

The CHE-Ranking of German Universities

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CHE - Center for Higher Education Development
Gütersloh, Germany

CHEA – International Committee
San Francisco
26 Jan 2006

- Private non-profit organisation
- Founded in 1994 by German Rectors' Conference & Bertelsmann Foundation
- Promoting reforms in higher education sector
- Staff: 26 persons

- Initiated by German Rectors' Conference (early 90s)
- Founding task for CHE
- First ranking: 1998
- Since 1999: co-operation with weekly magazine „stern“;
- From 2005: co-operation with „Die Zeit“
- 2002: First Research Ranking: more detailed analysis of data on research
- 2004: Inclusion of Austrian universities
- 2005: Inclusion of Swiss universities

Each ranking must be clear about its aims/audience

- ← Choice of indicators
- ← Presentation of results

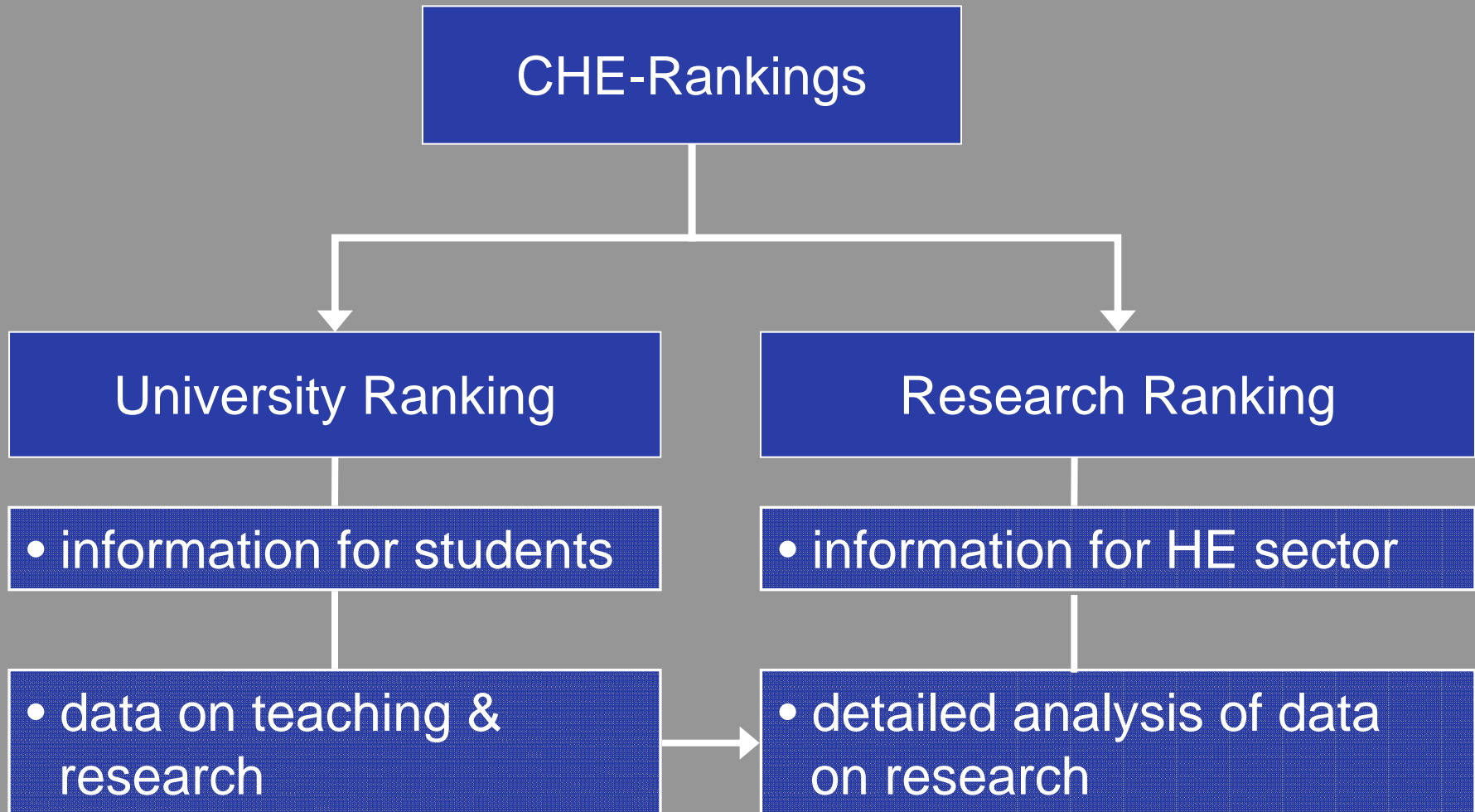
1. Information/orientation for students to find a university

