Perspektywy

The role of national university ranking
- *the Polish experience*

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Vice-President, IREG Observatory
on Academic Ranking and Excellence

LODZ, September 16, 2016

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Plan of presentation

1. Renaissance of National Rankings
2. Perspektywy (Poland) University Ranking
3. IREG Engineering Project - invitation

New role for rankings

How to measure university

?

Rankings – young phenomenon

Contemporaries of Internet and Facebook

First national ranking
US News Best Colleges (1983)
same age as Internet

First global ranking
Shanghai Ranking (2003)
same age as Facebook

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Fast growing family

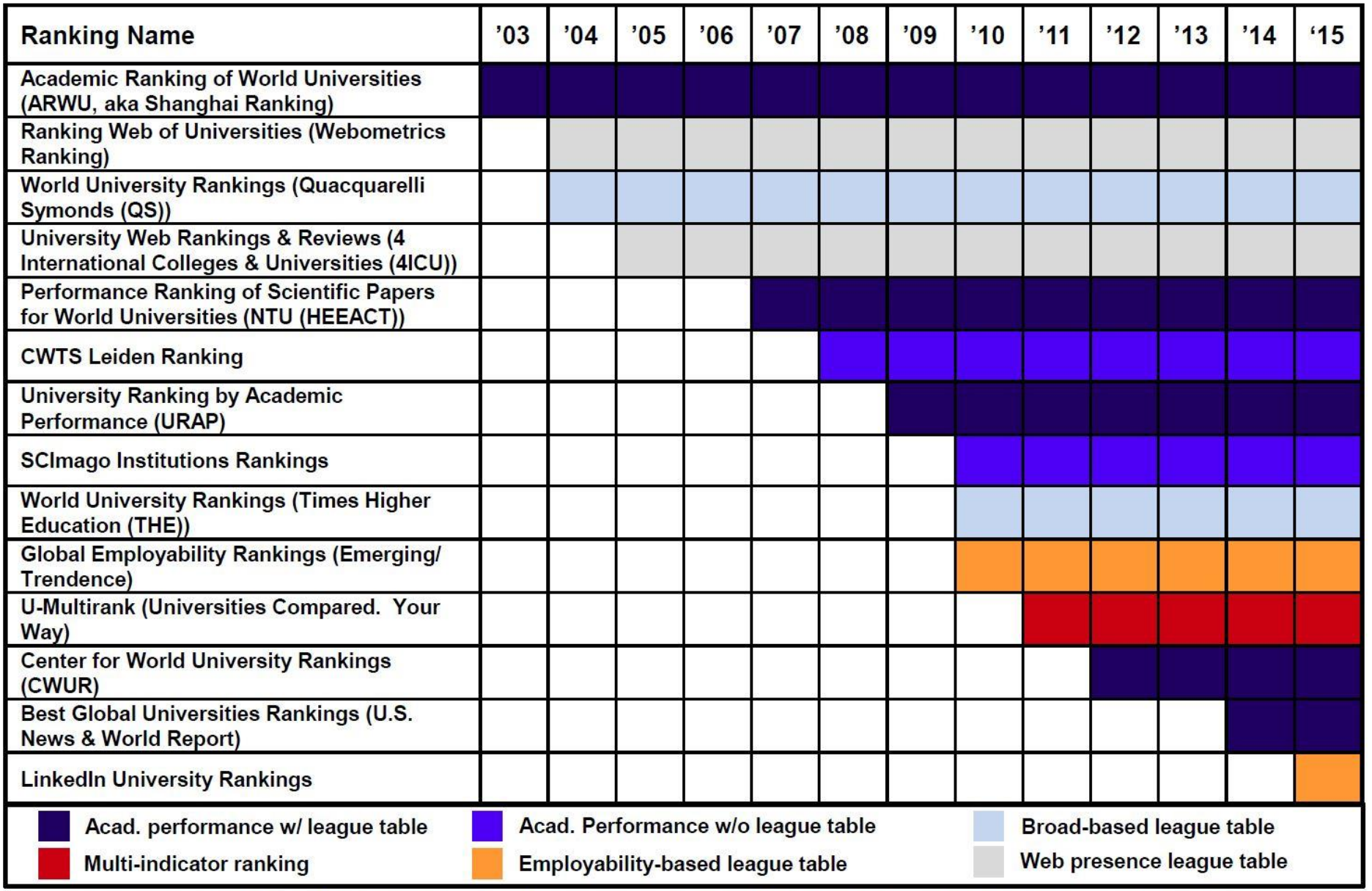
New rankings every year…

1 GLOBAL RANKING

2 REGIONAL RANKINGS

3 NATIONAL RANKINGS

Rankings by Release Year and Type (Active Only)



Notes: This overview does not list all world university rankings. Instead, it aims to highlight the variety of rankings that are being actively published, with a focus on key rankings

Source: ICG

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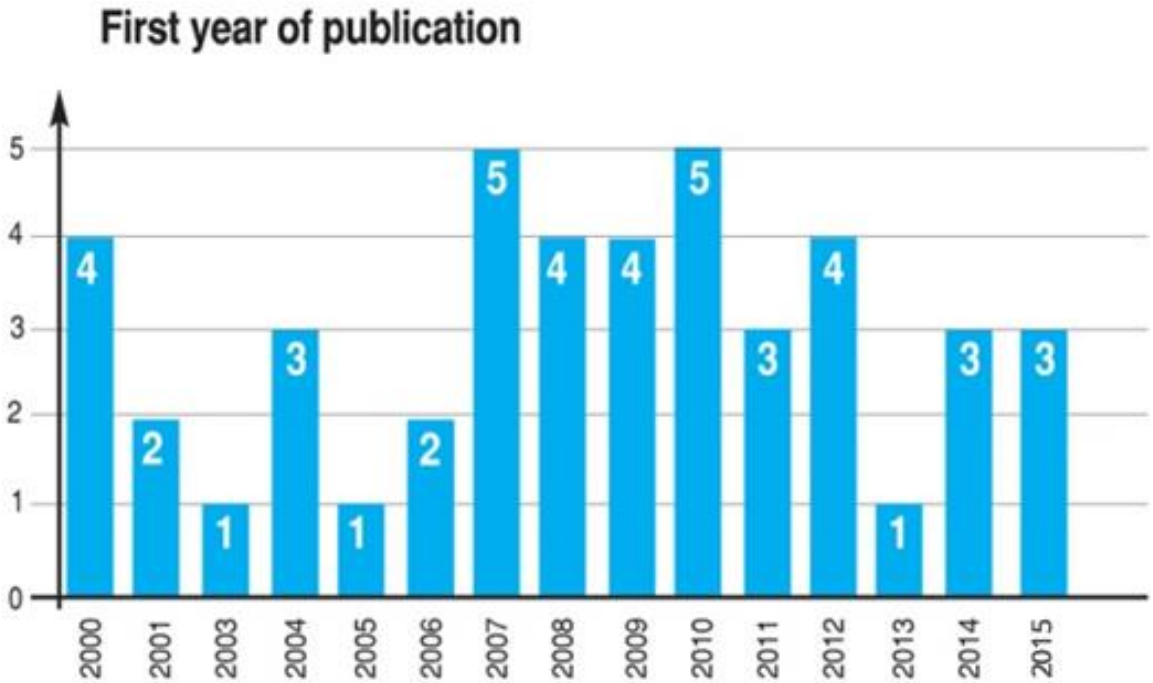
Fast growing family

Three new national ranking every year



15 years – 45 national rankings

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iREG

Fast growing family

About Inventory | List of rankings | Add your ranking | Update your ranking

Welcome to Inventory

The purpose of "IREG Inventory of National Rankings" is to collect and make available on the IREG Observatory website information on the current state and scope of this important group of rankings. Authors of national university rankings who want to be included into the Inventory are kindly requested to fill in the questionnaire ("Add your ranking" section). Please keep us informed on any changes in the rankings already presented in the Inventory (see "Update your ranking" section).

Albania
- Ranking of Higher Education Institutions in Albania

Brazil
- Folha University Ranking (Brazil)

Bulgaria

Italy
- The Great University Guide Censis-la Republica

Japan
- Brand rankings of Japanese universities
- Truly Strong Universities

Romania
- Top Universities in Romania

Russian Federation
- Expert RA Russian universities ranking
- Interfax & Echo Moskvy National University Rankings

www.ireg-observatory.org

Why national rankings?

- **More comprehensive** than international rankings
- Based on a broader **range of indicators**
- Cover institutions of **one educational legal and cultural environment**

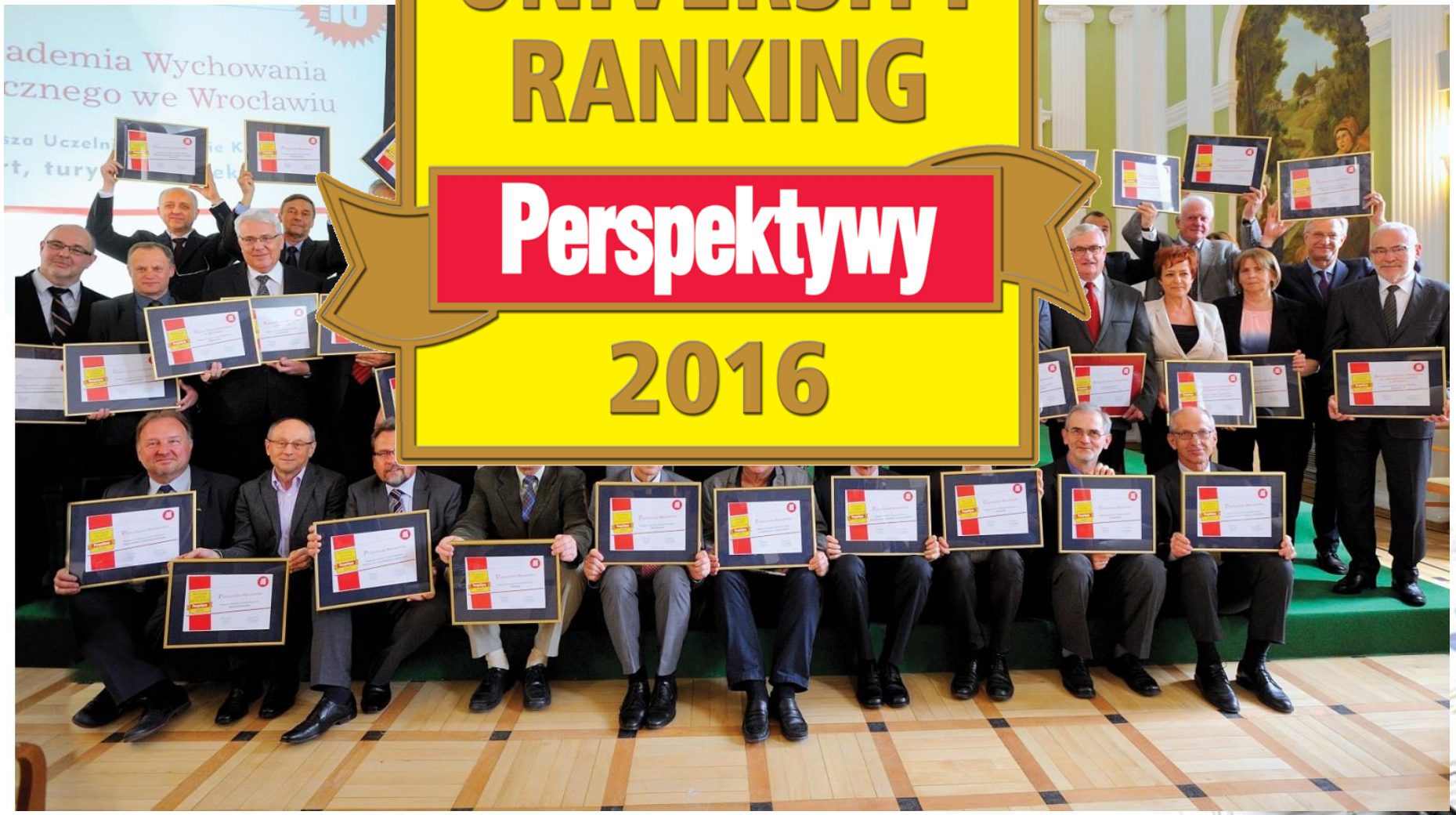
- **Assess all higher education institutions in a country** while global rankings a very narrow group of universities.

Polish experience

Perspektywy UNIVERSITY RANKING

Perspektywy

2016



Perspektywy mission

Provide rankings based on a vision of an **ideal university**

- does research on a high level,
- is **closely linked with job market and economy**,
- provides friendly environment for students,
- is **innovative** and **internationalized**.

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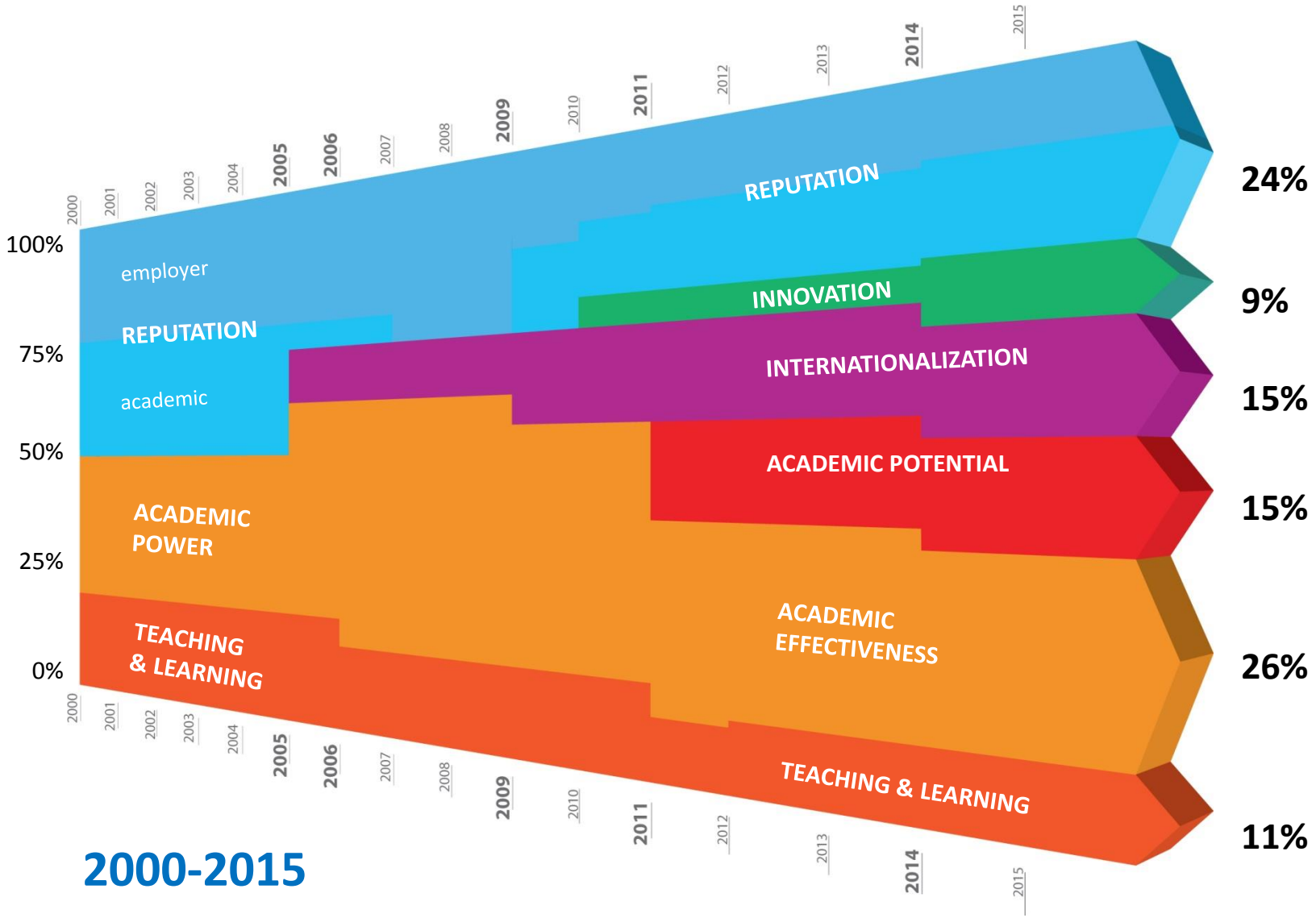
Evolution of Perspektywy Ranking



