

**KU LEUVEN**

# 10 Years Doctoral Schools at KU Leuven

Taking Stock of the Progress

Leen Cuypers  
Arenberg Doctoral School  
Science, Engineering & Technology



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<http://www.vilt.be/belgische-frietkotcultuur-erkend-als-cultureel-erfgoed>

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TRBW 2016 Cheers to Belgian Beers Mini Belgian Beer Fest

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## Leuven: a small student-friendly university town



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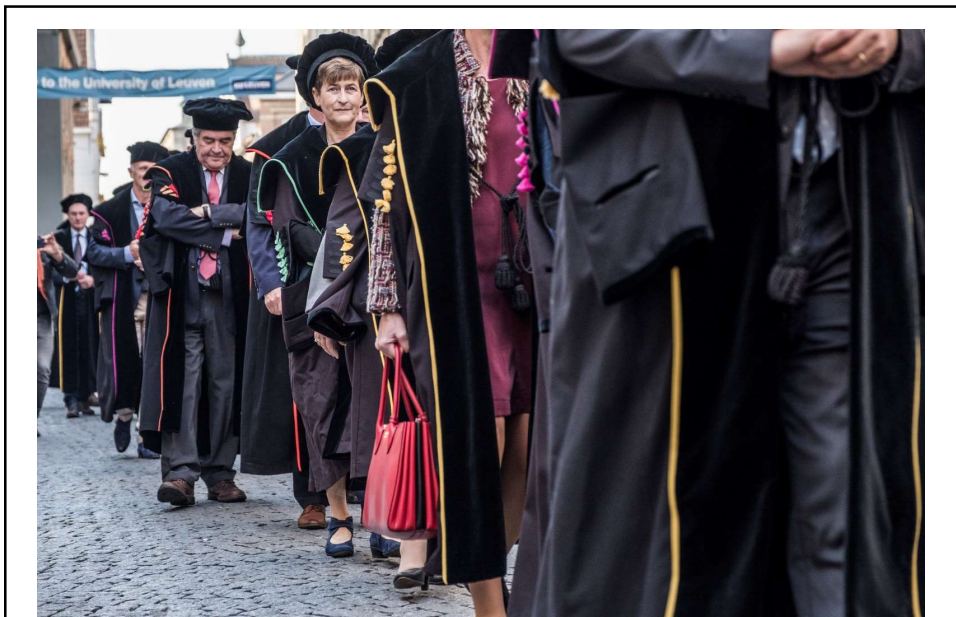
<https://destinoinfo.com/fons-expertise/>

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## Most innovative university in Europe

KU Leuven is named Europe's most innovative university by Reuters. In this study, Reuters aims to identify which institutions contribute the most to science and technology, and have the greatest impact on the global economy.

### Reuters top 100: Europe's Most Innovative Universities

1. **KU Leuven**
2. Imperial College London
3. University of Cambridge
4. École Polytechnique Fédérale de Lausanne
5. Technical University of Munich
6. University of Erlangen-Nuremberg
7. Delft University of Technology
8. University of Oxford
9. University of Munich
10. University of Zurich

### Reuters' study is based on:

- Number of publications
- Patent application (number of applications, patents granted, ...)
- Number of citations of patents and publications (in other patents and publications)
- Number of industrial cooperations
- ...

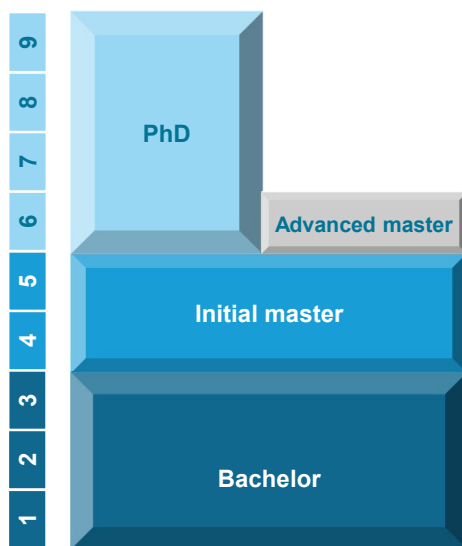
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## KU Leuven (= Leuven University)