2. Used by universities /HE sector for comparison/
benchmarking/ analysis of strength and weakness



need for balance between

- a) reduction of complexity for least informed group on HE
- b) adequate information for HE sector itself






No ranking of whole universities

No overall score from weighted indicators

No individual ranks in league tables

Ranking of single subjects / subject areas

Multidimensional ranking

Rank groups
top  intermediate 
bottom 

Time series data

1998
economics,
chemistry

1999
law, sciences.

2000
engineering

2001
humanities.

2002
economics, law
soc. sciences

2003
sciences,
medicine.

2004
engineering,
humanities.

2005
economics, law
soc. sciences

2006
sciences,
medicine.

2007
engineering,
humanities

Subjects



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Linguistics and Civilization Studies, Psychology

[Education Science](#)
[English/North American Studies](#)
[German Language and Literature](#)
[History](#)
[Psychology](#)

Engineering Sciences

[Architecture](#)
[Civil Engineering](#)
[Electrical and Information Engineering](#)
[Industrial Engineering](#)
[Interior Design](#)
[Mechanical Engineering](#)
[Physical and Instrumental Engineering \(FH\)](#)
[Process- and Chemical Engineering](#)
[Surveying \(FH\)](#)

Natural sciences, Mathematics, Computer Science

[Biochemistry](#)
[Biology](#)
[Chemistry](#)
[Computer Science](#)
[Food Chemistry](#)
[Mathematics](#)
[Pharmacy](#)
[Physics](#)
[Technical Computer Science](#)

Medicine

[Dentistry](#)
[Human Medicine](#)

Legal, Economic and Social Sciences

[Business Administration](#)
[Business and Economics Education](#)
[Commercial/Business Law](#)
[Economics](#)
[Law](#)
[Nursing](#)
[Political Science](#)
[Social Policy and Social Work](#)
[Sociology/Social Science](#)

34 subjects
covering > 75 % of all students

University Ranking: Decision model



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Each component contains several indicators..., 20 – 25 in sum

... from different data sources...

research

- publications /citations
(bibliometric analysis)

- research grants
(faculties/departments)

- research reputation
(professors survey)

... facts as well as judgements

teaching

- staff-students-ratio (fact)

- student assessment of contact between students and professors

- student assessment of course organisation

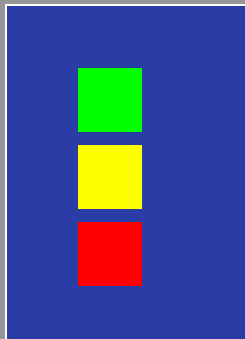
Groups instead of league table positions avoid misinterpretation of differences in indicators

2 different procedures of group ranking:



1. Facts

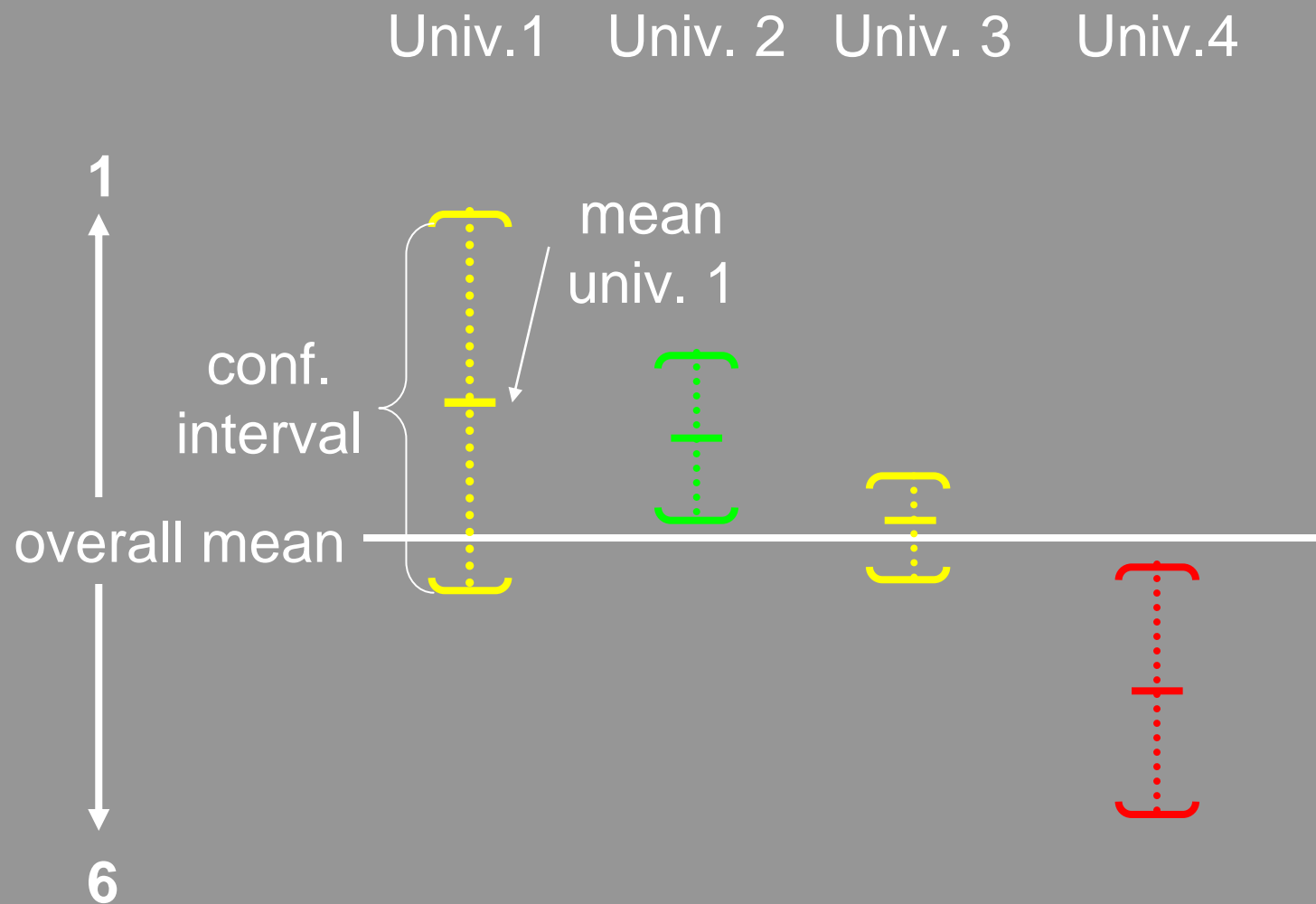
- ordering according to quartiles
- correction in case of characteristic jumps



2. Judgements (students, professors)

- **top group** if confidence interval of mean is completely below overall mean
- **bottom group** if confidence interval of mean is completely above overall mean
- **middle group** if dispersion is high, i.e. confidence interval is neither completely below nor above the overall mean

Rank groups: procedure



- Focus on labour market information /outcome indicators
 - including alumni surveys

- Bologna process
 - Introduction of Bachelor-/Master-degrees
 - New structure of German HE (universities – polytechnics)

