriculum
 - Admission and application
 - Competency profiles and labour market
 - Academic degree
 - Compulsory and restricted electives
 - Internationalisation
 - Dissertation
 - Supervision agreement
 - Assessment
 - Presentation and publication
- Structured programmes (doctoral schools, programmes, colleges)

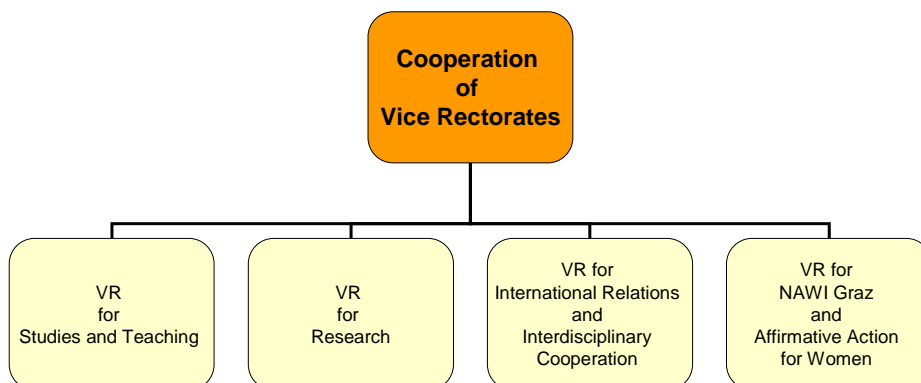
Karl-Franzens-University of Graz (KFUG)



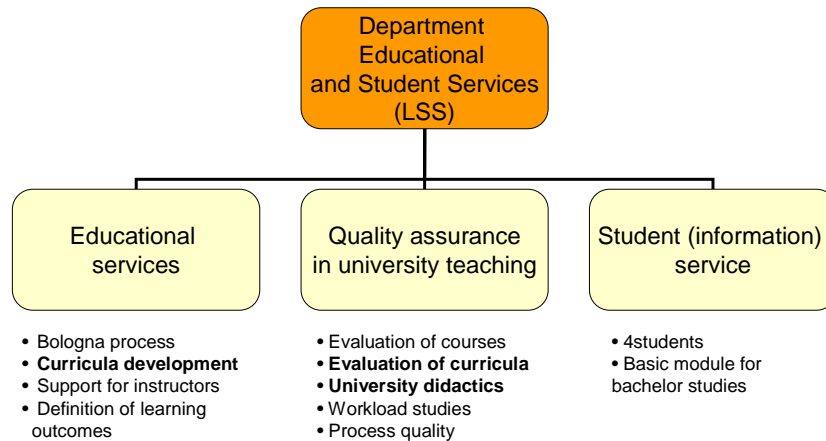
- founded 1585
- 6 faculties
- 22.000 students, 3.100 beginners
- 2.800 graduates (180 doctorate) per year
- 3.550 employees (thereof 2.550 in science)
- 103 study programmes



KFUG: Cooperation in doctoral studies



Department Educational and Student Services (LSS) - VR for Studies and Teaching



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BolognaTeam



since 2007

Main tasks:

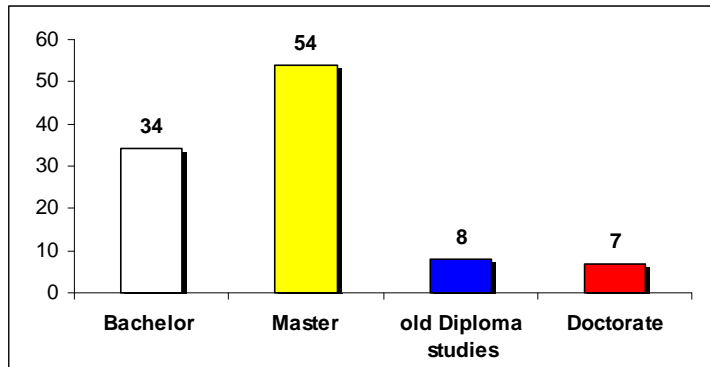
- Bologna process
- Curricula development
- Support for instructors
- Definition of learning outcomes
- Basic module
- Project management
- University didactics

Support in...