2000-2015

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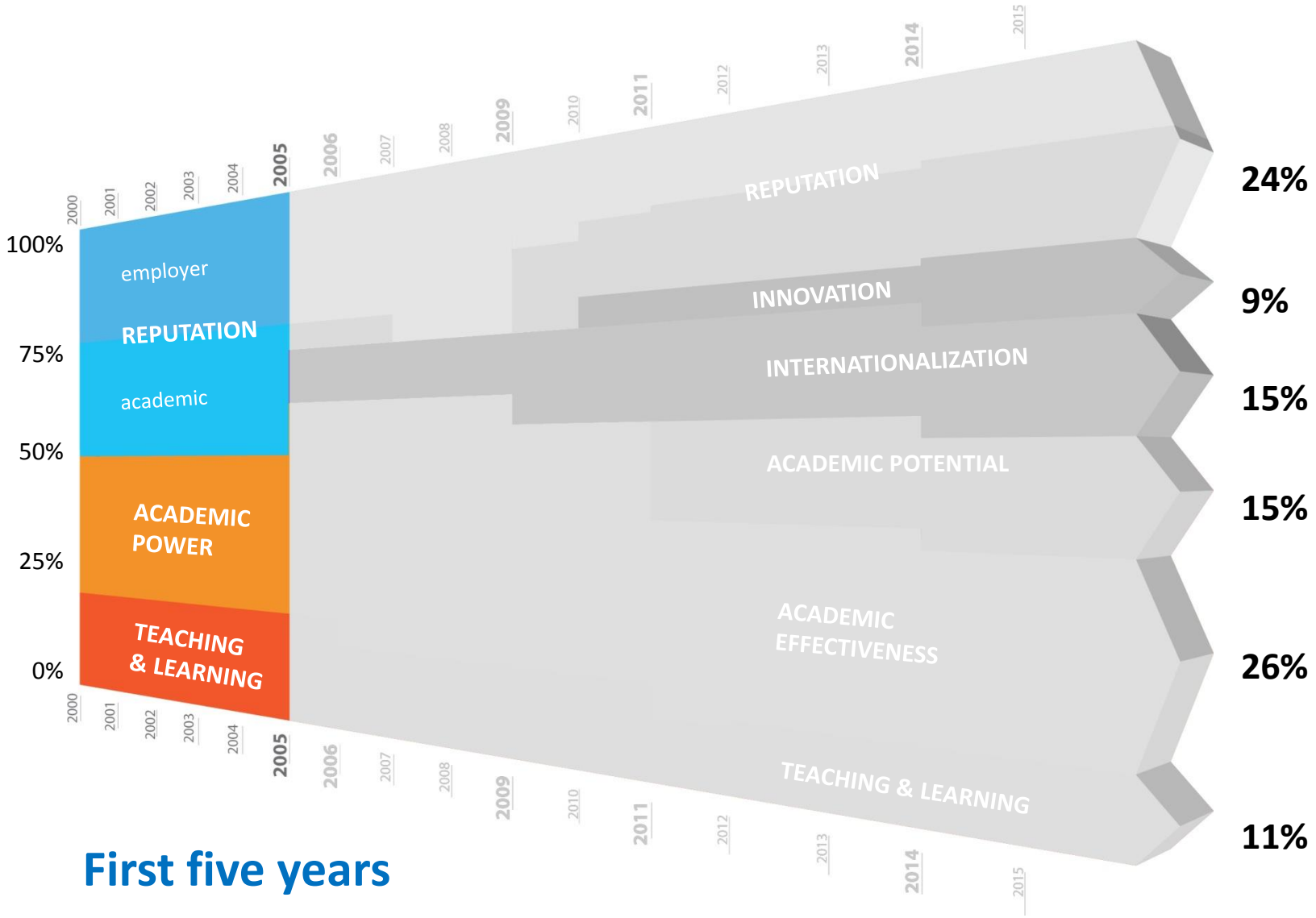
Evolution of Perspektywy Ranking



First five years

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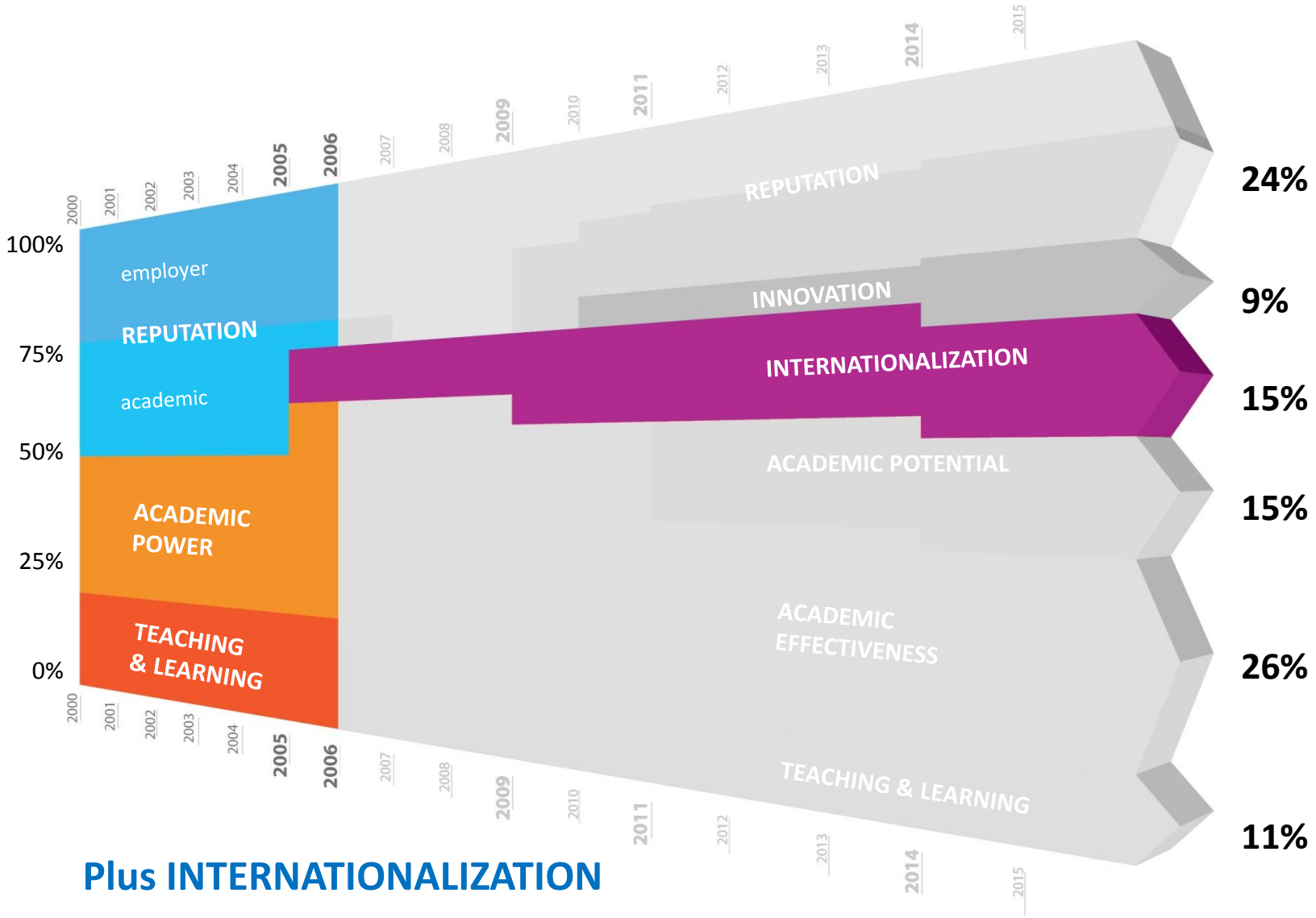
Evolution of Perspektywy Ranking



Plus INTERNATIONALIZATION

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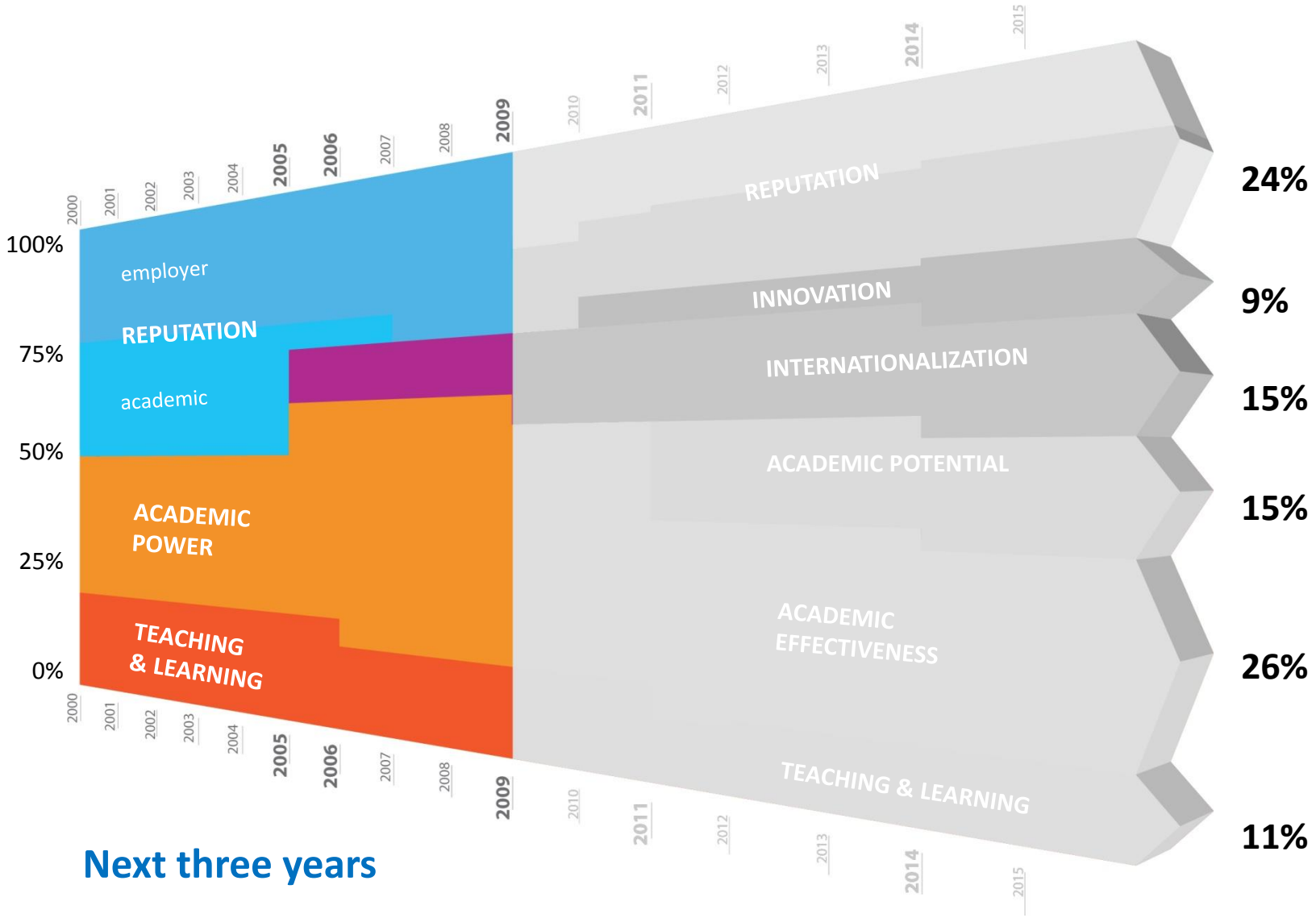
Evolution of Perspektywy Ranking