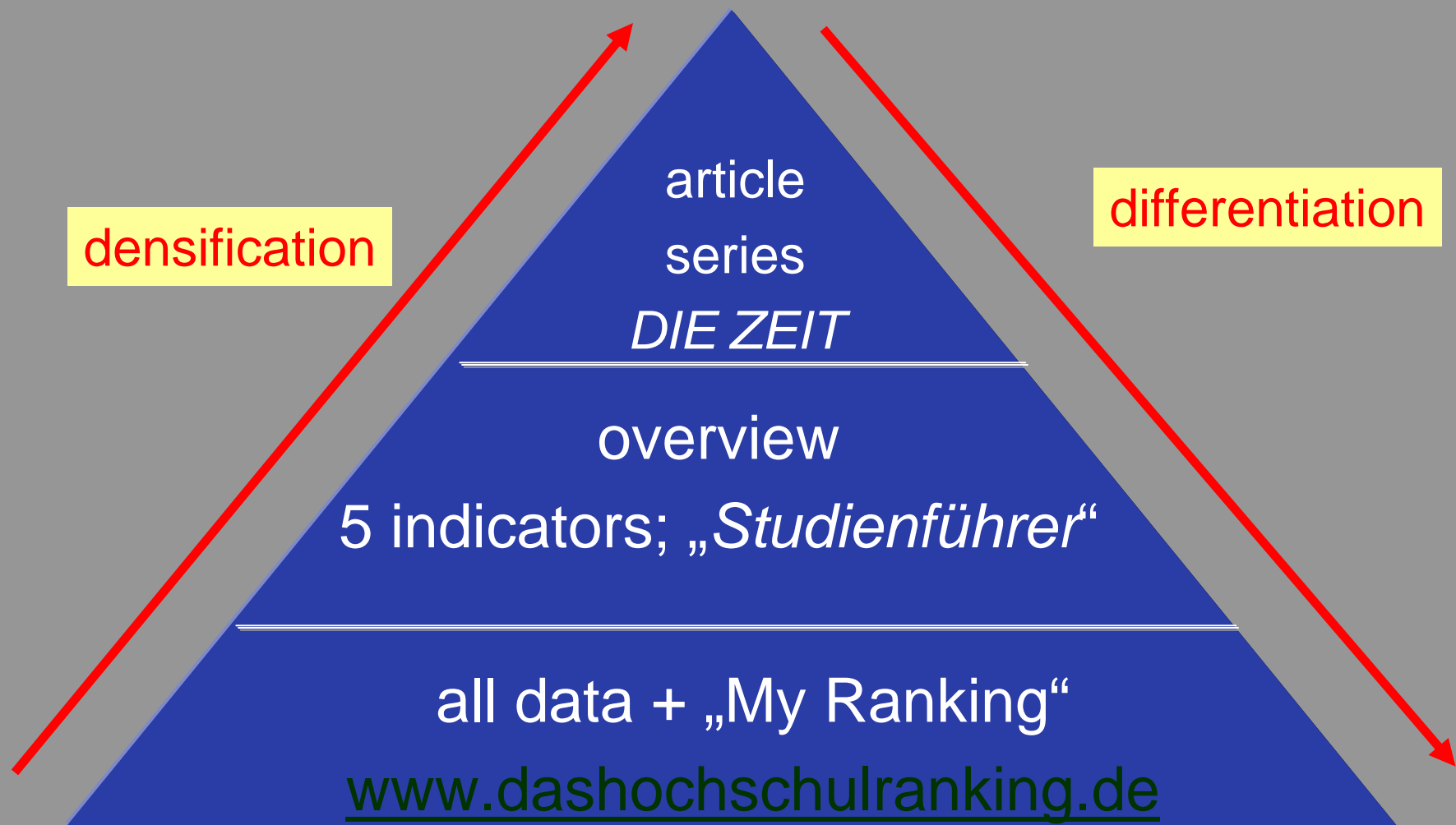
■ Internationalization

- Inclusion of Austrian / Swiss universities as a first step
- Further internationalization intended in line with evolving „European Area of Higher Education“
- 2 strategies:
 1. Inclusion of additional countries (e.g. Netherlands, Belgium): limits
 2. Ranking of (selected) European top universities with focus on research / graduate studies

■ Internationalization

■ with regard to both strategies:

- co-operation with competent partners in the participating countries
- to be able to consider differences in the structure of HE and in academic cultures
- and hence to avoid systematic biases



Results

Study and research in Germany

Home 

[Subjects](#) [Universities](#) [Locations](#) [Info/FAQ](#) 



Your gateway to the university ranking

Look here to find the departments that we have already surveyed. Select the subject you wish to study and let us take you to the universities and universities of applied sciences that offer it.