- ... phrasing of qualification profiles
- ... phrasing of learning outcomes
- ... calculating workload
- ... modularisation
- ... regulatory framework
- ... grouping information of the faculties
- ... data inquiry
- ... networking with Austrian and international universities
- ... strategic analyses
- ... expert workshops
- ... events for sensitising the Bologna process

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KFUG: Study programmes (02/2010)



7 Joint master programmes
1 Joint PhD programme

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KFUG: 7 Doctoral studies at KFUG



1. Doctoral studies in theology
2. Doctoral studies in natural sciences
3. Doctoral studies in philosophy
4. Doctoral studies in social and economic sciences
5. Doctoral studies in religious sciences
6. Doctoral studies in law
7. Joint doctoral degree in diversity management and governance (KFUG, University of Bologna, New Bulgarian University, University of Primorska)

2 more doctoral studies are planned

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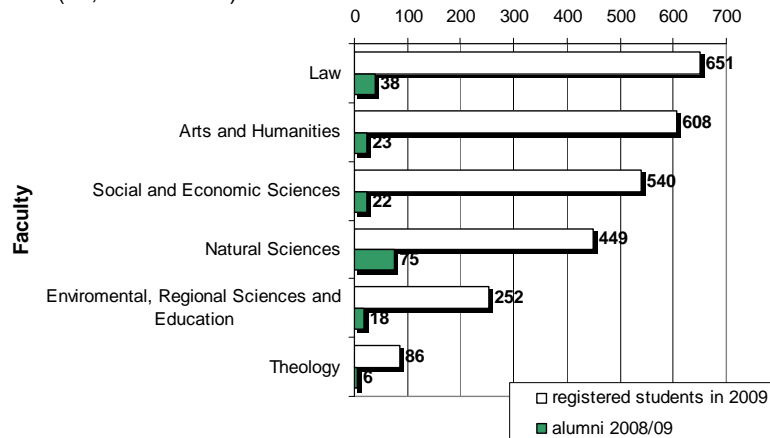
KFUG: Registered students and alumni in doctoral studies



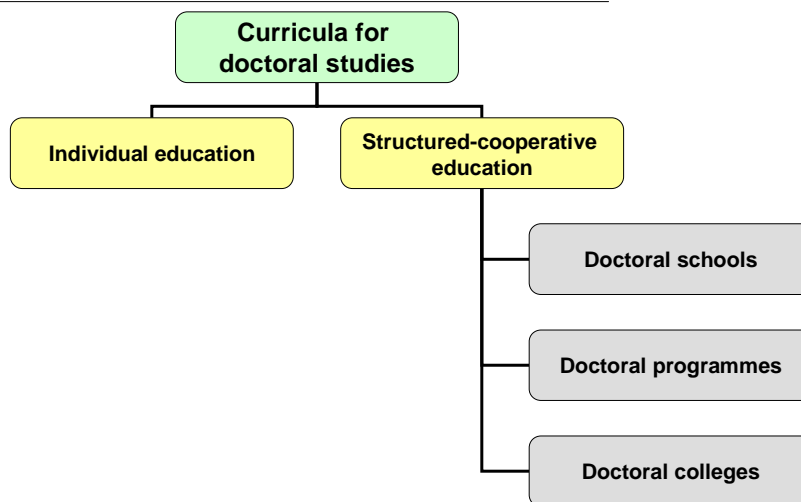
Total

Registered doctoral students: 2.586

Alumni: 182 (56,7 % females)



Programmes for young academics



Framework for doctoral studies KFUG



- Bologna agreements and recommendations
- University act (2002) and amendment (2009)
- Statute of the KFUG (2004)
- Handbook for the development of curricula (2005)

Bologna process in doctoral studies



- **Berlin Communiqué 2003:**
Doctoral studies and the synergy between the European Higher Education Area (EHEA) and the European Research Area (ERA)
- **Bergen Communiqué 2005**
 - Duration: at least 3 years
 - Definition of doctorate candidates as young academics
 - Assurance of a appropriate supervision and grading
 - Procurement of generic skills and competences for the labour market
- **Salzburg Principles**
- **Dublin Descriptors**
- **European Charter for Researchers and the Code of Conduct for the Recruitment of Researchers**



3-cycle-architecture for regular study programmes (University act 2002)



years

8	Doctorate-/PhD-studies
7	Duration: 3 to 4 years
6	
5	Master studies
4	Duration: min. 4 semesters (min. 120-ECTS-Credits)
3	
2	Bachelor studies
1	Duration: 6 semesters (180 ECTS-Credits)* * exceptions 8 semesters (240 ECTS-Credits)

Joint, double or multiple degree studies

Joint programme between one or more Austrian universities, teacher training colleges or universities of applied sciences or foreign universities.