Next three years

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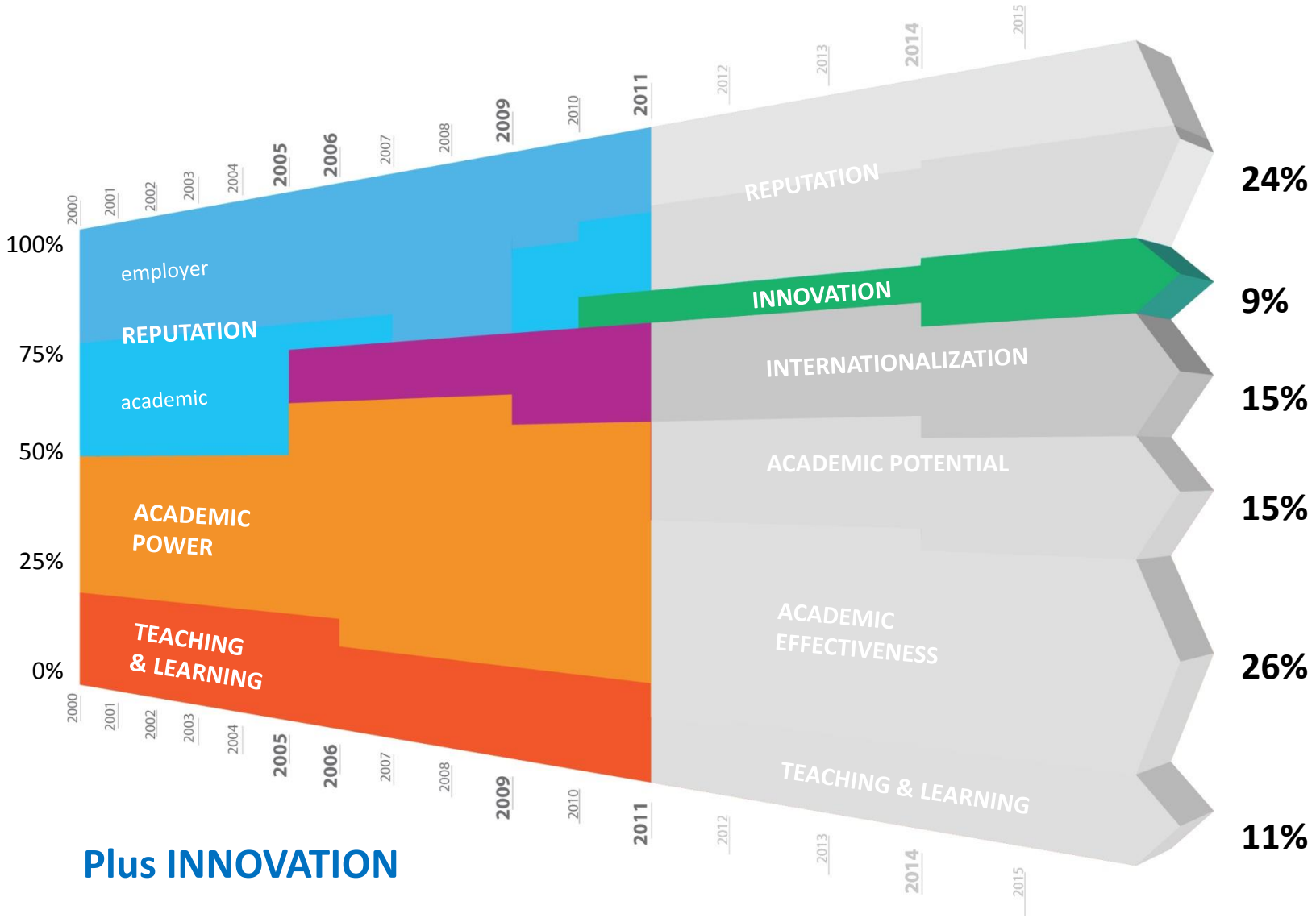
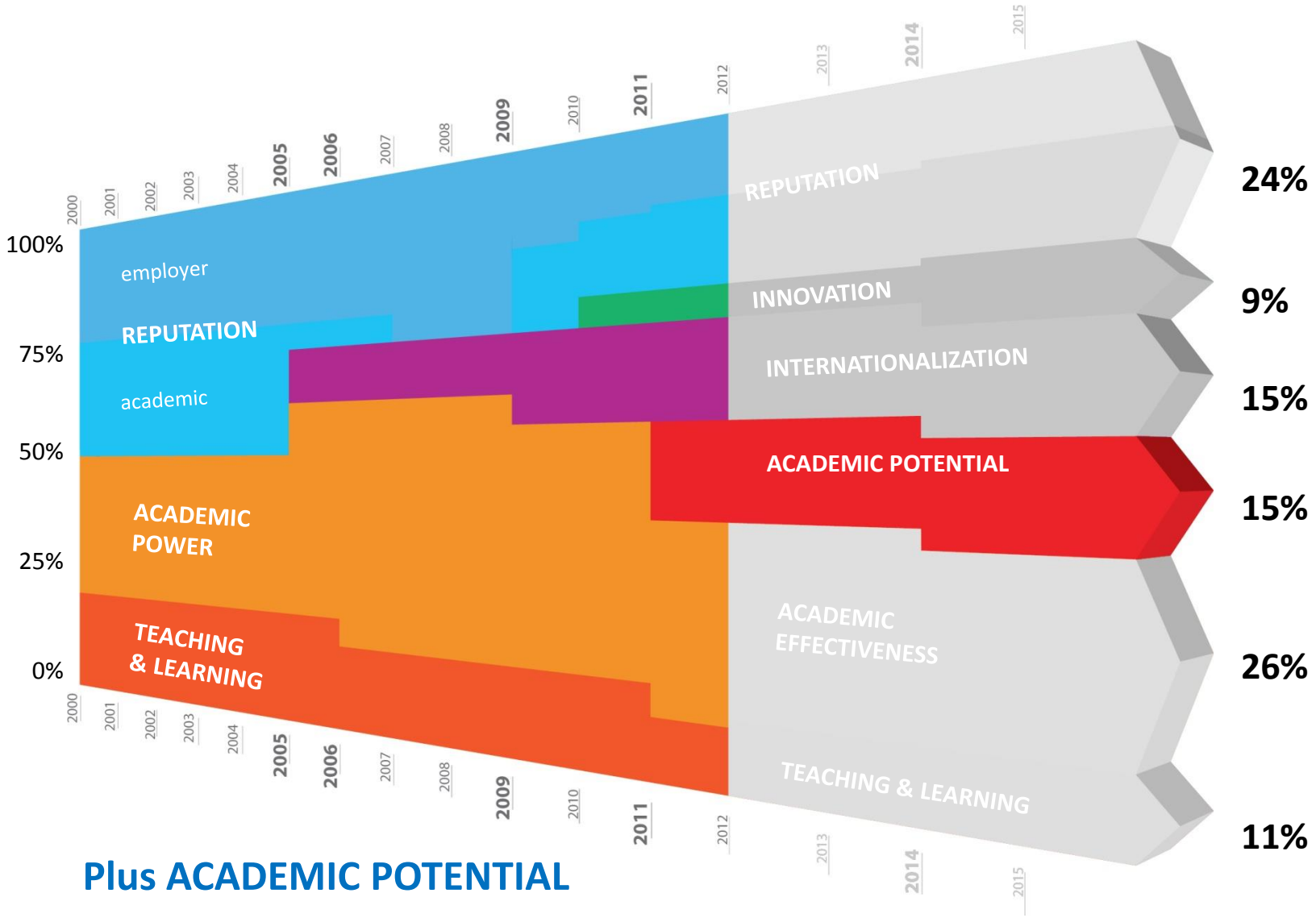
Evolution of Perspektywy Ranking



Plus INNOVATION

Evolution of Perspektywy Ranking



Plus ACADEMIC POTENTIAL

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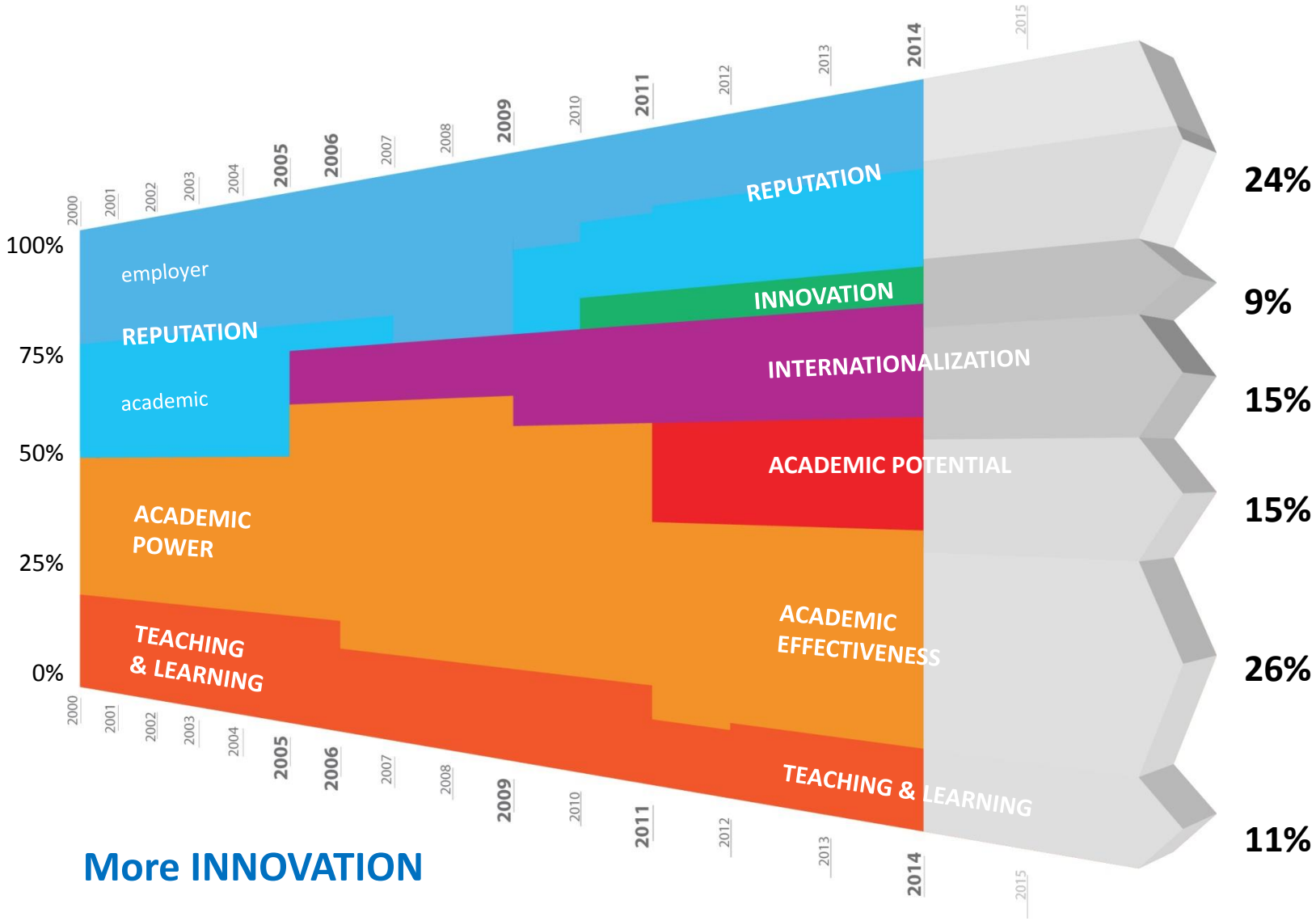
Evolution of Perspektywy Ranking



More INNOVATION

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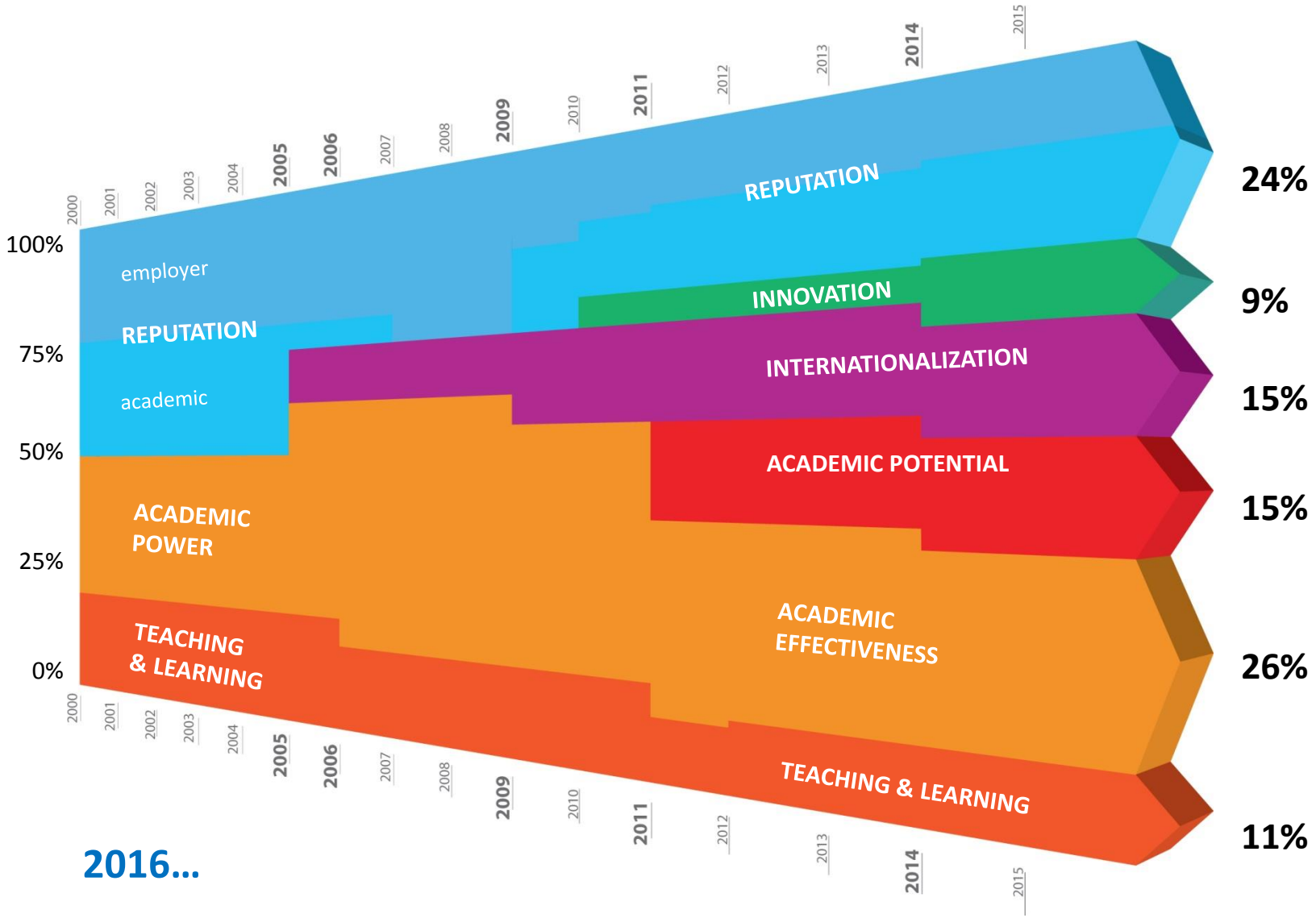
Evolution of Perspektywy Ranking



2016…

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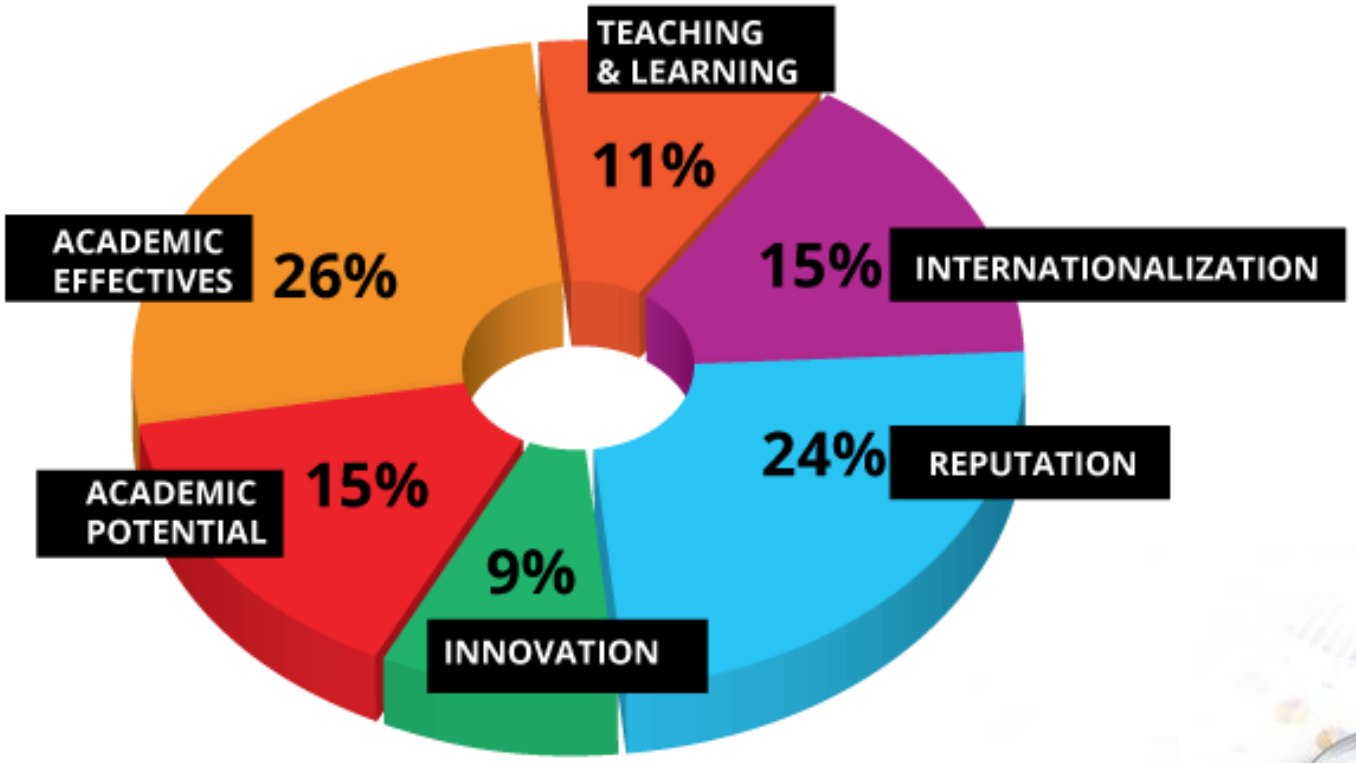
Methodology 2016

