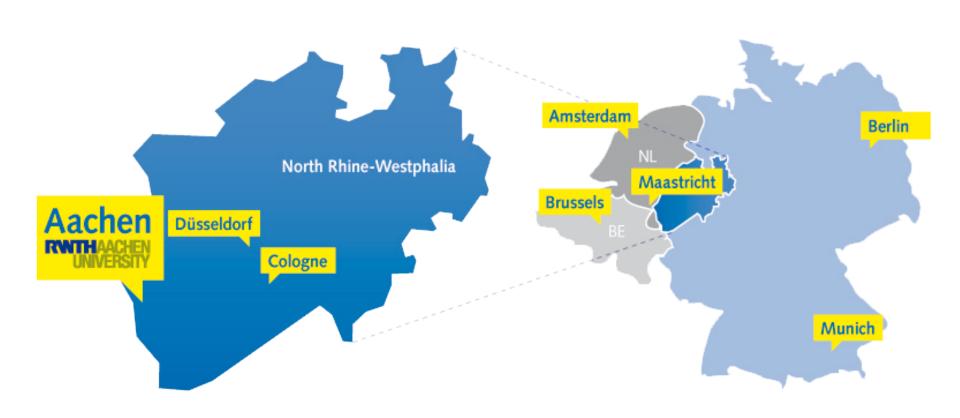
# RWTH Aachen University at a Glance ...innovative since 1870.











## **Location of RWTH Aachen University**



Travel distances (by train):