- Leuven University was founded in 1425.
- It is an autonomous university (but receives government funding).
- It is a comprehensive, research-intensive, internationally oriented university that carries out both fundamental and applied research.
- 57.000 students
- More than 5.000 PhD researchers
- 78 Bachelor's programmes (4 taught in English)
- 205 Master's programmes (62 taught in English)
- 44 Advanced Master's programmes (24 taught in English)

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## The educational system



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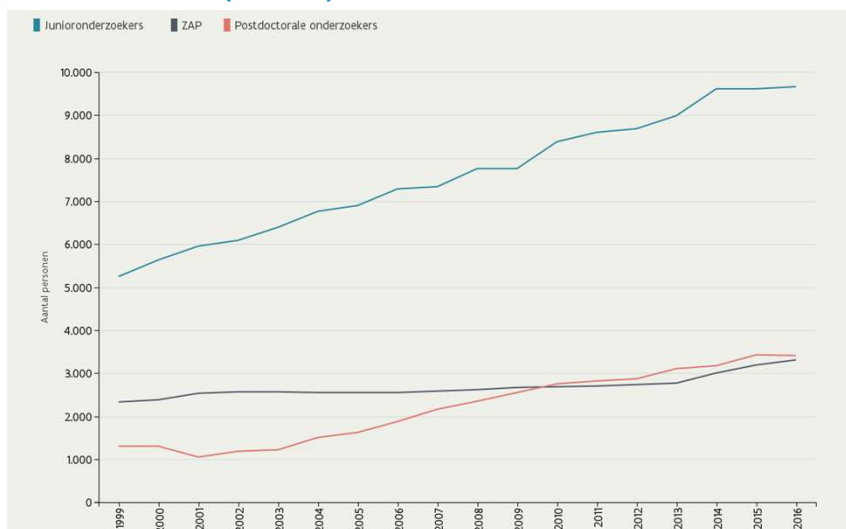
## Good-to-Know about a PhD at KU Leuven

- PhD researchers typically receive a scholarship or salary during the 4 years.
- Students + Staff (facilities)
- PhD researchers can start and defend any time throughout the year.
- Most PhD researchers (especially the Belgian ones) have just graduated as Master students.

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## Evolution of Academic Staff in Flanders (FTE)



Bron: VLIR-personeelsstatistieken

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## Organisation and Structure

- Central services:
  - Student administration
  - International office
  - Research coordination office
  - Human Resources Department
  - LRD (Tech transfer office)
  - ...
- Research and Education is organised in 3 groups:
  - Humanities & Social sciences
  - Biomedical sciences
  - Science, Engineering & Technology (Arenberg)

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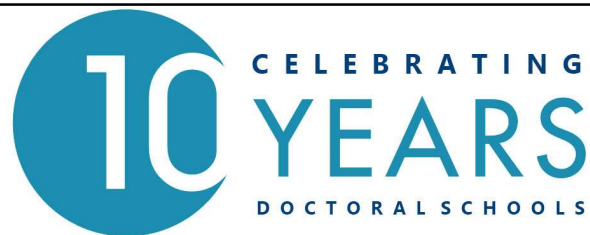
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## Science, Engineering & Technology Group

Faculties	Research departments
 Science	<ul style="list-style-type: none"> <li>» Architecture</li> <li>» Biology</li> <li>» Biosystems</li> <li>» Chemical Engineering</li> <li>» Chemistry</li> <li>» Civil Engineering</li> <li>» Computer Science</li> <li>» Earth and Environmental Sciences</li> <li>» Electrical Engineering (ESAT)</li> <li>» Mathematics</li> <li>» Mechanical Engineering</li> <li>» Materials Engineering</li> <li>» Microbial and Molecular Systems</li> <li>» Physics and Astronomy</li> </ul>
 Engineering Science	
 Bioscience Engineering	
 Engineering Technology	
 Architecture	
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Objectives and responsibilities (May 2007):