Perspektywy University Ranking



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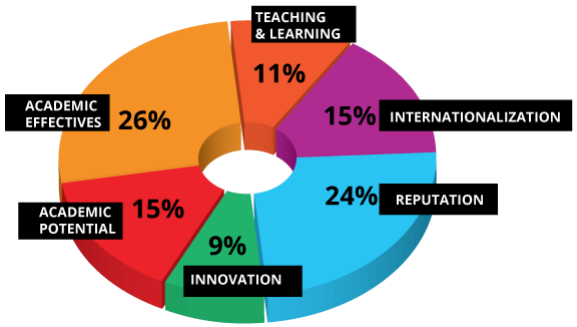
Methodology 2016

ACEDEMIC POTENTIAL - 15%

Parametric evaluation (8%)
Academic staff with highest qualifications (3%)
Right to confer PhD with habilitation degree (2%)
Rights to award PhD degrees (2%)

ACADEMIC EFFECTIVENESS – 26%

Faculty development (6%)
Academic titles awarded (5%)
External funding for research (4%)
Publications (2%)
Citations (3%)
H-index (3%)
EU research programmes (2%)
PhD students (1%)

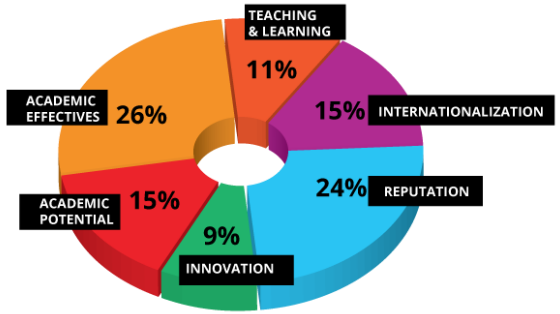


Perspektywy

Methodology 2016

TEACHING & LEARNING - 11%

Students – teaching staff (5%)
Accreditations (3%)
E-holdings (1%)
Printed library holdings (1%)
Library facilities (1%)

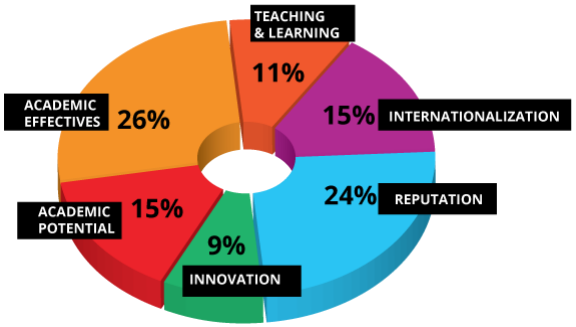


INTERNATIONALIZATION - 15%

Programmes in foreign languages (4%)
Students studying in foreign language (4%)
International students (3%)
Foreign teaching staff (1%)
Student exchange (outbound) (1%)
Student exchange (inbound) (1%)
Multicultural composition of student body (1%)

Perspektywy

Methodology 2016



REPUTATION - 24%

Employer reputation (11%)
Academic reputation (teaching) (11%)
International recognition (2%)

INNOVATION - 9%

Patents (4%)
External funding (2%)
Licenses (2%)
Spin-off and spin-out (1%)

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Polish experience

Award Ceremony 2016

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Perspektywy

Polish experience

Award Ceremony 2016

Perspektywy

Polish experience

Award Ceremony 2016

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Polish experience

Award Ceremony 2016

IREG APPROVED

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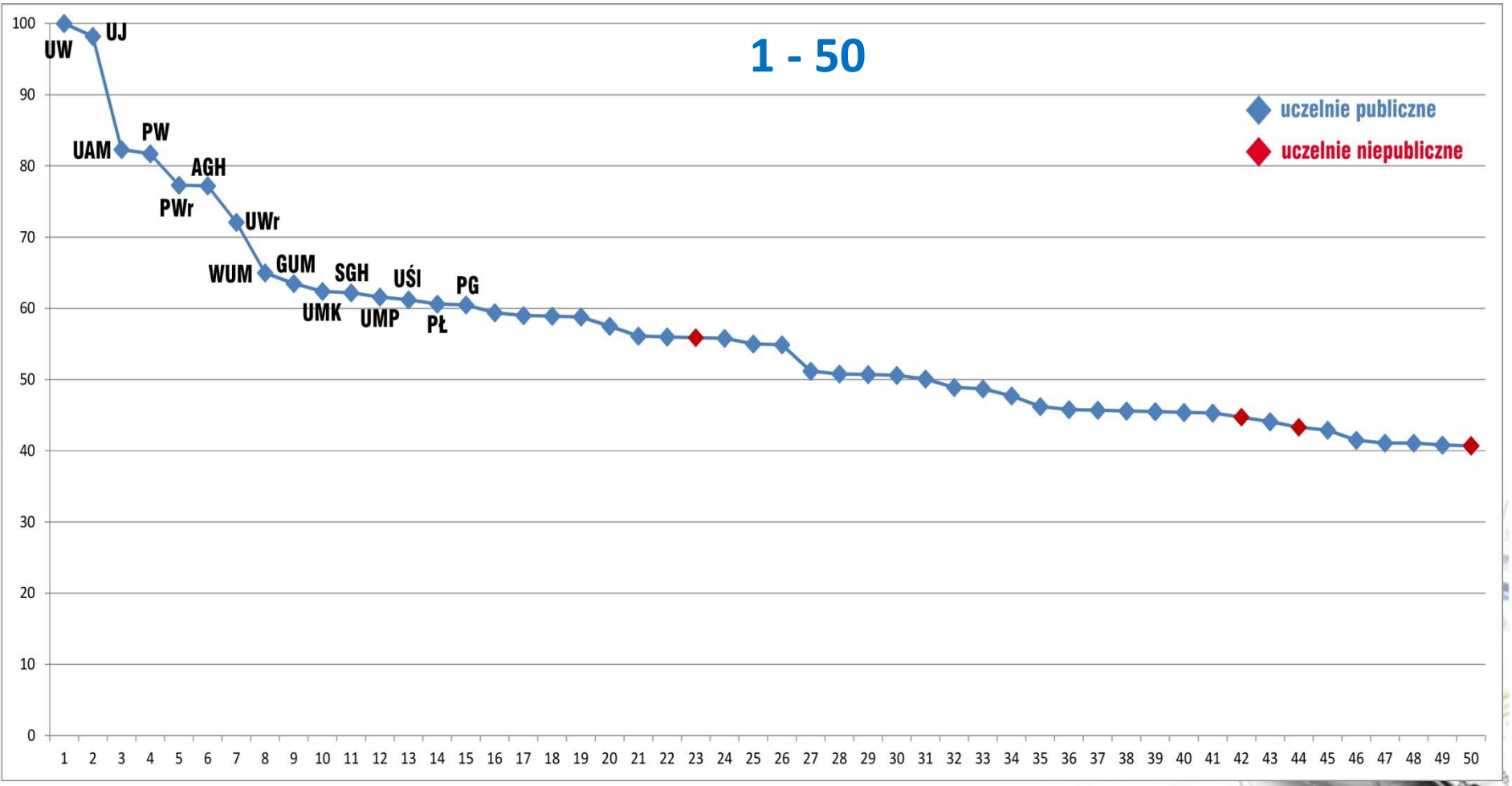
Best Universities in Poland

2016		2015	2014	2013	2012	OVERALL SCORE
1	University of Warsaw	1	1	2	2	100,0
2	Jagiellonian University in Krakow	1	2	1	1	98,2
3	Adam Mickiewicz University in Poznan	3	3	3	3	82,3
4	Warsaw University of Technology	4	4	4	4	81,7
5	Wroclaw University of Technology	4	5	6	5	77,3
6	AGH University of Science and Technology	6	6	5	6	77,2
7	University of Wroclaw	7	7	7	7	72,1
8	Medical University of Warsaw	8	8	11	14	65,0
9	Medical University of Gdansk	10	11	12	18	63,5
10	Nicolaus Copernicus University in Torun	9	9	9	9	62,4
11	Warsaw School of Economics (SGH)	12	13	10	12	62,2
12	Poznan University of Medical Sciences	13	10	8	10	61,6
13	University of Silesia in Katowice	17	20	20	19	61,2
14	Technical University of Lodz	11	12	13	8	60,6
15	Gdansk University of Technology	17	24	24	20	60,5
16	University of Lodz	16	21	23	24	59,4
17	Poznan University of Technology	14	16	22	21	59,0
18	Wroclaw Medical University	15	14	17	22	58,9
19	Silesian University of Technology in Gliwice	22	23	18	16	58,8
20	Medical University of Lodz	17	17	16	13	57,5

Best Universities in Poland 2016



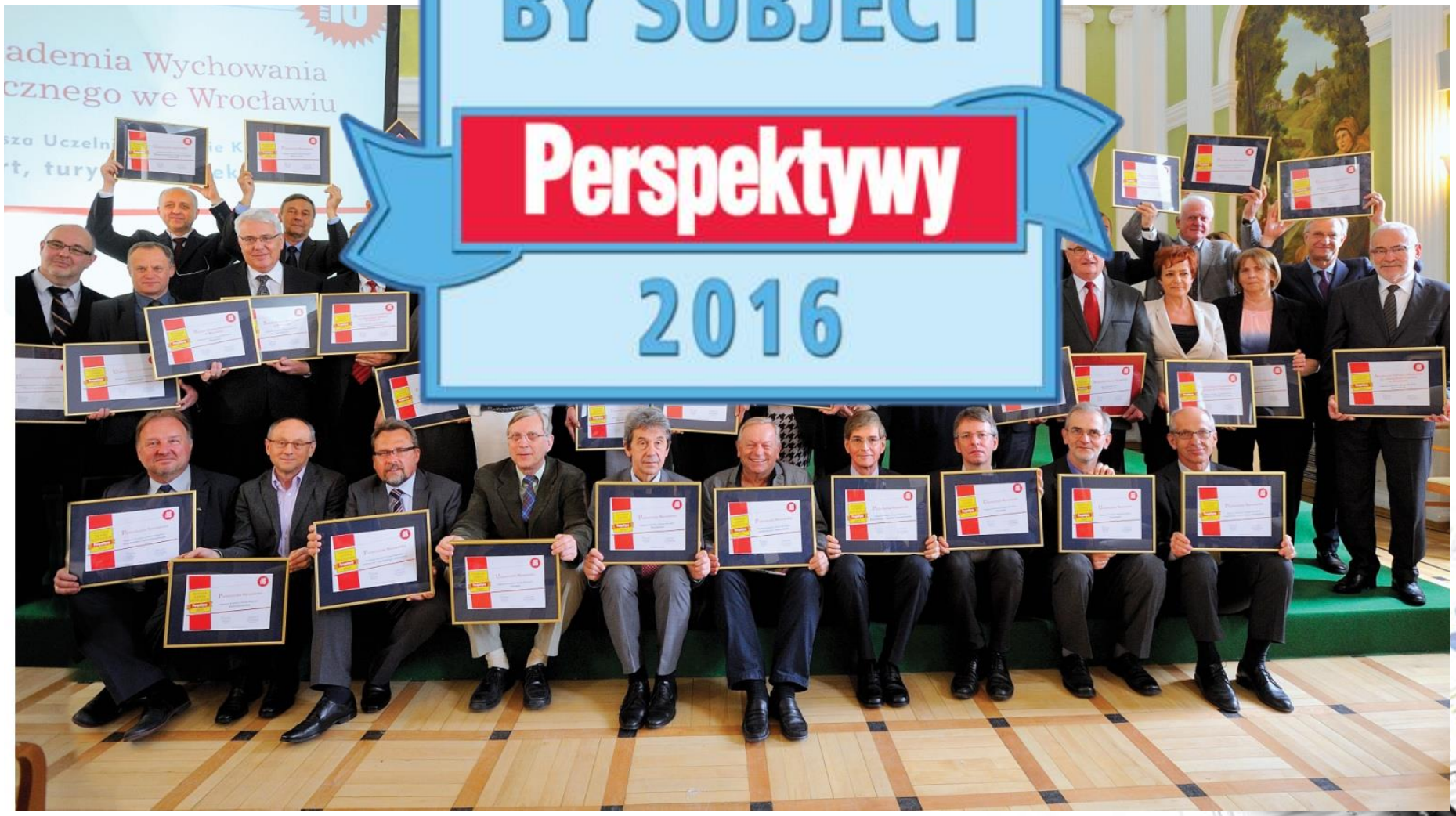
Best Universities of Technology in Poland

2016		2015	2014	OVERALL SCORE
1	Warsaw University of Technology	1	1	100,0
2	Wroclaw University of Technology	1	2	94,6
3	AGH University of Science and Technology	3	3	94,5
4	Technical University of Lodz	4	4	74,2
5	Gdansk University of Technology	6	7	74,1
6	Poznan University of Technology	5	5	72,2
7	Silesian University of Technology in Gliwice	7	6	72,0
8	Lublin University of Technology	11	12	59,6
9	Military University of Technology in Warsaw	9	8	56,1
10	West Pomeranian University of Technology in Szczecin	8	9	55,7
11	Cracow University of Technology	10	10	55,4
12	Czestochowa University of Technology	12	11	54,0
13	Polish Japanese Institute of Information Technology	15	13	53,0
14	Rzeszow University of Technology	13	15	52,5
15	Opole University of Technology	14	14	49,9
16	Bialystok University of Technology	17	15	–
16	Kielce University of Technology	15	15	–
16	University of Technology and Life Sciences in Bydgoszcz	17	18	–
17	Koszalin University of Technology	17	18	–
18	University of Bielsko-Biala	20	21	–
19	Gdynia Maritime University	20	21	–