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Bologna process: KFUG



- Focus on Bologna process since 2002
- Cooperation of LSS and Department of International Relations
- Change to the Bologna structure:
 - 2001: first bachelor and master in Biology
 - 2007: **first 3-year-doctoral studies**: Natural sciences

- Status quo 2010:

in all study programmes bachelor, master and doctoral studies are implemented (exceptions by law: diploma studies pharmacy, theology, law, teaching)

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Salzburg Principles (1)



- I. The core component of doctoral training: advancement of knowledge through **original research** and meeting an **employment market** wider than academia
- II. Embedding in **institutional strategies and policies**
- III. The importance of **diversity**: the rich diversity of doctoral programmes in Europe – including **joint doctorates**
- IV. Doctoral candidates as **early stage researchers** (professionals with commensurate rights)
- V. The crucial role of **supervision and assessment**

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Salzburg Principles (2)



- VI. Achieving **critical mass**
- VII. **Duration**: three to four years full-time
- VIII. The promotion of **innovative structures**: to meet the challenge of interdisciplinary training and the development of transferable skills.
- IX. **Increasing mobility**: geographical as well as interdisciplinary and intersectoral mobility and international collaboration
- X. Ensuring appropriate funding

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Statute of the KFUG (2004) for doctoral studies



- Definition of doctoral studies (duration, workload, ...)
- Terminology (i.e. course types, exams,...)
- Procedure for implementing studies
- Components of curricula
- Supervision agreement
- Dissertation
- Reviewer
- Viva voce/defence
- Joint degrees

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Curricula



- **autonomous universities**

Handbook for the development of curricula written by a working group (study deans, administration, senate)

Content

1. Preamble
2. Regulatory framework
3. Procedure for the implementation of a programme
4. Modularisation
5. Fachliche und inhaltliche Gestaltung des Curriculums
6. ECTS
7. Examination regulations
8. Joint Degrees
9. Templates for curricula

Download: <http://www.uni-graz.at/lss/curriculaentwicklung>

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Structure of a doctoral curriculum

- §: General regulations, qualification profile, labour market
- §: Duration, academic degree, admission, course types
- §: Teaching methods
- §: Structure of the programme (compulsory and restricted electives, internationalisation)
- §: Dissertation (exposé, supervision agreement and assessment)
- §: Examination regulations (viva voca/defensio dissertationis,...)
- §: Coming into effect
- §: Transfer regulations

Appendix:

- Module descriptions
- Master curriculum
- List with equal courses of old curriculum

Admission and application (1)

Open access to doctoral studies

apart from the possibility by law of

- quantitative admission limitations in „PhD“- studies in another language than German
- qualitative admission requirements

Admission requirements by law (2)



- Graduation of master studies familiar to the doctoral/PhD-studies (University act 2002) → **open access**
- **Excellence programme:** Graduation of bachelor studies (University act through Directive KFUG 2010) → **application process**

Admission from bachelor to doctorate (3)



Excellence programme for highly skilled bachelor graduates
since January 2010

Requirements for admission:

1. Graduation of bachelor studies familiar to the doctoral/PhD-studies
2. Grade point average in bachelor studies 1,0
3. Grad of the bachelor thesis 1,0
4. Grade point average of the school leaving examination 1,5
5. Written admission of a habilitated at the KFUG to supervise the dissertation (in natural sciences: admission to a doctoral school)
6. C.V., letter of motivation
7. Exposé of the planned dissertation
8. Hearing with the admission commission (vice rector for studies, dean of the faculty, curricula commission of the doctoral studies) and unanimous decision of the commission

Additional Application (4)

with fulfilled requirements by law → additional application process:

- Doctoral studies in natural sciences
- Joint doctoral degree in diversity management and governance

i.e. Doctoral studies in natural sciences

- **Exposé** of the planned dissertation
 - Naming of the **compulsory subjects**
 - Proposal for the appropriate **doctoral school**
 - Proposal for the **supervisor**
 - **Review** of the coordination team of the doctoral school
 - **Finance plan**
- decision of coordination board

Competency Profiles (1)

- **University act (2002)**

„qualification for independent research and support of young academics based on diploma- and master studies“

- **Dublin Descriptors (2002)**

characterise the level/cycles based on learning outcomes

Austria: committed to apply LOs based on Dublin Descriptors (2005 in Bergen)

1. **Third Cycle: Doctorate** (= Level 8 EQF)

Competency Profiles (2): Dublin Descriptors



Knowledge and understanding	[includes] a systematic understanding of their field of study and mastery of the methods of research associated with that field.
Applying knowledge and understanding	[is demonstrated by the] ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity . [is in the context of] a contribution that extends the frontier of knowledge by developing a substantial body of work some of which merits national or international refereed publication .
Making judgements	[requires being] capable of critical analysis, evaluation and synthesis of new and complex ideas.
Communication	with their peers , the larger scholarly community and with society in general (dialogue) about their areas of expertise (broad scope).
Learning skills	expected to be able to promote , within academic and professional contexts, technological, social or cultural advancement .