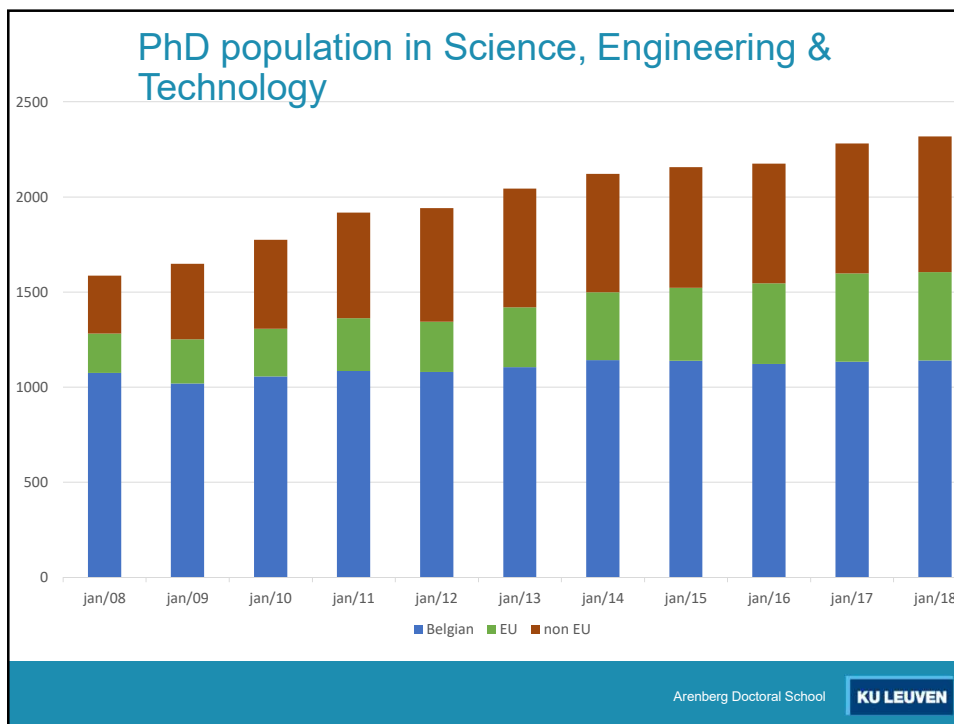
1. Increase visibility and transparency of KU Leuven research
2. International recruitment of PhD researchers
3. Organise doctoral training
4. Improve doctoral efficiency