Polish experience

Ranking BY SUBJECT

Perspektywy 2016



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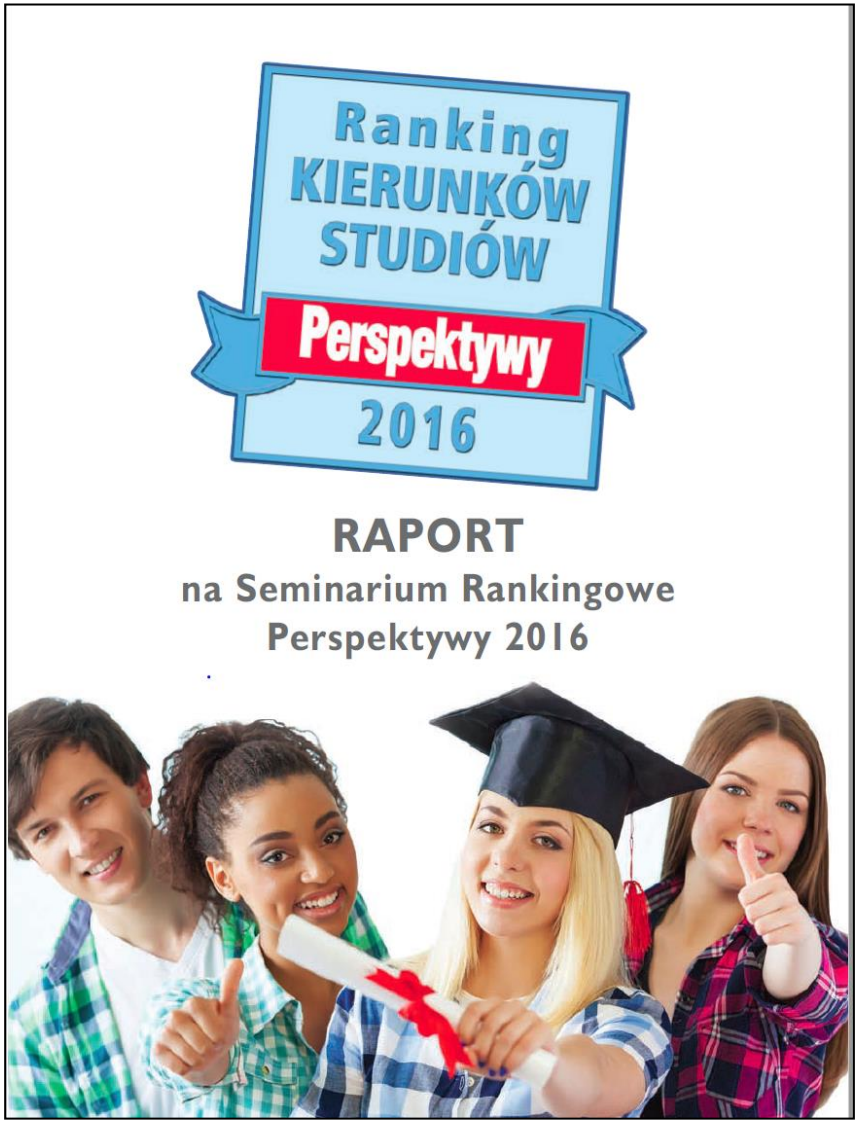
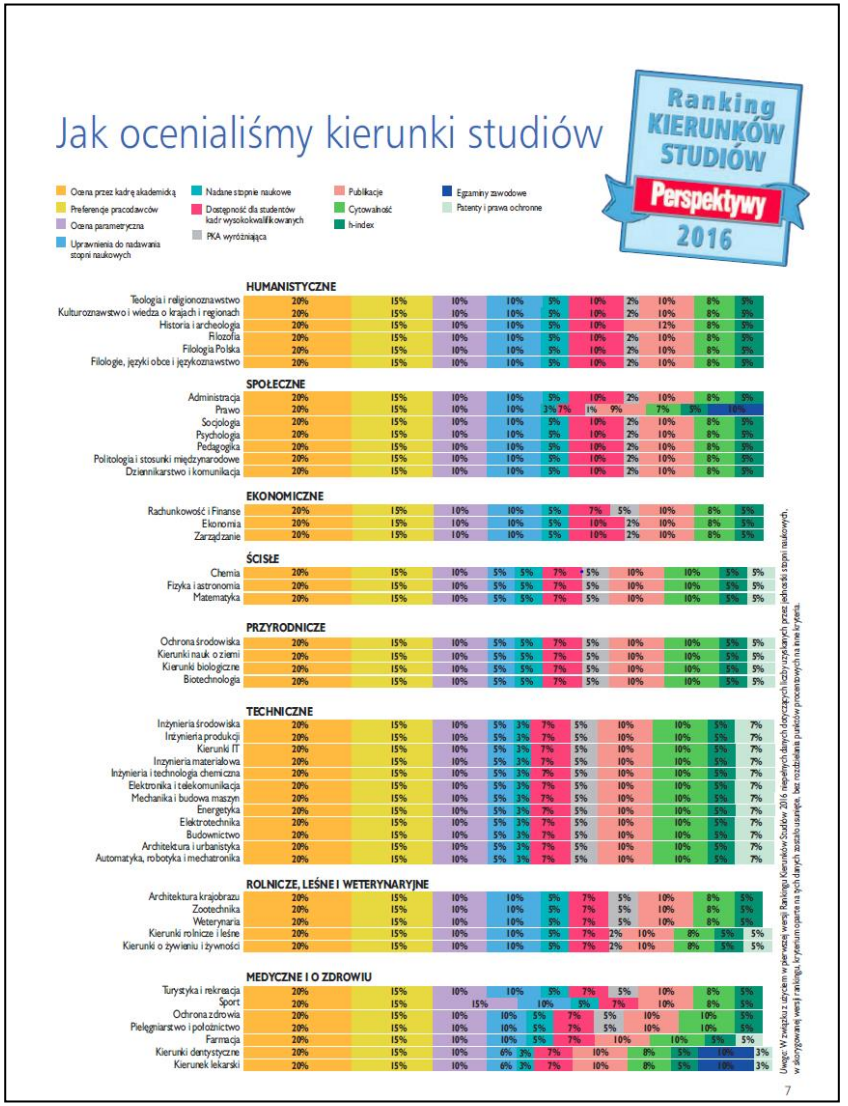
Polish experience

47 subjects





Engineering and Technology

1. Architecture and Urban Planning
2. Chemical Engineering and Technology
3. Civil Engineering
4. Electrical Engineering
5. Electronics and Telecommunication
6. Environmental Engineering
7. IT studies
8. Mechanical Engineering and Machine Building
9. Material Engineering
10. Power Enginering
11. Production Engineering
12. Robotics and Mechatronics

Ranking BY SUBJECT Perspektywy 2016

Robotics and Mechatronics

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**AGH University of Science and Technology** Faculty of Mechanical Engineering and Robotics	100,0	78,57	74,72	75,00	60,00	78,40	31,71	100,0	91,62	84,67	100,0	41,92
2	**AGH University of Science and Technology** Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering	99,3	78,57	74,72	75,00	100,0	76,33	33,47	100,0	91,62	84,67	100,0	5,25
3	**Warsaw University of Technology** Faculty of Power and Aeronautical Engineering	98,3	100,0	100,0	75,00	80,00	72,36	30,34	100,0	51,37	58,65	86,67	2,85
4	**Warsaw University of Technology** Faculty of Mechatronics	90,9	100,0	100,0	75,00	60,00	81,20	33,29	0,00	51,37	58,65	86,67	4,64
5	**Warsaw University of Technology** Faculty of Electrical Engineering	87,0	100,0	100,0	75,00	48,00	34,52	23,96	0,00	51,37	58,65	86,67	2,62
6	**Warsaw University of Technology** Faculty of Automotive and Construction Machinery Engineering	84,4	100,0	100,0	50,00	40,00	58,41	29,87	0,00	51,37	58,65	86,67	1,07
7	**Warsaw University of Technology** Faculty of Production Engineering	82,6	100,0	100,0	50,00	40,00	23,37	25,16	0,00	51,37	58,65	86,67	1,92
8	**Wroclaw University of Technology** Faculty of Microsystem Electronics and Photonics	75,8	60,71	66,11	100,0	20,00	87,62	48,85	100,0	27,42	49,37	60,00	3,20
9	**Wroclaw University of Technology** Faculty of Electronics	73,7	60,71	66,11	75,00	92,00	64,92	18,61	100,0	27,42	49,37	60,00	5,47
10	**Wroclaw University of Technology** Faculty of Mechanical Engineering	71,5	60,71	66,11	75,00	48,00	82,66	19,52	100,0	27,42	49,37	60,00	5,64
11	**Silesian University of Technology in Gliwice** Faculty of Automatic Control, Electronics and Computer Science	70,6	30,71	31,30	75,00	80,00	93,18	41,26	100,0	65,03	66,78	100,0	0,00
12	**Silesian University of Technology in Gliwice** Faculty of Mechanical Engineering	68,3	30,71	31,30	75,00	68,00	55,61	37,79	100,0	65,03	66,78	100,0	4,57
13	**Wroclaw University of Technology** Faculty of Electrical Engineering	63,4	60,71	66,11	75,00	20,00	83,53	29,47	0,00	27,42	49,37	60,00	3,17
14	**Poznan University of Technology** Faculty of Computer Science	56,8	32,86	28,64	75,00	40,00	77,39	39,94	100,0	33,70	43,80	60,00	0,00
15	**Bialystok University of Technology** Faculty of Mechanical Engineering	56,5	12,86	5,53	75,00	48,00	61,37	23,38	0,00	98,75	95,34	80,00	11,86
16	**Silesian University of Technology in Gliwice** Faculty of Electrical Engineering	54,5	30,71	31,30	50,00	28,00	25,82	39,82	0,00	65,03	66,78	100,0	8,48
17	**Poznan University of Technology** Faculty of Mechanical Engineering and Management	52,3	32,86	28,64	75,00	60,00	82,19	20,57	0,00	33,70	43,80	60,00	27,82
18	**Gdansk University of Technology** Faculty of Electronics, Telecommunications and Informatics	51,0	22,86	33,40	75,00	76,00	64,26	22,92	0,00	26,14	57,83	60,00	17,27
19	**University of Zielona Gora** Faculty of Computer, Electrical and Control Engineering	49,8	7,14	6,93	50,00	36,00	22,31	39,05	100,0	62,51	88,78	60,00	4,40
20	**Technical University of Lodz** Faculty of Mechanical Engineering	49,0	11,43	28,50	75,00	60,00	56,42	48,87	0,00	26,52	66,77	66,67	9,78
21	**Technical University of Lodz** Faculty of Electrical, Electronic, Computer and Control Engineering	47,1	11,43	28,50	75,00	80,00	29,80	32,85	0,00	26,52	66,77	66,67	3,83
22	**Military University of Technology in Warsaw** Faculty of Mechatronics and Aviation	46,8	2,14	25,21	50,00	28,00	48,80	36,28	0,00	100,0	64,96	53,33	2,67

Ranking BY SUBJECT Perspektywy 2016

Robotics and Mechatronics

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
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2	**AGH University of Science and Technology**	99,3	78,57	74,72	75,00	100,0	76,33	33,47	100,0	91,62	84,67	100,0	5,25
3	**Warsaw University of Technology** Faculty of Power and Aeronautical Engineering	98,3	0,0	100,0	75,00	80,00	72,36	30,34	100,0	51,37	58,65	86,67	2,85
4	**Warsaw University of Technology** Faculty of Mechatronics	90,9	0,0	100,0	75,00	60,00	81,20	33,29	0,00	51,37	58,65	86,67	4,64
5	**Warsaw University of Technology** Faculty of Electrical Engineering	87,0	0,0	100,0	75,00	48,00	34,52	23,96	0,00	51,37	58,65	86,67	2,62
6	**Warsaw University of Technology** Faculty of Automotive and Construction Machinery Engineering	84,4	0,0	100,0	50,00	40,00	58,41	29,87	0,00	51,37	58,65	86,67	1,07
7	**Warsaw University of Technology** Faculty of Production Engineering	82,6	0,0	100,0	50,00	40,00	23,37	25,16	0,00	51,37	58,65	86,67	1,92
8	**Wroclaw University of Technology** Faculty of Microsystem Electronics and Photonics	75,8	60,71	66,11	100,0	20,00	87,62	48,85	100,0	27,42	49,37	60,00	3,20
9	**Wroclaw University of Technology** Faculty of Electronics	73,7	60,71	66,11	75,00	92,00	64,92	18,61	100,0	27,42	49,37	60,00	5,47
10	**Wroclaw University of Technology** Faculty of Mechanical Engineering	71,5	60,71	66,11	75,00	48,00	82,66	19,52	100,0	27,42	49,37	60,00	5,64
11	**Silesian University of Technology in Gliwice** Faculty of Automatic Control, Electronics and Computer Science	70,6	30,71	31,30	75,00	80,00	93,18	41,26	100,0	65,03	66,78	100,0	0,00
12	**Silesian University of Technology in Gliwice** Faculty of Mechanical Engineering	68,3	30,71	31,30	75,00	68,00	55,61	37,79	100,0	65,03	66,78	100,0	4,57
13	**Wroclaw University of Technology** Faculty of Electrical Engineering	63,4	60,71	66,11	75,00	20,00	83,53	29,47	0,00	27,42	49,37	60,00	3,17
14	**Poznan University of Technology** Faculty of Computer Science	56,8	32,86	28,64	75,00	40,00	77,39	39,94	100,0	33,70	43,80	60,00	0,00
15	**Bialystok University of Technology** Faculty of Mechanical Engineering	56,5	12,86	5,53	75,00	48,00	61,37	23,38	0,00	98,75	95,34	80,00	11,86
16	**Silesian University of Technology in Gliwice** Faculty of Electrical Engineering	54,5	30,71	31,30	50,00	28,00	25,82	39,82	0,00	65,03	66,78	100,0	8,48
17	**Poznan University of Technology** Faculty of Mechanical Engineering and Management	52,3	32,86	28,64	75,00	60,00	82,19	20,57	0,00	33,70	43,80	60,00	27,82
18	**Gdansk University of Technology** Faculty of Electronics, Telecommunications and Informatics	51,0	22,86	33,40	75,00	76,00	64,26	22,92	0,00	26,14	57,83	60,00	17,27
19	**University of Zielona Gora** Faculty of Computer, Electrical and Control Engineering	49,8	7,14	6,93	50,00	36,00	22,31	39,05	100,0	62,51	88,78	60,00	4,40
20	**Technical University of Lodz** Faculty of Mechanical Engineering	49,0	11,43	28,50	75,00	60,00	56,42	48,87	0,00	26,52	66,77	66,67	9,78
21	**Technical University of Lodz** Faculty of Electrical, Electronic, Computer and Control Engineering	47,1	11,43	28,50	75,00	80,00	29,80	32,85	0,00	26,52	66,77	66,67	3,83
22	**Military University of Technology in Warsaw** Faculty of Mechatronics and Aviation	46,8	2,14	25,21	50,00	28,00	48,80	36,28	0,00	100,0	64,96	53,33	2,67