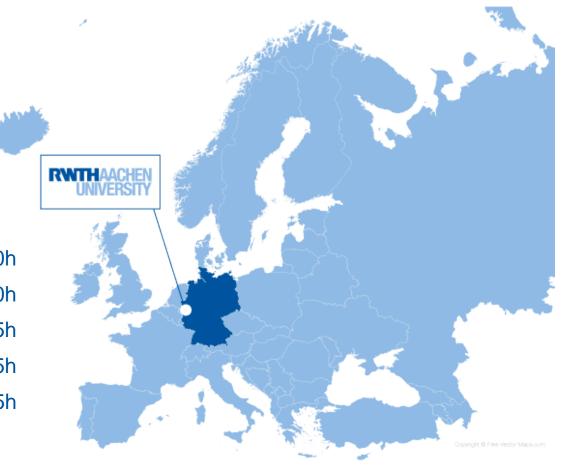
Aachen – Brussels: 2.0h

Aachen – Paris: 3.0h

Aachen – Amsterdam: 3.5h

Aachen – London: 4.5h

Aachen – Berlin: 5.5h



## The acronym

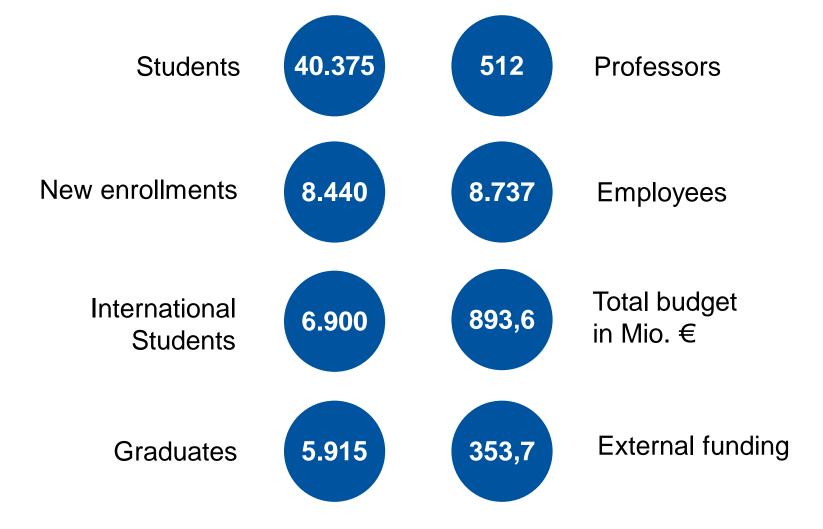


R W T H

Air Vay Tay Ha

# **RWTH Aachen University:**The Big Picture in Figures





# **Faculties of RWTH Aachen University**



Faculty 1: Mathematics, Computer Sciences & Natural Sciences

Faculty 2: Architecture

Faculty 3: Civil Engineering

Faculty 4: Mechanical Engineering

Faculty 5: Georesources & Materials Engineering

Faculty 6: Electrical Engineering & Information Technology

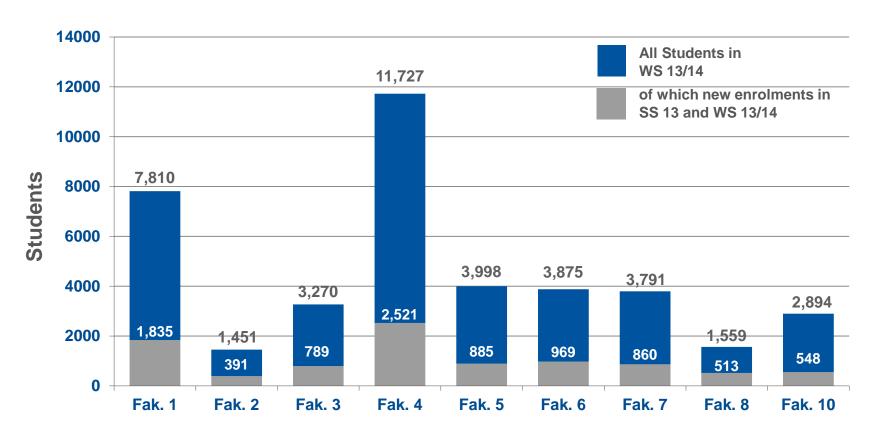
Faculty 7: Arts & Humanities

Faculty 8: Business Administration & Economics

Faculty 10: Medicine

## **Students by Faculty**





Fac. 1: Faculty of Mathematics, Computer Science and Natural Sciences

Fac. 2: Faculty of Architecture

Fac. 3: Faculty of Civil Engineering

Fac. 4: Faculty of Mechanical Engineering

Fac. 5: Faculty of Georesources and Materials Engineering

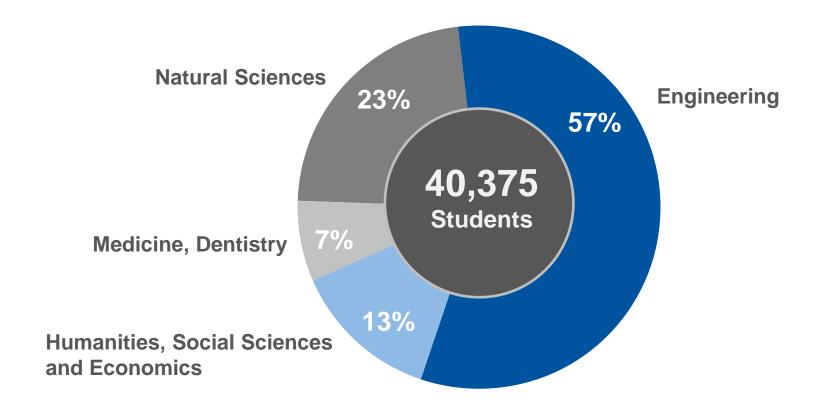
Fac. 7: Faculty of Arts and Humanities

Fac. 8: Faculty of Business Administration and Economics

Fac. 10: Faculty of Medicine

## **Students by Discipline**





# Degree Programs Bachelor and Master (1/3)



#### Faculty 1

Faculty of Mathematics, Computer Science and Natural Sciences

Biology (B.Sc./M.Sc.)

Molecular and Applied Biotechnology (B.Sc./M.Sc.)

Chemistry (B.Sc./M.Sc.)

Computer Science (B.Sc./M.Sc.)

Mathematics (B.Sc./M.Sc.)

Physics (B.Sc./M.Sc.)

Media Informatics (M.Sc., B-IT)

**Ecotoxicology (M.Sc.)** 

**Software Systems Engineering (M.Sc.)** 

#### Faculty 2

**Faculty of Architecture** 

Architecture (B.Sc./M.Sc.)

**Urban Planning (M.Sc.)** 

#### Faculty 3

Faculty of Civil Engineering

Civil Engineering (B.Sc./M.Sc.)

Mobility and Transport (B.Sc./M.Sc.)

Environmental Engineering (B.Sc./M.Sc.) (Coop. Fac. 5)

**Business Administration and Engineering: Civil** 

Engineering (B.Sc./M.Sc.) (Coop. Fac. 8)

#### Faculty 4

Faculty of Mechanical Engineering

Mechanical Engineering (B.Sc./M.Sc.)

Computational Engineering Science (B.Sc./M.Sc.)

Business Administration and Engineering: Mechanical Engineering (B.Sc./M.Sc.) (Cooperation with Fac. 8)

**General Mechanical Engineering (M.Sc.)** 

**Automation Engineering (M.Sc.)** 

**Automotive Engineering (M.Sc.)** 

**Energy Engineering (M.Sc.)** 

**Development and Design Engineering (M.Sc.)** 

**Automotive Engineering and Transport (M.Sc.)** 

Plastics and Textile Technology (M.Sc.)

**Aeronautical Engineering and Astronautics (M.Sc.)** 

**Production Engineering (M.Sc.)** 

**Process Engineering (M.Sc.)** 

# Degree Programs Bachelor and Master (2/3)



#### Faculty 5

Faculty of Georesources and Materials Engineering

Applied Geography (B.Sc./M.Sc.)