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i.e. Joint doctoral degree in diversity management and governance



Competency profile

- The Joint PhD programme in Diversity Management and Governance aims at offering **interdisciplinary and comparative academic training** in the study of various forms of diversity, be it ethnic, cultural, linguistic, regional, religious or social, and its management. Conflict prevention and management theories, reconstruction and reconciliation of divided societies after violent conflicts and political tensions, integration policies and the establishment of good governance throughout Europe are in focus in this Joint PhD programme.
- (2) In the course of their studies, students will not only deepen their **knowledge about theories and abstract concepts** but will also be **trained in the development and management of projects** and will be prepared – by developing their **independent, critical and reflexive thinking** – to formulate recommendations **for improving public policies** which might contribute to integration and a successful management of diversity.
- (3) The **theoretical knowledge, the practical skills and the intercultural experience** that students collect in the course of their studies **increase the international employability** of graduates. Their competencies can be applied **not only in academic research** but also in practice oriented professions (...)
- (4) Moreover, as an international programme, the Joint PhD programme **contributes to the development of a common European research area** as well as to the harmonisation of research studies in the interdisciplinary field of study of diversity management and governance and **promotes the mobility of students.**

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Academic degree: Dr. or PhD + add on



	Academic degrees
Doctoral studies in theology	Doctor of theology, Dr. theol.
Doctoral studies in religious sciences	Doctor of philosophy, Dr. phil.
Doctoral studies in natural sciences	Doctor of natural sciences, Dr. rer. nat
Doctoral studies in philosophy	Doctor of philosophy, Dr. phil.
Doctoral studies in social and economic science	Doctor of social and economic sciences, Dr. rer. soc. oec.
Doctoral studies in law	Doctor of law, Dr. jur.
Joint doctoral degree in diversity management and governance	Joint degree Doctor of philosophy, PhD which equals in <ul style="list-style-type: none"> • Austria: Doctor of philosophy, Dr. phil. • Italy: dottore di ricerca (Dr.) in diversity management and governance • Bulgaria: Доктор на Нов Български Университет [doktor na Nov Balgarski Universitet] (Dr. (NBU)) • Slovenia: doktor znanosti (Dr.)

Compulsory and restricted electives



- Methodological courses
- Subject specific courses
- Generic and interdisciplinary skills

total: 10 - 35 ECTS-credits

alternatives for courses (i.e. conference)

Internationalisation



- Curriculum and research on an international level
- Joint degrees
- Obligatory or recommended term in a foreign country
- International staff recruitment (instructors, supervisors and students)
- Conferences

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Dissertation



independently written scientific paper

- **Topic** of the dissertation: subject of the curriculum or field
- **Workload** for dissertation: min. 90 ECTS-Credits
- **2 Supervisors/reviewers**: habilitated person (KFUG or foreign universities); upon request of student 3rd reviewer
- Procedure of announcement of the topic fixed in curriculum (**exposé**)
- **Plagiarism-control**
- **Assessment** within 4 months (average of two/three supervisors)

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Procedure of announcement of the dissertation topic: Exposé



Process of application and approval of the topic of the dissertation fixed in the curriculum

- Filing in an exposé of the dissertation project
- Content (title, research interest, research methods, bibliography,...)
- Presentation and defence of the dissertation project in front of a commission



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Supervision agreement (1)



- Instrument of quality assurance (since October 2009)
- with **minimal standards** for supervision
- based on **rights and duties** of the student and supervisors

Advantages:

- More transparent supervision
- Better supervision because of permanent contact and knowledge of progress of dissertation
- Grading help

Draft:

- Application and contract of the supervision
- Documentation of the supervision

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Supervision agreement (2): Duties



First supervisor's duties:

- **Feedback to the exposé** within 8 weeks and agreement on a deadline for the dissertation
- min. **3 meetings** with the supervisor **in one term**
- Assistance in **modification of the dissertation** concept if the first concept is not realisable
- **Promoting the publication** of the dissertation or of parts of the dissertation

Second supervisor's duties:

- min. **1 meeting** with the supervisor about the exposé and before filing in the dissertation

Student's duties:

- **Written exposé** (min. 3 pages) with the planned research subject for the supervisor
- **TTD**: planned deadline for the dissertation
- **Attending meetings** with the supervisor
- Informing the supervisor about the **progress** of the dissertation
- Keeping **ethical standards** in research
- **Presenting** the dissertation (i.e. conference, seminar,...)