Ranking BY SUBJECT Perspektywy 2016

Architecture and Urban Planning

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Warsaw University of Technology** Faculty of Architecture	100,0	95,70	100,0	100,0	33,33	78,60	55,07	0,00	66,05	63,41	86,67	0,00
2	**Wroclaw University of Technology** Faculty of Architecture	92,5	100,0	68,24	100,0	33,33	95,02	46,97	100,0	25,55	51,79	66,67	0,00
3	**Silesian University of Technology in Gliwice** Faculty of Architecture	76,8	60,22	37,35	66,67	13,33	6,14	39,38	0,00	100,0	73,41	100,0	42,35
4	**Cracow University of Technology** Faculty of Architecture	76,2	82,80	37,45	100,0	33,33	51,85	60,89	100,0	15,56	35,79	60,00	0,00
5	**Poznan University of Technology** Faculty of Architecture	58,4	36,56	31,84	100,0	13,33	37,10	26,22	0,00	62,67	48,50	73,33	0,00
6	**Gdansk University of Technology** Faculty of Architecture	54,1	62,37	19,43	66,67	33,33	21,68	33,27	0,00	22,40	55,19	60,00	0,00
7	**Opole University of Technology** Faculty of Civil Engineering and Architecture	46,9	2,15	11,32	100,0	33,33	8,35	25,24	0,00	12,98	83,79	60,00	57,60
8	**Technical University of Lodz** Faculty of Civil Engineering, Architecture and Environmental Engineering	45,1	0,00	17,27	100,0	60,00	28,30	25,44	0,00	16,89	68,86	66,67	16,27
9=	**Bialystok University of Technology** Faculty of Architecture	43,1	4,30	14,14	66,67	13,33	0,00	32,83	0,00	32,34	100,0	80,00	0,00
9=	**Nicolaus Copernicus University in Torun** Faculty of Fine Arts	43,1	4,30	8,16	100,0	100,0	100,0	68,80	0,00	11,03	25,00	26,67	0,00
11	**Lublin University of Technology** Civil Engeneering and Architecture Faculty	40,6	2,15	9,87	100,0	13,33	6,52	24,38	0,00	11,61	49,07	46,67	75,00
12	**West Pomeranian University of Technology in Szczecin** Faculty of Civil Engineering and Architecture	40,4	12,90	3,57	100,0	46,67	11,59	24,12	0,00	6,09	38,80	33,33	62,22
13	**Rzeszow University of Technology** Faculty of Civil and Environmental Engineering	39,2	0,00	22,68	66,67	46,67	8,70	20,42	0,00	8,95	38,22	26,67	100,0
14=	**Kielce University of Technology** Faculty of Civil Engineering and Architecture	38,7	0,00	12,55	66,67	33,33	29,81	20,85	0,00	18,64	47,21	46,67	76,19
14=	**University of Zielona Gora** Faculty of Civil Engineering, Architecture and Environmental Engineering	38,3	0,00	4,58	66,67	46,67	10,57	45,10	0,00	10,83	93,18	60,00	0,00

Ranking BY SUBJECT
Perspektywy
2016

Electrical Engineering

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1=	**Warsaw University of Technology** Faculty of Electrical Engineering	**100,0**	82,19	100,0	100,0	48,00	41,32	53,48	0,00	100,0	78,23	100,0	6,43
1=	**Wroclaw University of Technology** Faculty of Electrical Engineering	**100,0**	100,0	86,96	100,0	20,00	100,0	65,77	0,00	79,80	76,89	83,33	7,78
3	**AGH University of Science and Technology** Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering	**94,3**	50,68	68,43	100,0	100,0	91,37	74,70	100,0	46,91	96,13	87,50	12,90
4	**Silesian University of Technology in Gliwice** Faculty of Electrical Engineering	**69,9**	41,10	51,26	66,67	28,00	30,91	88,87	0,00	59,95	82,59	70,83	20,84
5	**Gdansk University of Technology** Faculty of Electrical and Control Engineering	**59,6**	35,16	31,57	66,67	28,00	46,34	44,19	0,00	56,52	88,13	62,50	15,63
6	**Poznan University of Technology** Faculty of Electrical Engineering	**59,3**	51,14	33,61	66,67	40,00	38,69	60,63	0,00	26,49	72,42	62,50	6,14
7	**Technical University of Lodz** Faculty of Electrical, Electronic, Computer and Control Engineering	**55,8**	25,57	22,62	100,0	80,00	35,67	73,31	0,00	18,49	61,26	58,33	9,41
8	**University of Zielona Gora** Faculty of Computer, Electrical and Control Engineering	**53,2**	5,48	7,10	66,67	36,00	26,71	87,14	100,0	21,25	100,0	58,33	10,81
9	**Czestochowa University of Technology** Faculty of Electrical Engineering	**50,5**	1,83	20,49	100,0	20,00	10,99	100,0	0,00	48,88	70,79	54,17	0,00
10	**Bialystok University of Technology** Faculty of Computer Science	**49,2**	13,70	11,35	66,67	28,00	48,08	83,72	0,00	30,40	90,00	54,17	12,97
11	**Opole University of Technology** Faculty of Electrical Engineering, Automatic Control and Informatics	**48,5**	5,48	12,19	66,67	40,00	50,97	69,56	0,00	13,70	63,09	45,83	100,0
12	**Lublin University of Technology** Electrical Engineering and Computer Science Faculty	**48,0**	21,00	15,12	100,0	20,00	22,19	60,55	0,00	18,62	44,70	41,67	54,87
13	**West Pomeranian University of Technology in Szczecin** Faculty of Electrical Engineering	**45,6**	1,83	11,71	100,0	40,00	38,46	87,98	0,00	23,63	63,04	45,83	6,48
14	**Gdynia Maritime University** Faculty of Marine Electrical Engineering	**40,8**	0,00	11,71	66,67	28,00	48,08	76,92	0,00	17,93	84,96	41,67	5,40
15	**Cracow University of Technology** Faculty of Electrical and Computer Engineering	**39,1**	10,05	28,96	33,33	8,00	16,72	44,73	0,00	43,70	56,29	41,67	33,83

Ranking BY SUBJECT Perspektywy 2016

Civil Engineering

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Wroclaw University of Technology** Faculty of Civil Engineering	100,0	100,0	74,98	66,67	35,71	52,36	49,89	100,0	57,21	65,52	84,21	0,00
2	**AGH University of Science and Technology** Faculty of Mining and Geoengineering	98,3	34,65	88,17	66,67	100,0	87,70	39,25	100,0	81,31	87,19	100,0	15,24
3	**Warsaw University of Technology** Faculty of Civil Engineering, Mechanics and Petrochemistry (Plock)	93,2	90,86	100,0	66,67	28,57	31,78	71,72	0,00	42,29	60,31	84,21	0,00
4	**Warsaw University of Technology** Faculty of Civil Engineering	91,1	90,86	100,0	66,67	35,71	48,42	39,71	0,00	42,29	60,31	84,21	0,00
5	**Silesian University of Technology in Gliwice** Faculty of Civil Engineering	79,0	20,92	68,78	66,67	35,71	78,87	53,34	0,00	100,0	82,56	100,0	0,00
6	**Poznan University of Technology** Faculty of Civil and Environmental Engineering	66,3	43,14	15,97	66,67	71,43	66,41	44,63	100,0	35,64	55,87	68,42	0,00
7	**Gdansk University of Technology** Faculty of Civil and Environmental Engineering	64,5	47,72	17,36	100,0	71,43	65,81	29,47	0,00	23,75	67,45	68,42	6,19
8	**Cracow University of Technology** Faculty of Civil Engineering	64,3	62,75	40,98	66,67	85,71	48,35	35,98	0,00	17,50	39,34	57,89	5,75
9	**Cracow University of Technology** Faculty of of Environmental Engineering	59,7	62,75	40,98	66,67	35,71	19,32	45,87	0,00	17,50	39,34	57,89	0,00
10	**Technical University of Lodz** Faculty of Civil Engineering, Architecture and Environmental Engineering	58,2	11,11	15,33	100,0	64,29	57,63	37,25	0,00	42,65	76,45	68,42	16,27
11	**Opole University of Technology** Faculty of Civil Engineering and Architecture	56,8	3,92	27,76	100,0	35,71	17,00	36,97	0,00	24,63	84,19	57,89	57,60
12	**Lublin University of Technology** Civil Engeneering and Architecture Faculty	53,8	2,61	22,24	100,0	14,29	13,28	35,70	0,00	36,12	67,08	52,63	75,00
13	**Bialystok University of Technology** Faculty of Civil and Environmental Engineering	51,0	1,31	10,37	66,67	85,71	55,69	43,22	0,00	19,33	89,30	63,16	33,10
14	**University of Zielona Gora** Faculty of Civil Engineering, Architecture and Environmental Engineering	50,2	0,00	30,50	66,67	50,00	21,52	66,04	0,00	13,57	100,0	57,89	0,00
15	**Rzeszow University of Technology** Faculty of Civil and Environmental Engineering	48,8	1,31	30,50	66,67	50,00	17,71	29,90	0,00	16,17	52,29	36,84	100,0
16=	**Kielce University of Technology** Faculty of Civil Engineering and Architecture	48,0	7,84	18,71	66,67	35,71	60,71	30,53	0,00	35,61	39,98	42,11	76,19
16=	**Military University of Technology in Warsaw** Faculty of Civil Engineering and Geodesy	46,5	4,58	33,28	66,67	28,57	100,0	31,29	0,00	38,41	56,60	42,11	0,00
18	**West Pomeranian University of Technology in Szczecin** Faculty of Civil Engineering and Architecture	43,7	1,96	18,07	100,0	50,00	23,61	35,31	0,00	10,60	34,12	26,32	62,22
19	**Czestochowa University of Technology** Faculty of Civil Engineering	43,4	0,00	7,59	66,67	14,29	19,77	40,62	0,00	65,06	63,78	47,37	22,33
20	**University of Warmia and Mazury in Olsztyn** Faculty of Geodesy, Geospatial and Civil Engineering	42,7	1,31	10,44	66,67	35,71	49,64	44,75	100,0	2,78	62,97	36,84	0,00

Ranking BY SUBJECT Perspektywy 2016

Electronics and Telecommuncation

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Warsaw University of Technology** Faculty of Electronics and Information Technology	100,0	100,0	100,0	100,0	86,96	91,18	100,0	0,00	51,22	78,23	100,0	1,82
2	**AGH University of Science and Technology** Faculty of Computer Science, Electronics and Telecommunications	90,7	86,89	80,58	75,00	65,22	50,83	76,61	0,00	61,71	96,13	87,50	39,06
3	**Wroclaw University of Technology** Faculty of Microsystem Electronics and Photonics	83,8	74,32	53,71	100,0	21,74	92,05	96,39	100,0	37,17	76,89	83,33	7,86
4	**Wroclaw University of Technology** Faculty of Electronics	79,8	74,32	53,71	75,00	100,0	68,20	36,72	100,0	37,17	76,89	83,33	13,44
5	**Silesian University of Technology in Gliwice** Faculty of Automatic Control, Electronics and Computer Science	66,1	20,77	47,81	75,00	86,96	97,89	81,42	100,0	23,62	82,59	70,83	0,00
6	**Gdansk University of Technology** Faculty of Electronics, Telecommunications and Informatics	65,3	58,47	23,75	75,00	82,61	67,50	45,22	0,00	34,30	88,13	62,50	42,44
7	**Poznan University of Technology** Faculty of Electronics and Telecommunications	61,6	28,96	22,32	75,00	21,74	100,0	87,58	0,00	100,0	72,42	62,50	4,80
8	**Silesian University of Technology in Gliwice** Faculty of Electrical Engineering	51,6	20,77	47,81	50,00	30,43	27,12	78,58	0,00	23,62	82,59	70,83	20,84
9	**University of Zielona Gora** Faculty of Computer, Electrical and Control Engineering	46,3	3,28	4,99	50,00	39,13	23,44	77,05	100,0	25,64	100,0	58,33	10,81
10	**Technical University of Lodz** Faculty of Electrical, Electronic, Computer and Control Engineering	45,0	10,38	22,75	75,00	86,96	31,30	64,82	0,00	22,30	61,26	58,33	9,41
11	**Czestochowa University of Technology** Faculty of Electrical Engineering	44,1	0,00	21,89	75,00	21,74	9,64	88,42	0,00	58,96	70,79	54,17	0,00
12	**Military University of Technology in Warsaw** Faculty of of Electronics	43,5	13,11	9,40	50,00	43,48	23,01	73,72	0,00	49,95	83,76	62,50	0,00
13	**Opole University of Technology** Faculty of Electrical Engineering, Automatic Control and Informatics	41,3	0,00	11,92	50,00	43,48	44,73	61,50	0,00	16,53	63,09	45,83	100,0
14	**West Pomeranian University of Technology in Szczecin** Faculty of Electrical Engineering	40,3	7,10	10,92	75,00	43,48	33,75	77,80	0,00	28,51	63,04	45,83	6,48
15	**Bialystok University of Technology** Faculty of Computer Science	39,8	0,00	9,93	50,00	30,43	42,19	74,02	0,00	36,67	90,00	54,17	12,97
16	**Gdynia Maritime University** Faculty of Marine Electrical Engineering	36,4	0,00	15,91	50,00	30,43	42,19	68,02	0,00	21,63	84,96	41,67	5,40
17=	**Koszalin University of Technology** Faculty of Electronics and Computer Science	32,7	3,28	16,43	50,00	17,39	33,75	62,17	0,00	19,76	74,74	29,17	0,00
17=	**Rzeszow University of Technology** Faculty of Electrical and Computer Engineering	32,7	8,20	25,36	50,00	30,43	22,94	42,17	0,00	19,30	54,50	37,50	5,04

Ranking BY SUBJECT Perspektywy 2016

Power Engineering

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Warsaw University of Technology** Faculty of Power and Aeronautical Engineering	100,0	78,79	100,0	75,00	100,0	60,59	31,07	100,0	100	76,58	95,24	7,01
2	**AGH University of Science and Technology** Faculty of Geology, Geophysics and Environmental Protection	88,7	100,0	71,79	75,00	60,00	29,53	31,62	100,0	48,28	84,07	80,95	0,00
3	**AGH University of Science and Technology** Faculty of Energy and Fuels	83,1	100,0	71,79	75,00	35,00	79,98	28,45	0,00	48,28	84,07	80,95	10,52
4	**Silesian University of Technology in Gliwice** Faculty of Energy and Environmental Engineering	80,4	98,48	5,46	75,00	75,00	100,0	48,83	100,0	39,69	76,32	90,48	16,30
5	**Wroclaw University of Technology** Faculty of Mechanical and Power Engineering	79,5	74,24	74,54	50,00	35,00	71,12	25,24	0,00	81,14	86,71	100	17,89
6	**Silesian University of Technology in Gliwice** Faculty of Electrical Engineering	64,3	98,48	5,46	50,00	35,00	21,62	40,78	0,00	39,69	76,32	90,48	20,84
7	**University of Warsaw** Faculty of Physics	63,9	3,03	27,12	100,0	60,00	85,49	100,0	100,0	14,98	100	80,95	3,30
8	**University of Warsaw** Faculty of Chemistry	59,4	3,03	27,12	100,0	25,00	89,67	78,21	100,0	14,98	100	80,95	0,00
9	**Cracow University of Technology** Faculty of Mechanical Engineering	52,2	51,52	48,18	50,00	80,00	39,63	30,97	0,00	14,93	45,21	52,38	10,42
10	**Gdansk University of Technology** Faculty of Ocean Engineering and Ship Technology	48,8	36,36	27,18	50,00	25,00	29,24	13,51	0,00	12,69	72,04	57,14	84,58
11	**Technical University of Lodz** Faculty of Mechanical Engineering	48,5	12,12	29,99	75,00	75,00	47,24	50,05	0,00	9,74	75,73	61,9	24,04
12	**Technical University of Lodz** Faculty of Electrical, Electronic, Computer and Control Engineering	46,3	12,12	29,99	75,00	100,0	24,95	33,64	0,00	9,74	75,73	61,9	9,41
13	**Gdansk University of Technology** Faculty of Mechanical Engineering	45,6	36,36	27,18	50,00	35,00	22,84	20,76	0,00	12,69	72,04	57,14	39,15
14	**Cracow University of Technology** Faculty of Electrical and Computer Engineering	44,3	51,52	48,18	25,00	10,00	11,70	20,53	0,00	14,93	45,21	52,38	33,83
15	**Bialystok University of Technology** Faculty of Mechanical Engineering	44,0	15,15	17,26	75,00	60,00	51,38	23,94	0,00	7,58	80,88	57,14	29,14
16	**Gdansk University of Technology** Faculty of Electrical and Control Engineering	43,8	36,36	27,18	50,00	35,00	32,41	20,28	0,00	12,69	72,04	57,14	15,63
17	**Czestochowa University of Technology** Faculty of Mechanical Engineering and Computer Science	42,5	6,06	34,52	50,00	75,00	60,30	63,25	0,00	15,58	55,78	61,9	4,47
18	**West Pomeranian University of Technology in Szczecin** Faculty of Mechanical Engineering and Mechatronics	41,7	0,00	9,06	75,00	50,00	21,96	42,36	0,00	18,6	96,76	52,38	31,76
19	**Opole University of Technology** Faculty of Electrical Engineering, Automatic Control and Informatics	41,1	0,00	15,48	50,00	50,00	35,65	31,92	0,00	7	77,09	47,62	100,0
20	**Czestochowa University of Technology** Faculty of Infrastructure and Environment	40,8	6,06	34,52	50,00	35,00	58,63	79,17	0,00	15,58	55,78	61,9	0,00