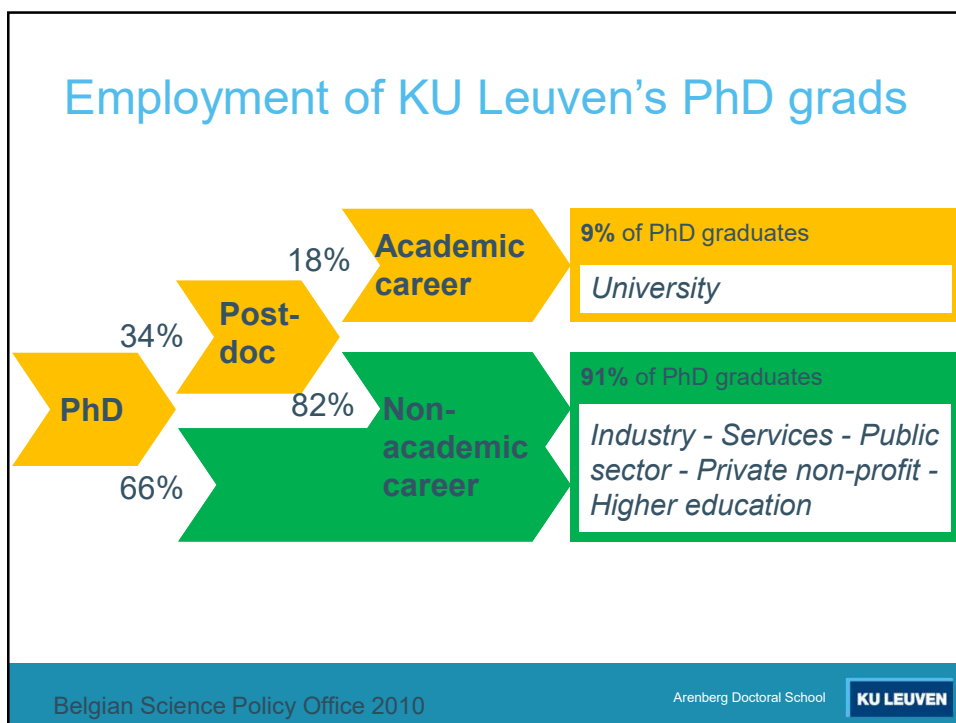
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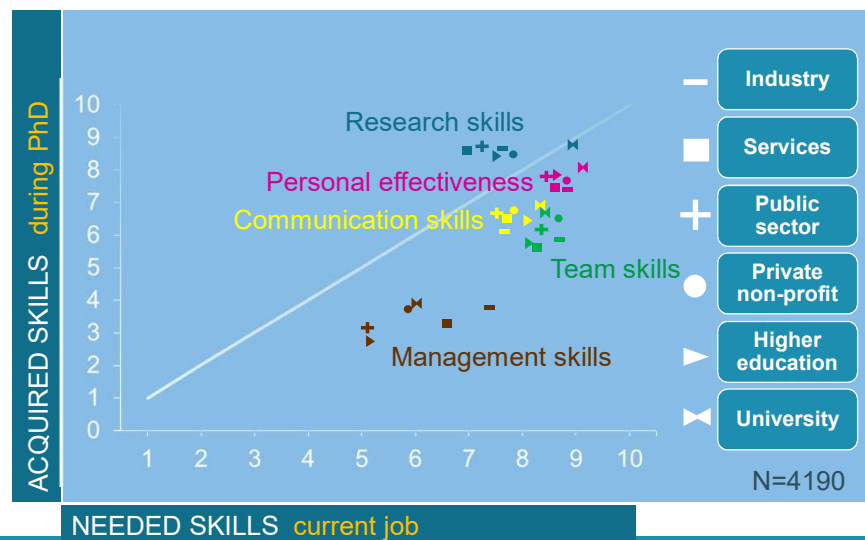


- Junior Mobility Programme:  
If a PhD researcher plans a 3-12 months research stay in a university or company outside Belgium, he/she can apply for a monthly allowance and reimbursement of travel expenses
- Other financing
  - For short research stays in the framework of development cooperation
  - For short research stays with 'priority partners' of the KU Leuven
  - to attend international scientific conferences, symposia or summer schools abroad
- Dual/joint PhD collaboration (coordinated by the doctoral school)