Linguistics and Civilization Studies, Psychology

[Education Science](#)

[English/North American Studies](#)

[German Language and Literature](#)

[History](#)

[Psychology](#)

Engineering Sciences

[Architecture](#)

[Civil Engineering](#)

[Electrical and Information Engineering](#)

[Industrial Engineering](#)

[Interior Design](#)

[Mechanical Engineering](#)

[Physical and Instrumental Engineering \(FH\)](#)

[Process- and Chemical Engineering](#)

[Surveying \(FH\)](#)

Natural sciences, Mathematics, Computer Science

Legal, Economic and Social Sciences

German Language and Literature (Last update 2004)

Institutions going up and coming down

Has the subject improved or deteriorated over the last few years with respect to individual indicators? The comparison over time allows trends to be observed: Here is an overview of the going ups and coming downs. [more...](#)

Ranking in overview

Here you see all the higher education institutions at which German Language and Literature can be studied and how the higher education institutions performed in four to five selected criteria. [more...](#)

Individual ranking

Here you see all the higher education institutions at which German Language and Literature can be studied and how the higher education institutions performed in a selected criteria. [more...](#)

Personal ranking with assistant

Here you can create your own ranking by selecting from the available criteria and weighing up those which are most important to you. In this process, our ranking assistant leads you through to the result. [more...](#)

Personal ranking

You know exactly what your higher education institution should offer? Here you can combine up to five criteria at will in order to find the most fitting higher education institution for you. [more...](#)

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Results



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Please select a sort sequence