Ranking BY SUBJECT Perspektywy 2016

Engineering and Chemical Technology

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Warsaw University of Technology** Faculty of Chemistry	100,0	100,0	100,0	100,0	80,95	100,0	50,27	0,00	36,95	83,27	100,0	13,58
2	**Wroclaw University of Technology** Faculty of Chemistry	99,9	100,0	83,84	100,0	100,0	50,98	32,97	100,0	41,48	77,23	88,46	10,82
3	**Warsaw University of Technology** Faculty of Chemical and Process Engineering	98,5	100,0	100,0	100,0	23,81	27,37	46,68	100,0	36,95	83,27	100,0	2,35
4	**Warsaw University of Technology** Faculty of Civil Engineering, Mechanics and Petrochemistry (Plock)	84,9	100,0	100,0	66,67	19,05	12,28	35,14	0,00	36,95	83,27	100,0	0,00
5	**AGH University of Science and Technology** Faculty of Materials Science and Ceramics	77,8	51,11	75,37	100,0	71,43	69,30	56,58	0,00	41,27	71,43	76,92	13,19
6	**Silesian University of Technology in Gliwice** Faculty of Chemistry	76,9	45,56	55,03	100,0	71,43	53,58	47,93	0,00	100,0	64,45	69,23	10,69
7	**AGH University of Science and Technology** Faculty of Energy and Fuels	70,2	51,11	75,37	100,0	33,33	48,82	22,21	0,00	41,27	71,43	76,92	4,57
8	**Poznan University of Technology** Faculty of Chemical Technology	69,6	47,78	38,83	100,0	42,86	54,22	38,39	0,00	65,02	63,49	65,38	45,78
9	**West Pomeranian University of Technology in Szczecin** Faculty of Chemical Technology and Engineering	66,4	22,22	12,50	100,0	47,62	26,70	100,0	0,00	42,12	78,37	65,38	100,0
10	**Gdansk University of Technology** Faculty of Chemistry	63,6	31,11	28,66	100,0	71,43	55,69	36,22	100,0	23,46	75,42	57,69	9,90
11	**Technical University of Lodz** Faculty of Chemistry	62,2	42,22	22,74	100,0	47,62	23,75	79,62	0,00	34,91	71,83	69,23	15,61
12	**Technical University of Lodz** Faculty of Process and Environmental Engineering	55,4	42,22	22,74	66,67	47,62	26,27	49,59	0,00	34,91	71,83	69,23	21,06
13	**University of Silesia in Katowice** Faculty of Mathematics, Physics and Chemistry	49,1	0,00	14,31	100,0	71,43	34,45	81,17	0,00	9,87	100,0	53,85	0,00
14	**Cracow University of Technology** Faculty of Chemical Engineering and Technology	48,0	22,22	47,26	66,67	42,86	46,31	40,98	0,00	42,16	35,12	42,31	12,54
15	**Rzeszow University of Technology** Faculty of Chemistry	42,7	21,11	22,16	66,67	33,33	38,24	32,91	0,00	29,14	58,66	42,31	17,00
16	**Czestochowa University of Technology** Faculty of Production Engineering and Materials Technology	42,0	0,00	22,12	66,67	57,14	34,50	70,23	0,00	26,52	64,50	53,85	4,74
17	**University of Warmia and Mazury in Olsztyn** Faculty of Food Sciences	38,5	0,00	20,89	100,0	23,81	34,69	67,39	0,00	7,97	58,90	30,77	0,00
18	**Opole University of Technology** Faculty of Mechanical Engineering	36,1	4,44	9,01	100,0	33,33	31,49	28,68	0,00	15,32	56,11	46,15	3,09

Ranking BY SUBJECT Perspektywy 2016

Material Engineering

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Warsaw University of Technology** Faculty of Materials Science and Engineering	100,0	74,19	78,13	100,0	23,81	100,0	56,88	0,00	100,0	71,39	100,0	4,31
2	**AGH University of Science and Technology** Faculty of Materials Science and Ceramics	94,6	100,0	100,0	75,00	71,43	44,00	56,58	0,00	17,11	59,21	73,33	12,34
3	**AGH University of Science and Technology** Faculty of Non-Ferrous Metals	91,9	100,0	100,0	75,00	47,62	43,31	34,60	0,00	17,11	59,21	73,33	25,98
4	**AGH University of Science and Technology** Faculty of Metals Engineering and Industrial Computer Science	83,8	100,0	100,0	50,00	47,62	13,50	26,63	0,00	17,11	59,21	73,33	4,56
5	**Wroclaw University of Technology** Faculty of Chemistry	77,0	33,06	64,51	75,00	100,0	32,37	32,97	100,0	16,52	77,89	90,00	10,12
6	**Silesian University of Technology in Gliwice** Faculty of Mechanical Engineering	70,7	40,32	56,55	75,00	80,95	18,04	30,21	100,0	12,04	65,38	73,33	4,57
7	**Jagiellonian University in Krakow** Faculty of Physics, Astronomy and Applied Computer Science	62,3	10,89	31,51	100,0	57,14	30,50	81,21	0,00	14,87	100,0	76,67	2,25
8	**Silesian University of Technology in Gliwice** Faculty of Materials Engineering and Metallurgy	60,6	40,32	56,55	50,00	57,14	16,93	58,59	0,00	12,04	65,38	73,33	4,51
9	**West Pomeranian University of Technology in Szczecin** Faculty of Chemical Technology and Engineering	58,1	12,90	12,57	75,00	47,62	16,95	100,0	0,00	5,67	73,67	53,33	93,54
10=	**Gdansk University of Technology** Faculty of Chemistry	52,1	1,61	23,88	75,00	71,43	35,36	36,22	100,0	4,94	71,41	63,33	9,26
10=	**Czestochowa University of Technology** Faculty of Production Engineering and Materials Technology	52,1	16,94	42,40	50,00	57,14	21,90	70,23	0,00	17,88	66,96	60,00	4,44
12	**Poznan University of Technology** Faculty of Mechanical Engineering and Management	51,7	10,08	36,02	75,00	71,43	26,67	16,44	0,00	13,10	76,93	66,67	27,82
13	**Military University of Technology in Warsaw** Faculty of of New Technologies and Chemistry	50,0	17,74	12,76	75,00	33,33	31,73	84,80	0,00	17,50	68,13	66,67	2,29
14	**Technical University of Lodz** Faculty of Material Technologies and Textile Design	49,8	13,71	25,23	75,00	23,81	21,82	60,63	0,00	6,30	57,83	66,67	51,55
15	**Technical University of Lodz** Faculty of Chemistry	49,4	13,71	25,23	75,00	47,62	15,08	79,62	0,00	6,30	57,83	66,67	14,61
16	**Technical University of Lodz** Faculty of Mechanical Engineering	46,6	13,71	25,23	75,00	71,43	18,31	39,07	0,00	6,30	57,83	66,67	9,78
17	**Lublin University of Technology** Mechanical Engineering Faculty	45,1	0,00	9,64	75,00	42,86	31,35	18,38	0,00	7,26	65,73	53,33	100,0
18	**Cracow University of Technology** Faculty of Chemical Engineering and Technology	44,7	20,97	40,20	50,00	42,86	29,41	40,98	0,00	3,57	50,74	53,33	11,73
19	**University of Silesia in Katowice** Faculty of Computer Science and Materials Science	44,1	25,00	18,32	50,00	33,33	8,77	28,09	0,00	20,95	75,54	63,33	1,97
20	**Cracow University of Technology** Faculty of Mechanical Engineering	44,0	20,97	40,20	50,00	76,19	15,36	24,17	0,00	3,57	50,74	53,33	4,24

Ranking BY SUBJECT Perspektywy 2016

Production Engineering

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Wroclaw University of Technology** Faculty of Mechanical Engineering	100,0	100,0	77,40	100,0	70,59	61,94	22,21	100,0	50,52	72,96	77,78	5,64
2	**AGH University of Science and Technology** Faculty of Non-Ferrous Metals	92,2	90,28	61,73	100,0	58,82	100,0	49,27	0,00	55,33	65,20	83,33	25,98
3	**AGH University of Science and Technology** Faculty of Mining and Geoengineering	89,5	90,28	61,73	66,67	82,35	49,68	27,38	100,0	55,33	65,20	83,33	1,68
4	**Warsaw University of Technology** Faculty of Production Engineering	86,9	56,94	100,0	66,67	58,82	17,51	28,64	0,00	100,0	73,46	100,0	1,92
5	**Warsaw University of Technology** Faculty of Management	84,7	56,94	100,0	66,67	29,41	39,30	20,19	0,00	100,0	73,46	100,0	0,00
6	**Silesian University of Technology in Gliwice** Faculty of Mechanical Engineering	84,5	52,78	63,72	100,0	100,0	41,67	43,02	100,0	34,41	67,57	88,89	4,57
7	**AGH University of Science and Technology** Faculty of Management	82,3	90,28	61,73	100,0	23,53	31,50	28,98	0,00	55,33	65,20	83,33	0,99
8	**Silesian University of Technology in Gliwice** Faculty of Materials Engineering and Metallurgy	74,5	52,78	63,72	66,67	70,59	39,09	83,43	0,00	34,41	67,57	88,89	4,51
9	**Poznan University of Technology** Faculty of Mechanical Engineering and Management	72,0	26,39	63,27	100,0	88,24	61,58	23,41	0,00	64,36	58,89	72,22	27,82
10	**Silesian University of Technology in Gliwice** Faculty of Organization and Management	67,1	52,78	63,72	66,67	41,18	26,42	40,02	0,00	34,41	67,57	88,89	0,64
11	**Technical University of Lodz** Faculty of Mechanical Engineering	60,1	9,72	39,92	100,0	88,24	42,28	55,63	0,00	46,19	57,57	72,22	9,78
12	**Lublin University of Technology** Mechanical Engineering Faculty	55,7	8,33	15,48	100,0	52,94	72,40	26,18	0,00	23,17	66,41	50,00	100,0
13	**Opole University of Technology** Faculty of of Production Engineering and Logistics	53,3	44,44	9,82	66,67	11,76	0,00	35,42	0,00	38,58	100,0	66,67	1,37
14	**Cracow University of Technology** Faculty of Mechanical Engineering	51,1	27,78	34,59	66,67	94,12	35,47	34,42	0,00	27,48	44,27	55,56	4,24
15	**Czestochowa University of Technology** Faculty of Production Engineering and Materials Technology	49,8	16,67	27,32	66,67	70,59	50,58	100,0	0,00	16,96	43,00	50,00	4,44
16	**Poznan University of Economics** Faculty of Commodity Science	49,5	0,00	10,83	100,0	29,41	27,78	50,17	100,0	7,12	99,00	27,78	4,06
17	**Gdansk University of Technology** Faculty of Mechanical Engineering	48,7	20,83	33,09	66,67	41,18	20,44	23,07	0,00	44,80	57,18	55,56	15,93
18	**West Pomeranian University of Technology in Szczecin** Faculty of Mechanical Engineering and Mechatronics	48,6	0,00	5,24	100,0	58,82	19,65	47,08	0,00	24,03	98,87	66,67	12,93
19	**Rzeszow University of Technology** Faculty of Mechanical Engineering and Aeronautics	47,0	19,44	17,35	66,67	82,35	74,93	22,46	0,00	21,22	56,04	55,56	19,57
20	**Technical University of Lodz** Faculty of Organization and Management	44,0	9,72	39,92	66,67	11,76	5,41	21,83	0,00	46,19	57,57	72,22	0,00

Ranking BY SUBJECT Perspektywy 2016

Environmental Engineering

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Silesian University of Technology in Gliwice** Faculty of Energy and Environmental Engineering	100,0	89,80	64,83	100,0	100,0	100,0	61,68	100,0	69,82	70,50	94,44	14,53
2	**Wroclaw University of Technology** Faculty of Environmental Engineering	94,6	93,88	87,36	100,0	33,33	77,60	41,76	0,00	84,19	69,30	100,0	22,24
3	**Warsaw University of Technology** Faculty of Civil Engineering, Mechanics and Petrochemistry (Plock)	84,7	100,0	100,0	66,67	26,67	20,11	56,87	0,00	45,10	65,01	94,44	0,00
4	**Warsaw University of Technology** Faculty of Building Services, Hydro and Environmental Engineering	84,5	100,0	100,0	66,67	33,33	38,09	40,54	0,00	45,10	65,01	94,44	2,05
5	**AGH University of Science and Technology** Faculty of Geology, Geophysics and Environmental Protection	79,4	51,02	79,20	100,0	80,00	29,53	39,94	100,0	30,59	70,92	88,89	0,00
6	**AGH University of Science and Technology** Faculty of Mining and Geoengineering	76,4	51,02	79,20	66,67	93,33	55,51	31,12	100,0	30,59	70,92	88,89	3,67
7	**AGH University of Science and Technology** Faculty of Mining Surveying and Environmental Engineering	70,0	51,02	79,20	66,67	66,67	77,60	36,77	0,00	30,59	70,92	88,89	11,12
8	**Gdansk University of Technology** Faculty of Civil and Environmental Engineering	64,4	53,06	22,36	100,0	66,67	41,65	23,37	0,00	37,28	100,0	83,33	1,49
9	**Czestochowa University of Technology** Faculty of Infrastructure and Environment	63,2	32,65	60,36	66,67	46,67	58,63	100,0	0,00	61,26	49,94	55,56	0,00
10	**University of Warmia and Mazury in Olsztyn** Faculty of Environmental Sciences	63,2	16,33	23,39	100,0	46,67	0,00	60,41	100,0	86,92	65,89	72,22	0,00
11	**Technical University of Lodz** Faculty of Process and Environmental Engineering	59,2	26,53	32,50	66,67	66,67	43,04	80,25	0,00	43,49	59,05	77,78	43,17
12	**Warsaw University of Life Sciences - SGGW** Faculty of Civil and Environmental Engineering	57,4	16,33	57,61	100,0	66,67	34,99	42,89	0,00	34,27	65,16	61,11	9,40
13	**Lublin University of Technology** Environmental Engineering Faculty	56,9	12,24	32,34	66,67	33,33	36,35	31,65	0,00	76,75	59,07	61,11	100,0
14	**Poznan University of Life Sciences** Faculty of Land Reclamation and Environmental Engineering	55,4	10,20	37,59	66,67	33,33	52,92	53,09	0,00	100,0	65,06	72,22	0,00
15	**Technical University of Lodz** Faculty of Civil Engineering, Architecture and Environmental Engineering	54,5	26,53	32,50	100,0	60,00	36,48	29,54	0,00	43,49	59,05	77,78	3,92
16	**Poznan University of Technology** Faculty of Civil and Environmental Engineering	51,4	12,24	26,92	66,67	66,67	42,03	35,39	100,0	41,32	54,72	72,22	0,00
17	**Opole University of Technology** Faculty of Mechanical Engineering	47,5	6,12	34,92	100,0	46,67	51,59	46,41	0,00	17,17	72,40	50,00	6,34
18	**University of Agriculture in Krakow** Faculty of Environmental Engineering and Land Surveying	45,8	28,57	35,95	66,67	46,67	43,79	37,00	0,00	25,87	51,83	50,00	0,00
18=	**Cracow University of Technology**												