## Which skills are missing after PhD training ?



ECOOM: CDH (2010) Belgium

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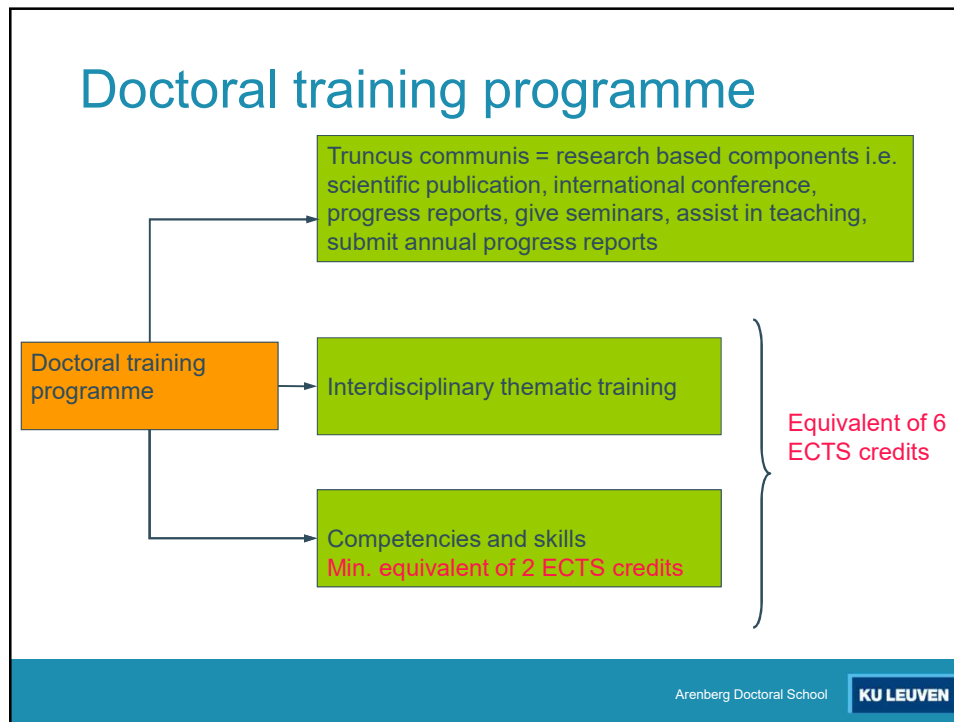
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## What do we want to achieve through research training ?

- Research training should result in young professionals who continue their career within academia or in other areas:
  - Training independent researchers mastering the techniques and methodologies relevant to their field: this remains the major objective of doctoral training.
  - But also having acquired generic skills useful in different professional contexts and allowing them to work successfully in an ever challenging professional environment.
- Researchers are responsible to choose their personal path for personal development and owner of their own project.