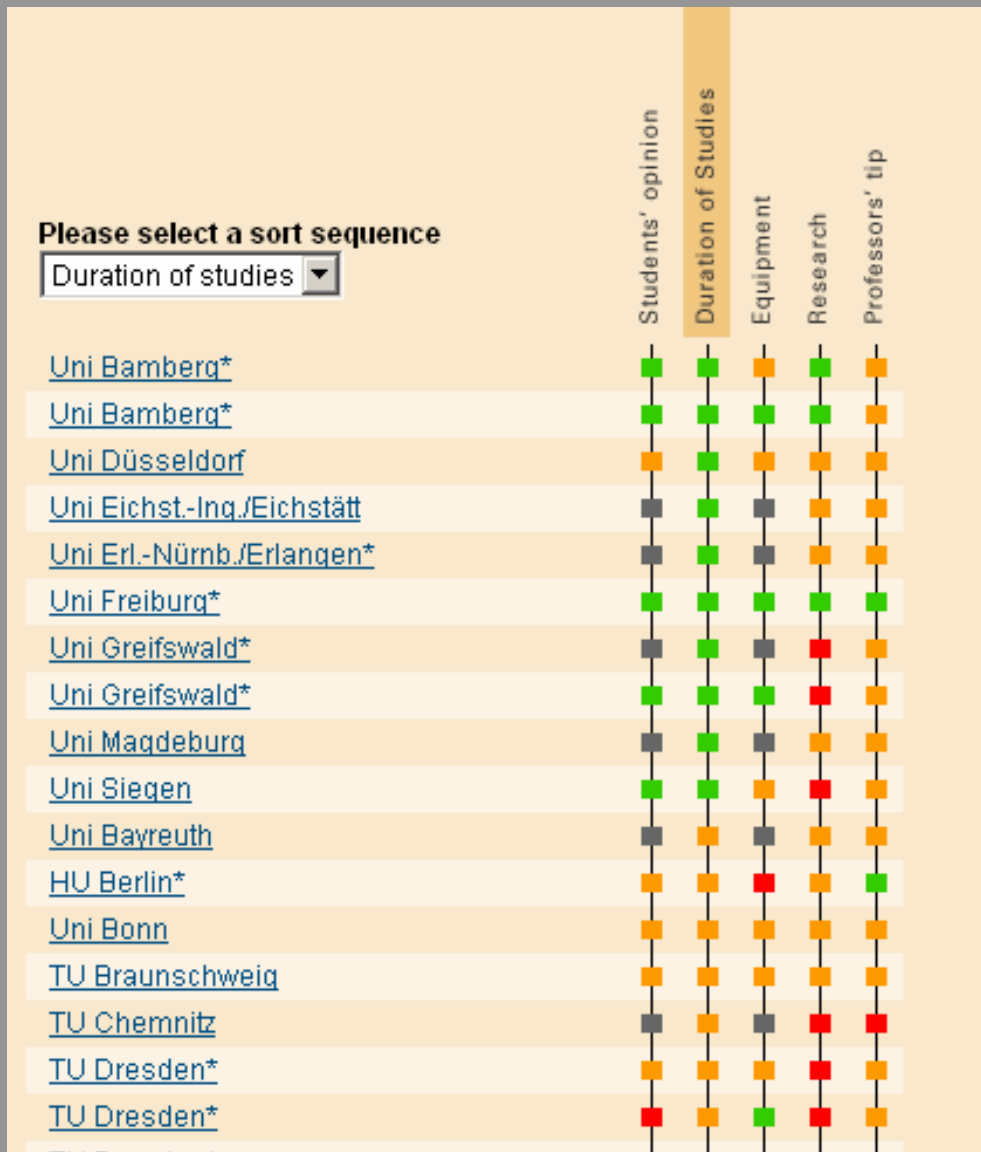
alphabetical

	Students' opinion	Duration of Studies	Equipment	Research	Professors' tip
RWTH Aachen*	■	■	■	■	■
RWTH Aachen*	■	■	■	■	■
Uni Augsburg*	■	■	■	■	■
Uni Augsburg*	■	■	■	■	■
Uni Bamberg*	■	■	■	■	■
Uni Bamberg*	■	■	■	■	■
Uni Bayreuth	■	■	■	■	■
FU Berlin*	■	■	■	■	■
FU Berlin*	■	■	■	■	■
FU Berlin*	■	■	■	■	■
HU Berlin*	■	■	■	■	■
HU Berlin*	■	■	■	■	■
TU Berlin	■	■	■	■	■
Uni Bielefeld	■	■	■	■	■
Uni Bochum	■	■	■	■	■
Uni Bonn	■	■	■	■	■
TU Braunschweig	■	■	■	■	■

Results



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Personal ranking with assistant

1. Step: Personal indicators 2. 3. 4.

Please select up to **five** criteria from those available for the subject. Here is an (F) for facts and a (S) for students' opinion.

Academic studies and teaching

- E-Learning (S)
- Contact between students (S)
- Contact students-teachers (S)
- Courses offered (S)
- Specialist studies consultancy (S)
- Study organisation (S)
- Practice Support (S)
- Counselling (S)

Equipment

- PC-equipment (S)
- Media equipment (S)
- Workstations (S)
- Rooms (S)
- Library (S)

Job market and career-orientation

- Employment market related Programmes (S)

Overall opinion students and professors

- Overall assessment (S)
- Research Reputation
- Professors' tip

Research

- many doctorates (F)
- much third party funding (F)

Result of study

- short duration of studies (F)

Study location and higher education institution

- lots of higher education sport (F)
- low rent (F)
- small college location (F)
- Higher education sport (S)

Personal ranking with assistant

1. 2. **Step: Sort indicators** 3. 4.

Determin the order of the criteria according to which the higher education institutions are to be sorted in your personal ranking. The higher education institutions are first sorted according to the first criterium, then according to the second, etc.