Applied Geosciences (B.Sc./M.Sc.)

Waste Management Engineering (B.Sc./M.Sc.) (Coop. Fac. 3)

**Georesources Management (B.Sc./M.Sc.)** 

Materials Science (B.Sc./M.Sc.)

Mineral Resources Engineering (B.Sc./M.Sc.)

Materials Engineering (B.Sc./M.Sc.)

Industrial Engineering – Branch of study Raw Materials and Materials Technology (B.Sc./M.Sc.) (Coop. Fac. 8)

**Applied Geophysics (M.Sc. – IDEA League)** 

**Energy Engineering (M.Sc.)** 

**Metallurgical Engineering (M.Sc.)** 

**Sustainable Power Supply (M.Sc.)** 

**Nuclear Safety Engineering (M.Sc.)** 

**Economic Geography (M.Sc.)** 

#### Faculty 6

Faculty of Electrical Engineering and Information Technology

Electrical Engineering, Information Technology and Computer Engineering (B.Sc./M.Sc.)

Business Administration and Engineering – Electrical Power Engineering (B.Sc./M.Sc.) (Coop. Fac. 8)

#### Faculty 7

Faculty of Arts and Humanities

Social Science (B.A.)

**Literary and Linguistic Studies (B.A.)** 

Psychology (B.Sc./M.Sc.)

Technical Communication (B.Sc./M.Sc.)

(Communication Studies and

- Fundamentals of Computer Science or
- Fundamentals of Mechanical Engineering or
- Fundamentals of Materials Engineering or
- Fundamentals of Electrical Engineering)

**Education and Knowledge Management (M.A.)** 

**English Studies (M.A.)** 

**European Studies (MES) (M.A.)** 

**German and General Literature (M.A.)** 

History (M.A.)

Philosophy (M.A.)

Political Science (M.A.)

Sociology (M.A.)

**Linguistics and Communication Studies (M.A.)** 

# Degree Programs Bachelor and Master (3/3)



Faculty 8

Faculty of Business Administration and Economics

Business Administration (B.Sc./M.Sc.) Economics (M.Sc.)

### Faculty 10

Faculty of Medicine

Logopaedics, Dual Course of Studies (B.Sc.) Teaching and Research Logopaedics (M.Sc.) Biomedical Engineering (M.Sc.)

## **English-taught Master's programs**



- Applied Geophysics (Joint Master`s program with TU Delft and ETH Zuerich)
- Automotive Engineering
- Biomedical Engineering
- Electrical Engineering, Information Technology & Computer Engineering; specializations: Communications Engineering or Electrical Power Engineering
- Media Informatics
- Metallurgical Engineering
- Physics
- Software Systems Engineering
- Simulation Sciences

## Rankings 2014



Nr.1 Nr.1

Natural Electrical Engineering

Nr.2

Mechanical

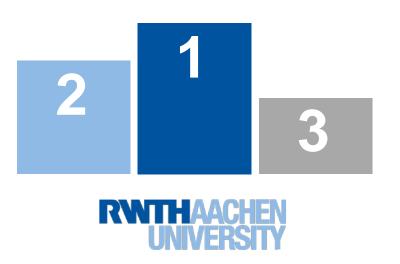
**Engineering** 

Business
Administration
& Engineering

Nr.2

Nr.2

Computer Science





### **International Rankings**



#### **Q&S Ranking 2014/15**

#### **Faculties:**

- Ranked #36 in Natural Science
- Ranked #42 in Engineering and Technology

## **Subjects:**

- Ranked #12 in Mechanical, Aeronautical & Manufacturing Engineering
- Ranked #29 in Materials Science
- Ranked #30 in Physics & Astronomy
- Ranked #34 in Chemical Engineering
- Ranked #40 in Chemistry

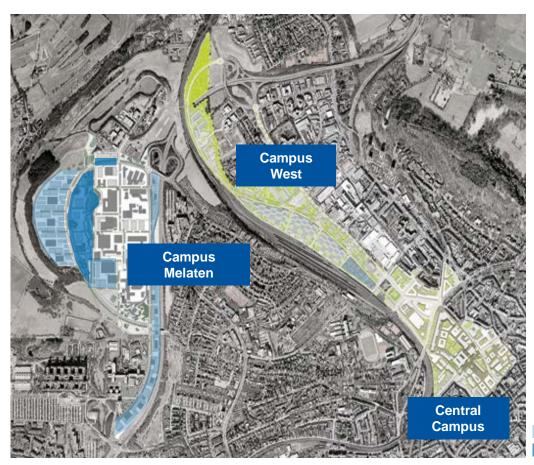
## **RWTH Aachen Innovation Campus**





### One of the largest European research territories





With its two new areas, RWTH Aachen University covers a total area of approx. 2.5 km<sup>2</sup>.