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## YouReCa

= Young Researchers' Careers

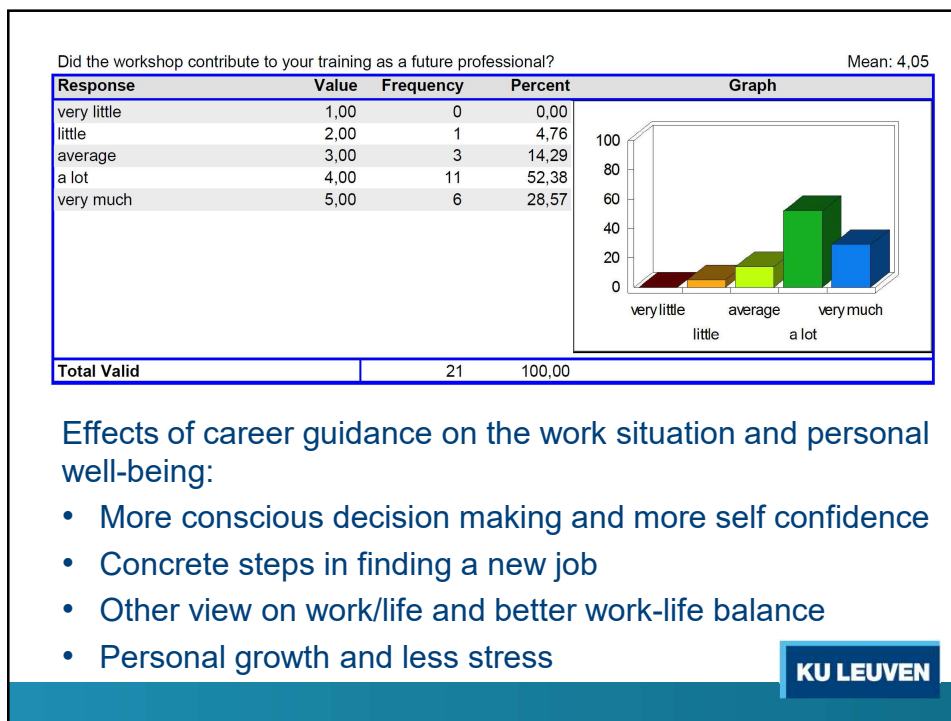


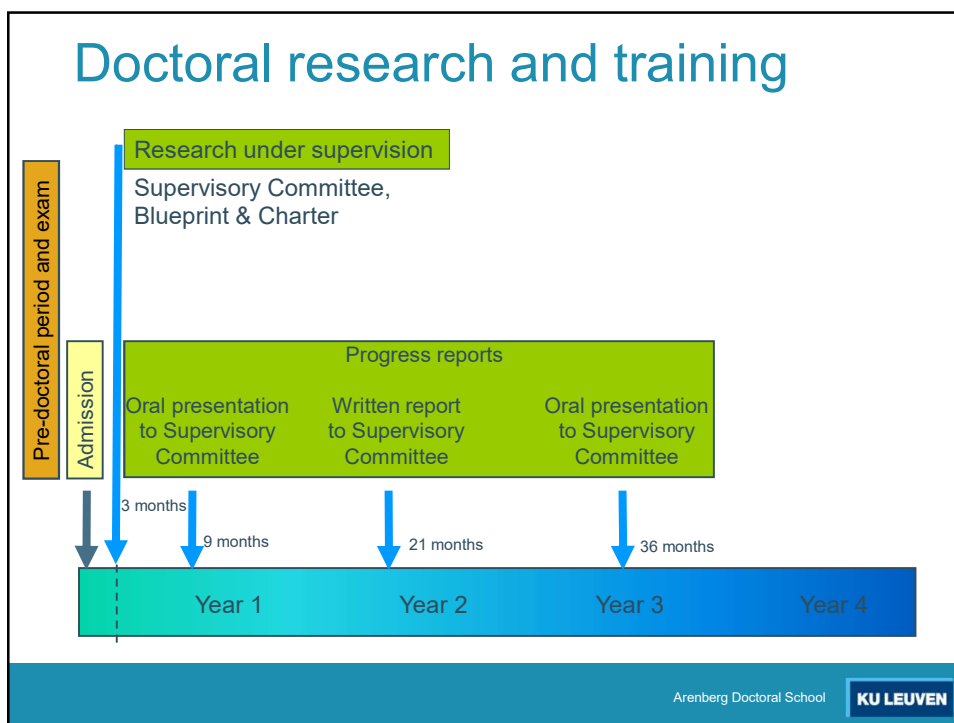
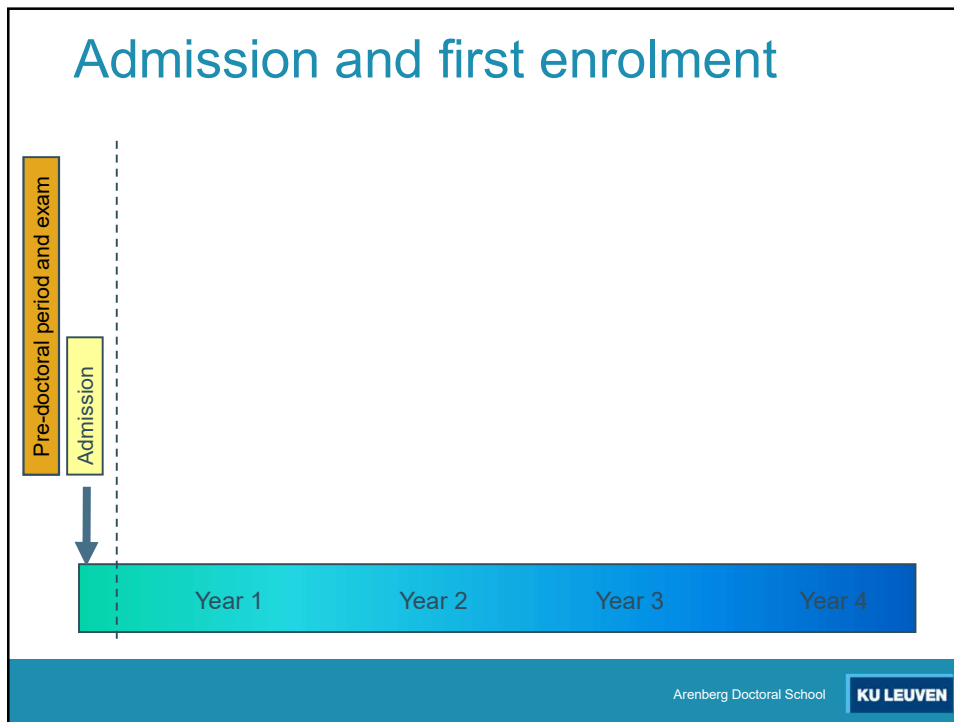
YouReCa is a collection of all the training activities and other initiatives organised by different services at KU Leuven. YouReCa started up in 2012 and has developed into a label or brand. The aim is to improve career perspectives of young researchers with regard to:

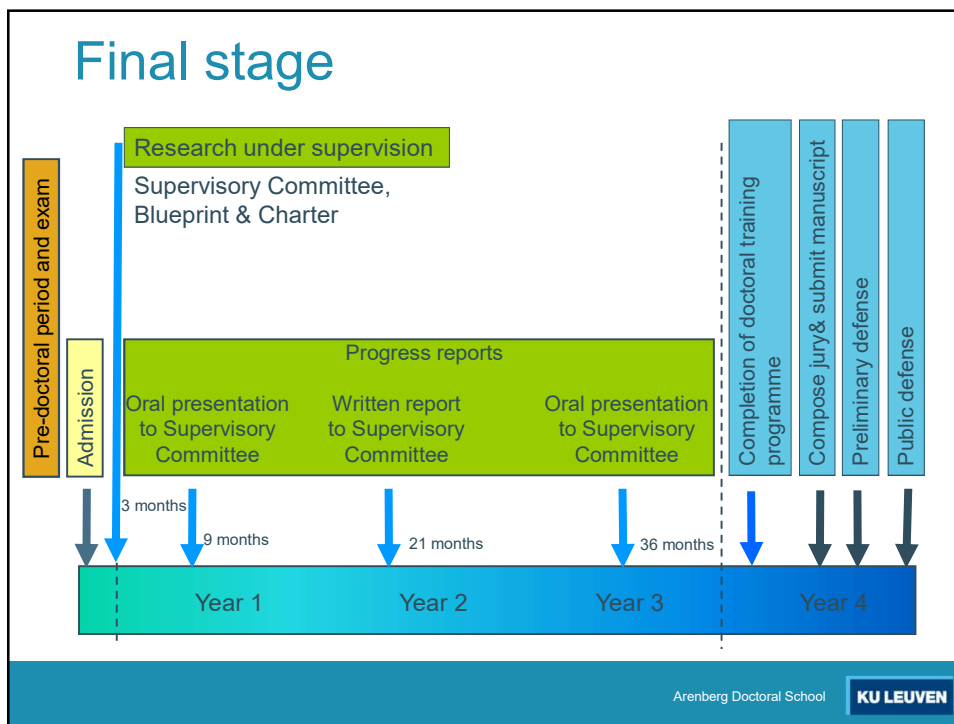
- Training
- Internationalisation
- Career Development

YouReCa has opened a Career Centre early 2014.