1. Overall assessment students
2. Students opinion on study organisation
3. **Duration of studies**
4. Third party funds per academic
5. Professors' tip

← previous step

→ next step

Personal ranking with assistant

1. 2. 3. Step: Weighting indicators 4.

Now you have to decide whether only the top group, the top and middle groups, or all higher education institutions are to be displayed.

	Only top group	Top and middle group	All
1. Overall assessment students	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Students opinion on study organisation	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
3. Duration of studies	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Third party funds per academic	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>
5. Professors' tip	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>

← previous step

→ show results

Results



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Diplom / Magister

1. Overall assessment (S)
2. Study organisation (S)
3. short duration of studies (F)
4. much third party funding (F)
5. Professors' tip

(S) = Students' opinion

(F) = Facts

GO

■ Top Group

■ Middle Group

■ Final group

■ not ranked

Results

	1.	2.	3.	4.	5.
Uni Siegen	■ 2,5	■ 2,5	■ 9,9	■ 21,1	■ 1,6
Uni Freiburg	■ 2,2	■ 2,2	■ 10,5	■ 11,5	■ 6,1
Uni Bamberg *	■ 2,6	■ 2,6	■ 10,0	■ 11,3	■ 1,2
Uni Bamberg *	■ 1,9	■ 1,7	■ 10,2	■ 11,3	■ 1,2
Uni Greifswald	■ 2,5	■ 2,2	■ 9,2	■ 0,6	■ 1,0

Diplom / Magister

1. Research Reputation
2. many doctorates (F)
3. much third party funding (F)
4. Overall assessment (S)
5. Study organisation (S)

(S) = Students' opinion

(F) = Facts

GO

■ Top Group

■ Middle Group

■ Final group

■ not ranked

Results

	1.	2.	3.	4.	5.
Uni Tübingen *	■ 9,3	■ 0,9	■ 16,5	■ 2,1	■ 2,3
Uni Tübingen *	■ 9,3	■ 0,9	■ 16,5	■ 2,2	■ 2,6
Uni Heidelberg	■ 5,7	■ 1,3	■ 7,6	■ 2,9	■ 2,8
LMU München	■ 15,8	■ 0,9	■ 5,9	■ 3,1	■ 2,9

- in-depth- analysis of ranking data on research
- identification of top research departments field by field
- Indicators:
 1. publications
 2. citations
 3. research grants
 4. PhDs
 5. reputation

- University ranking: per-capita-indicators
(e.g. number of publications per professor)
- Research Ranking: absolute + per-capita-indicators:
identification of centers of high research activity

Top research departments =

top group in at least 50 % of research indicators (absolute & per-capita; without reputation)

top group :

a) per-capita-indicators: quartiles

b) absolute indicators: top group of departments that cumulates for 50% of the respective measure (e.g. publications) in a field

Example: Publications in Psychology



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Hochschule	Publikationen pro Jahr (sortiert nach Umfang)	Kumulierter Anteil an der Zahl der Publikationen (in %)	kumulierter Anteil an der Zahl der Hochschulen (in %)
Uni Gießen	16	54	24
Uni Bremen	13	57	27
Uni Bielefeld	11	60	29
Uni Saarbrücken	11	63	32
LMU München	10	65	34
Uni Tübingen	9	68	37
Uni Göttingen	9	70	39
Uni Freiburg	9	72	41
HU Berlin	8	74	44

} top group

Top research departments in Psychology



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University	Reputation	Top group with regard to						
		absolute			Per-capita			
		Research grants	Publications	PhDs	Research grants	Publications	Citations/public.	PhDs
Uni Bochum		●	●		●	●		
TU Dresden		●	●			●	●	
Uni Düsseldorf			●		●	●	●	
Uni Heidelberg	●	●		●	●			●
Uni Jena	●	●	●	●	●	●	●	●
Uni Konstanz	●		●	●		●	●	●
Uni Marburg	●	●	●	●		●		
Uni Würzburg		●	●		●	●		

Thank you for your attention!

Further information:

www.dashochschulranking.de

www.university-ranking.de

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