Supervision agreement (3): Contract



1. Application of the dissertation and supervision agreement at the faculty of _____, Karl-Franzens University Graz



First supervisor/reviewer:	
Second supervisor/reviewer:	
Student:	
Number of registration:	
Studies/Number:	B
eMail u. Tel.-Nr.:	

Dissertation titel:

Brief concept

Notice of receipt deanery

Supervision agreement (4): Documentation of the supervision



2. Documentation of the supervision of the dissertation at the faculty of _____, Karl-Franzens-University Graz

(recorded by student)



First supervisor/reviewer:	
Second supervisor/reviewer:	
Student:	

Date	Brief meeting record



Date, Signature first supervisor/reviewer

Date, Signature student

Assessment



Viva voce and/or defence of the dissertation

- Oral public exam
- Conducted by a commission (3 habilitated)
- Presentation and defence of the dissertation
- Subject of the dissertation and another elective

Presentation and publication



University act (2002)

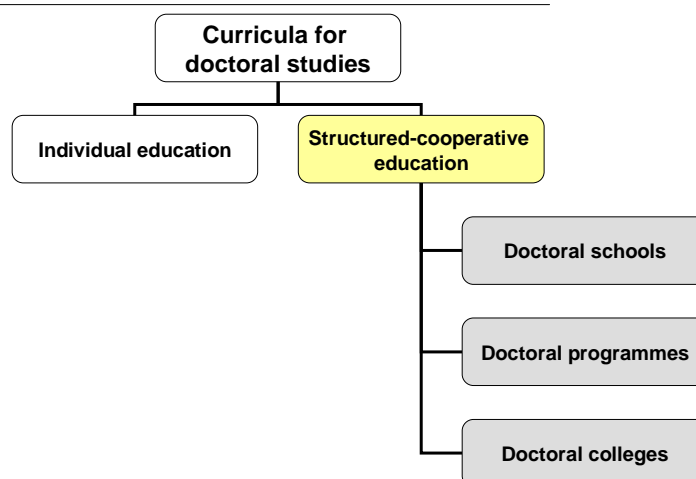
- Library of the university
- National Library of Austria

additionally in curricula recommended

- Publication in journals
- Presentation at conferences

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Structured programmes



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Doctoral schools

- Faculty of natural sciences
- Funds
- Research group: doctoral students and habilitated
- High quality supervision and mentoring
- Participation of doctoral students obligatory
- Evaluation: every 3 years

9 doctoral schools (since 2007)

- Biology
- Chemistry
- Earth sciences
- Mathematics
- Molecular biology and bio chemistry
- Pharmaceutical sciences
- Physics
- Psychology
- Geography

Doctoral programmes

- All faculties: field specific or interdisciplinary
- Usually no third party funds
- Research group: min. 10 doctoral students and 5 - 15 habilitated
- High quality supervision and mentoring
- Code of Conduct (target, minimum standards, application process)
- Participation of doctoral students not obligatory

5 doctoral programmes

- Doctoral programme „Category and typology of cultural studies“
- Doctoral programme „Interdisciplinary gender studies“
- Doctoral programme „Habsburg monarchy“
- Doctoral programme „Antique cultures of the Mediterranean Sea “
- Doctoral programme for human rights and demography

Doctoral colleges

- All faculties: field specific or interdisciplinary
- **FWF funded**
- Research group: min. 5 - 20 researchers
- Excellence cluster for training of young academics
- Participation of doctoral students not obligatory
- Evaluation: at the end of the college

6 Doctoral colleges

- Hadrons in Vacuum, Nuclei and Stars Numerical Simulations in Technical Sciences
- Molecular Enzymology: Structure, Function and Biotechnological Exploitation of Enzymes
- Discrete Mathematics
- Accounting, Reporting, and Taxation
- Metabolic and Cardiovascular Disease

Thank you for your attention!

Mag.Mag. Regina Ressler

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