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## KULoket: PhD progress

Description	Target date	Status	Attachment	Submission date
Compose supervisory committee	13-12-2013	Approved on 13-12-2013	<a href="#">Info/template</a>	13-12-2013
Blueprint doctoral training	13-12-2013	Approved on 13-12-2013	<a href="#">Info/template</a>	13-12-2013
First oral presentation	13-06-2014	Approved on 13-06-2014	<a href="#">Info/template</a>	13-06-2014
Teacher assistant training	13-09-2014	Overdue	<a href="#">Info/template</a> <input type="text" value="Bladeren..."/> <input type="button" value="Submit"/>	✘
Mid term report	13-06-2015	Approved on 11-06-2015	<a href="#">Info/template</a> <a href="#">Mid term.pdf</a>	10-06-2015
Second oral presentation	13-09-2016	Approved on 09-11-2017	<a href="#">Info/template</a> <a href="#">Formulier second oral</a>	08-11-2017
Submit doctoral diary			<a href="#">Info/template</a> <input type="text" value="Bladeren..."/> <input type="button" value="Submit"/>	✘
Compose examination committee			<a href="#">Info/template</a> <input type="text" value="Bladeren..."/> <input type="button" value="Submit"/>	✘
Preliminary defence			<a href="#">Info/template</a> <input type="text" value="Bladeren..."/> <input type="button" value="Submit"/>	✘
Practicalities public defence			<a href="#">Info/template</a> <input type="text" value="Bladeren..."/> <input type="button" value="Submit"/>	✘
Digital archiving Lirias			<a href="#">Info/template</a>	
Submit PhD manuscript			<a href="#">Info/template</a>	

- Charter for PhD researcher and supervisor
- Mandatory seminar on scientific integrity & Data management training
- Training & Support for PhD supervisors
- Ombudsteam
- Exit Survey
- PhD researchers are represented in university committees and councils on all levels
- ADS has a news-email, Twitter account and website and regularly organizes brainstorm sessions, lunch sessions etc. to involve PhD researchers and hear about their needs and ideas
- PhD & Postdoc Society and Alumni Network



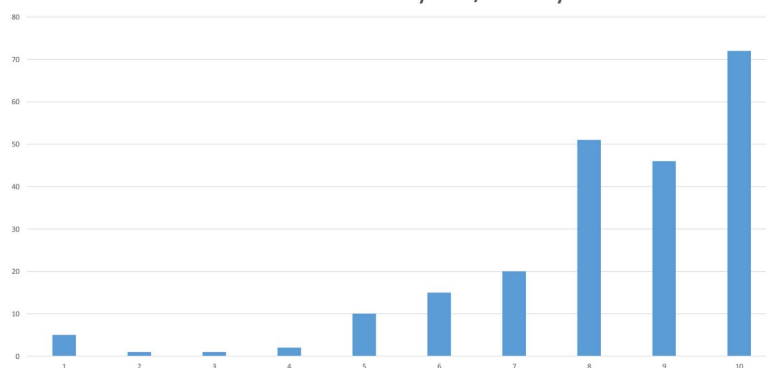
- More focus on internationalisation
- University-wide regulations: transparent
- PhD administration and monitoring by doctoral school: More efficient organisation and better quality control
- Doctoral training:
  - Increased awareness for importance of the non-research aspects of doctoral training
  - Larger offer in training initiatives and activities
  - Better communication → Better attendance of activities
  - We believe our researchers are now, on average better trained and prepared in comparison to 5 years ago and we believe improvement is continuing

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## Recent ADS exit survey ...

Overall I find the past PhD experience at KU Leuven valuable for myself/for my career

Mean: 8,25  
≤5: 9%



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## What needs more work ?

- The interaction with broader society needs further intensification
- Sharing ideas with our professors to make sure we develop a common vision, supported by all. This requires a continuing dialogue at all levels.
- Mindset of PhD researchers
- Strengthening the environment of PhD researchers and supervisors (social integration, community building, mental well-being, ...)

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