Ranking BY SUBJECT Perspektywy 2016

IT studies

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patents 7%
1	**Warsaw University of Technology** Faculty of Electronics and Information Technology	100,0	100,0	100,0	100,0	80,00	36,02	28,33	0,00	58,45	48,93	92,31	1,82
2	**Warsaw University of Technology** Faculty of Mathematics and Information Science	98,9	100,0	100,0	75,00	28,00	2,19	35,64	100,0	58,45	48,93	92,31	0,00
3	**AGH University of Science and Technology** Faculty of Electrical Engineering, Automatics, Computer Science and Biomedical Engineering	98,0	89,96	84,46	75,00	100,0	31,68	18,71	100,0	36,65	62,16	100	12,90
4	**AGH University of Science and Technology** Faculty of Physics and Applied Computer Science	92,2	89,96	84,46	100,0	28,00	61,54	47,52	0,00	36,65	62,16	100	2,00
5=	**AGH University of Science and Technology** Faculty of Geology, Geophysics and Environmental Protection	91,9	89,96	84,46	75,00	48,00	14,63	17,26	100,0	36,65	62,16	100	0,00
5=	**Warsaw University of Technology** Faculty of Electrical Engineering	91,9	100,0	100,0	75,00	48,00	14,33	13,40	0,00	58,45	48,93	92,31	6,43
7	**AGH University of Science and Technology** Faculty of Computer Science, Electronics and Telecommunications	90,2	89,96	84,46	75,00	60,00	20,08	21,71	0,00	36,65	62,16	100	39,06
8	**University of Warsaw** Faculty of Mathematics, Informatics and Mechanics	89,7	76,03	25,68	100,0	40,00	35,87	41,23	100,0	100	63,49	84,62	0,00
9	**Wroclaw University of Technology** Faculty of Electronics	84,6	59,18	70,05	75,00	92,00	26,94	10,40	100,0	50,55	53,91	96,15	13,44
10	**AGH University of Science and Technology** Faculty of Metals Engineering and Industrial Computer Science	81,6	89,96	84,46	50,00	40,00	17,27	18,63	0,00	36,65	62,16	100	11,20
11	**Wroclaw University of Technology** Faculty of Fundamental Problems of Technology	73,7	59,18	70,05	75,00	48,00	13,33	25,06	0,00	50,55	53,91	96,15	1,85
12	**Poznan University of Technology** Faculty of Computer Science	69,9	53,18	39,36	75,00	40,00	32,12	22,33	100,0	46	51,98	76,92	0,00
13	**Jagiellonian University in Krakow** Faculty of Mathematics and Computer Science	68,1	38,20	22,74	100,0	40,00	48,58	27,33	100,0	37,19	75,71	65,38	0,00
14	**Wroclaw University of Technology** Faculty of Computer Science and Management	68,0	59,18	70,05	50,00	40,00	17,28	11,90	0,00	50,55	53,91	96,15	0,00
15	**Jagiellonian University in Krakow** Faculty of Physics, Astronomy and Applied Computer Science	64,5	38,20	22,74	100,0	48,00	39,01	56,80	0,00	37,19	75,71	65,38	5,52
16	**Silesian University of Technology in Gliwice** Faculty of Automatic Control, Electronics and Computer Science	62,5	19,48	42,40	75,00	80,00	38,67	23,07	100,0	30,43	56,04	80,77	0,00
17	**Poznan University of Technology** Faculty of Electronics and Telecommunications	62,1	53,18	39,36	75,00	20,00	39,51	24,81	0,00	46	51,98	76,92	4,80
18	**Silesian University of Technology in Gliwice** Faculty of Mechanical Engineering	61,9	19,48	42,40	75,00	68,00	23,08	21,13	100,0	30,43	56,04	80,77	11,22
19	**Gdansk University of Technology** Faculty of Electronics, Telecommunications and Informatics	58,4	23,22	30,99	75,00	76,00	26,67	12,81	0,00	64,88	46,01	61,54	42,44
20	**Poznan University of Technology** Faculty of Electrical Engineering	57,9	53,18	39,36	50,00	40,00	13,41	15,19	0,00	46	51,98	76,92	6,14

Ranking BY SUBJECT Perspektywy 2016

Mechanical Engineering and Machine Building

		OVERALL SCORE	Academic reputation 20%	Employer reputation 15%	Parametric evaluation 10%	Academic level 5%	Academic titles awarded 3%	Students/staff ratio 7%	Assessment of PKA 5%	Publications 10%	Citations 10%	H-index 5%	Patenty i prawa ochronne 7%
1	**AGH University of Science and Technology** Faculty of Mechanical Engineering and Robotics	100,0	95,26	100,0	100,0	75,00	39,49	51,35	100,0	100,0	76,86	95,00	41,92
2	**Warsaw University of Technology** Faculty of Power and Aeronautical Engineering	91,0	100,0	97,29	100,0	100,0	36,45	49,12	100,0	41,04	73,39	95,00	2,85
3	**Wroclaw University of Technology** Faculty of Mechanical Engineering	79,5	82,70	65,72	100,0	60,00	41,64	31,60	100,0	44,62	87,49	90,00	5,64
4	**Warsaw University of Technology** Faculty of Automotive and Construction Machinery Engineering	77,5	100,0	97,29	66,67	50,00	29,43	48,37	0,00	41,04	73,39	95,00	1,07
5	**Warsaw University of Technology** Faculty of Civil Engineering, Mechanics and Petrochemistry (Plock)	76,9	100,0	97,29	66,67	20,00	12,10	71,18	0,00	41,04	73,39	95,00	0,00
6	**Warsaw University of Technology** Faculty of Production Engineering	76,3	100,0	97,29	66,67	50,00	11,77	40,74	0,00	41,04	73,39	95,00	1,92
7	**Silesian University of Technology in Gliwice** Faculty of Energy and Environmental Engineering	74,8	39,81	69,53	100,0	75,00	60,16	77,19	100,0	40,40	81,53	100,0	6,63
8	**Silesian University of Technology in Gliwice** Faculty of Mechanical Engineering	72,7	39,81	69,53	100,0	85,00	28,01	61,19	100,0	40,40	81,53	100,0	4,57
9	**Wroclaw University of Technology** Faculty of Mechanical and Power Engineering	68,9	82,70	65,72	66,67	35,00	42,79	39,91	0,00	44,62	87,49	90,00	7,28
10	**Poznan University of Technology** Faculty of Machines and Transport	60,7	44,79	41,01	100,0	50,00	100,0	53,70	0,00	35,03	81,41	80,00	4,29
11	**Poznan University of Technology** Faculty of Mechanical Engineering and Management	60,3	44,79	41,01	100,0	75,00	41,40	33,31	0,00	35,03	81,41	80,00	27,82
12	**Technical University of Lodz** Faculty of Mechanical Engineering	53,0	17,54	35,41	100,0	75,00	28,42	79,13	0,00	40,32	67,67	70,00	9,78
13	**Lublin University of Technology** Mechanical Engineering Faculty	51,2	7,35	13,65	100,0	45,00	48,67	37,24	0,00	31,82	92,02	65,00	100,0
14	**Czestochowa University of Technology** Faculty of Mechanical Engineering and Computer Science	48,8	4,98	34,65	66,67	75,00	36,27	100,0	0,00	41,81	82,05	65,00	1,82
15	**Military University of Technology in Warsaw** Faculty of Mechanical Engineering	48,4	12,32	18,62	100,0	50,00	29,22	46,50	0,00	67,19	75,00	65,00	11,73
16	**Gdansk University of Technology** Faculty of Mechanical Engineering	47,6	31,52	27,73	66,67	35,00	13,74	32,82	0,00	71,86	63,72	65,00	15,93
17	**Opole University of Technology** Faculty of Mechanical Engineering	45,5	4,27	23,92	100,0	35,00	31,04	58,09	0,00	45,62	85,52	65,00	2,89
18	**Bialystok University of Technology** Faculty of Mechanical Engineering	43,4	1,90	7,22	100,0	60,00	30,91	37,85	0,00	65,33	75,62	60,00	11,86

Deans of best engineering faculties

Gala Rankingu Kierunków Studiów Perspektywy 2016. Dziekani najlepszych wydziałów technicznych w Polsce 2016 (od lewej): **prof. Edward Chlebus**, Wydział Mechaniczny, PWr. *(inżynieria produkcji)*; **prof. Jerzy Robert Sobiecki**, Wydział Inżynierii Materiałowej, PW *(inżynieria materiałowa)*; **prof. Janusz Kotowicz**, Wydział Inżynierii Środowiska i Energetyki, PŚl. *(inżynieria środowiska)*; **prof. Zbigniew Brzózka**, Wydział Chemiczny, PW *(inżynieria i technologia chemiczna)*; **prof. Krzysztof Zaręba,** Wydział Elektroniki i Technik Informacyjnych, PW *(elektronika oraz kierunki IT)*; **prof. Jerzy Banaszek,** Wydział Mechaniczny, Energetyki i Lotnictwa, PW *(energetyka)*; **prof. Waldemar Rebizant**, Wydział Elektryczny, PWr. *(elektrotechnika)*; **prof. Antoni Kalukiewicz**, Wydział Inżynierii Mechanicznej i Robotyki, AGH *(automatyka, robotyka i mechatronika oraz mechanika i budowa maszyn)*; **prof. Jerzy Hoła,** Wydział Budownictwa Lądowego i Wodnego, PWr. *(budownictwo)*; **prof. Stefan Wrona**, Wydział Architektury PW *(architektura i urbanistyka)*.

Ranking watchdog

IREG sponsored project on "New Approaches to Design and Collection of Data for Subject and Discipline Rankings: Engineering and Technology"

www.ireg-observatory.org

LODZ, September 16, 2016

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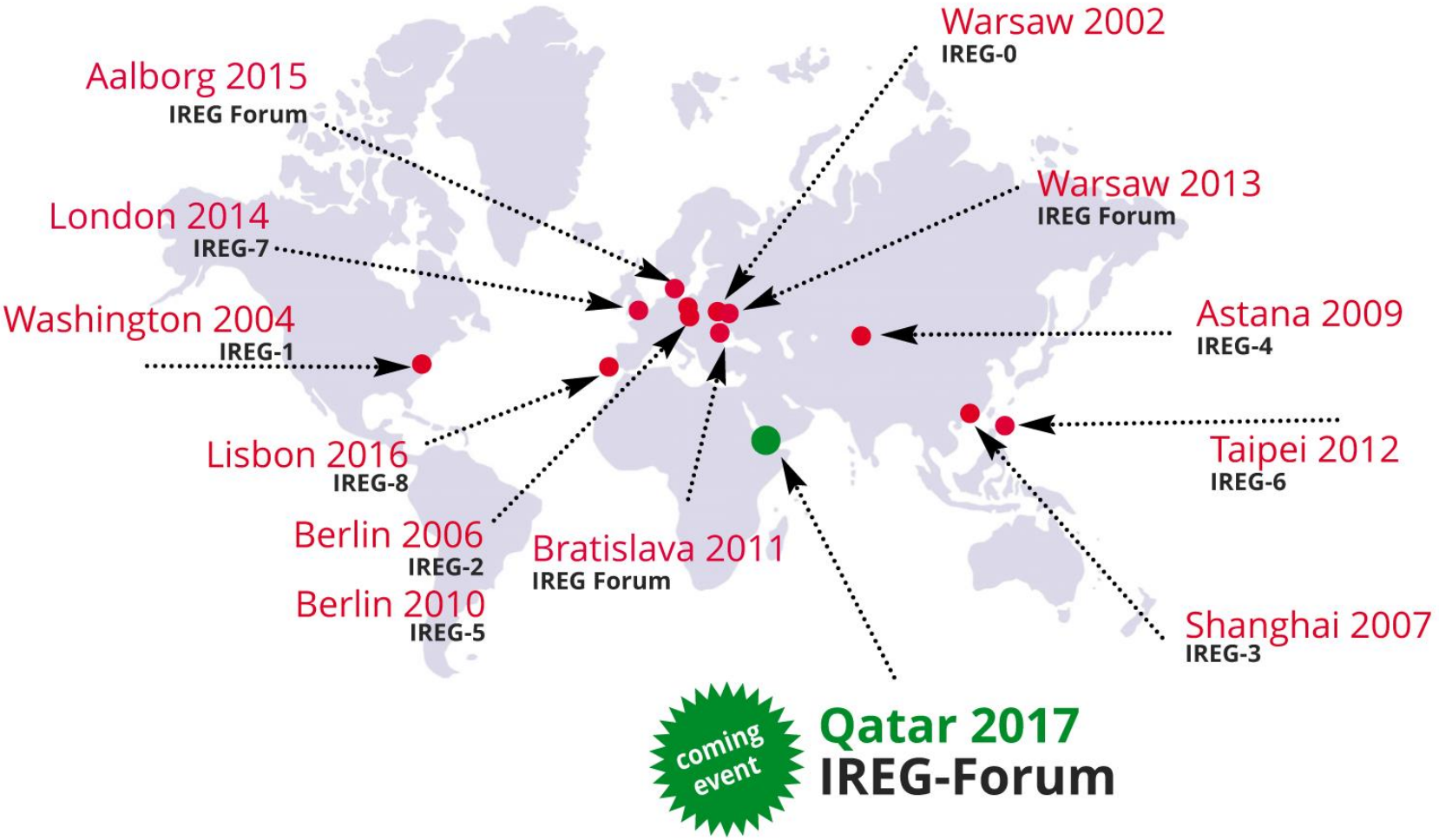

What do we need?

Future rankings in the area of high tech will take into consideration opinion of employers, professional associations and accrediting organization.

New indicators: "**value for money**", "**value to society**", "**knowledge transfer**", "**mobility between university and industry**", "**quality of te graduates**", "**employability of graduates**„ and others

Universities need rankings to build school's brand and reputation.

Invitation

End of 2017 - **IREG Engineering Working Group** will present recommendation for a new set of indicators in rankings for engineering.

Seminars organized in cooperation with **universities**, **high tech companies**, **European employers organizations** and **bodies responsible for accreditation**.

If interested, **feel invited to join**.

Perspektywy

Thank You!

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Vice President, IREG Observatory

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LODZ, September 16, 2016