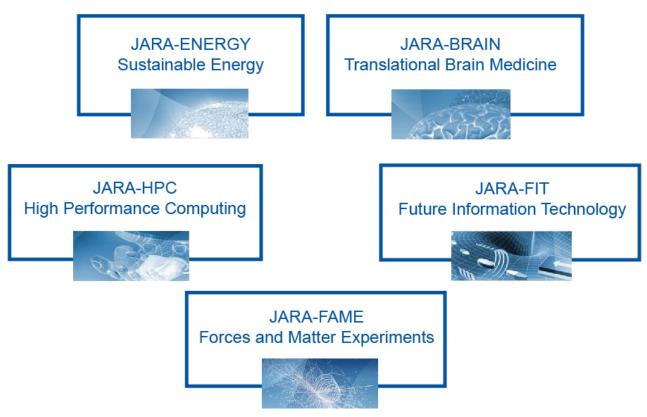
This makes RWTH Aachen University one of the largest technology-oriented campus areas in Europe.

#### The RWTH Aachen Campus

- → Area: 800.000 m<sup>2</sup>
- → Volume of investments: 2 bn €
- → New direct and indirect jobs: approx. 10.000
- Cluster area
- Central infrastructural facilities

#### **Juelich Aachen Research Alliance**





- Linkage of a university and a major research institution as cores of excellence
- Approx. 175 professors are part of this alliance

## The Excellence Initiative at RWTH Aachen University



Awarded the status of "top class university" as part of the federal government's "Excellence Initiative"

#### **Institutional Strategy**

**RWTH 2020: Meeting Global Challenges** 

funding: €60 Mio.

#### **Graduate School**

Aachen Institute of Advanced Study in Computational Engineering Science (AICES)

funding: €7.4 Mio.

#### **Cluster of Excellence**

**Integrative Production Technology for High-Wage Countries** 

funding: €28 Mio.

Tailor-Made Fuels from Biomass (TMFB)

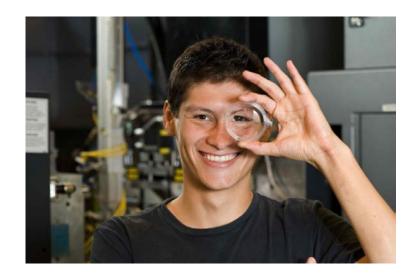
funding: €28 Mio.





"Place to be"

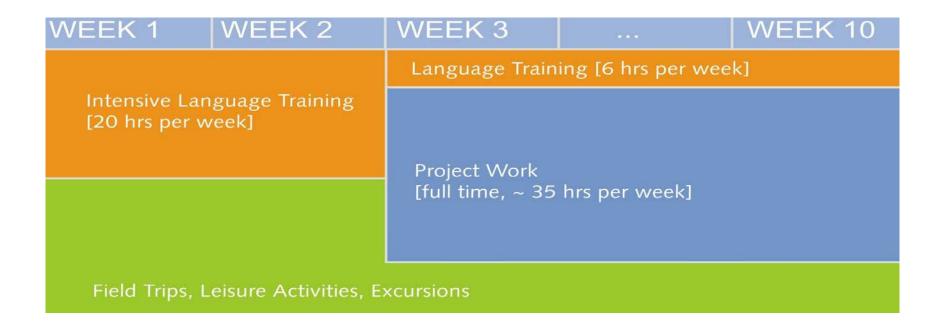
"Mobilizing people"



# UROP International: Research Summer School



- program dates: May 18th July 24th, 2015
- first two weeks: intensive language training & workshops
- eight weeks of full-time research work (& some language hrs)



## **UROP Participants 2015**



- 51 students from 26 different universities
- · 38 from US universities, 13 from Canadian universities
- . 22 female / 29 male

Age (as of today)	
19	12
20	21
21	10
22+	8

Departments	8
Faculty of Mathematics, Computer Science and Natural Sciences	13
Faculty of Architecture	2
Faculty of Civil Engineering	2
Faculty of Mechanical Engineering	22
Faculty of Georesources and Materials Engineering	2
Faculty of Electrical Engineering and Information Technology	2
School of Business and Economics	2
Faculty of Medicine	6

# **UROP Participants 2015**



US	38
Carnegie Mellon University	1
Columbia University	1
Georgia Institute of Technology	3
Harvard University	2
Iowa State University	6
Johns Hopkins University	2
Massachusetts Institute of Technology	1
Seattle University	1
Temple University/Philadelphia	1
University of Arizona	4
University of California, Berkeley	1
University of Florida	1
University of Michigan	7
University of Pennsylvania	1
University of Rochester	1
University of Texas at Austin	1
University of Texas at Dallas	1
University of Virginia	1
Washington University in St. Louis	1
Yale University	1

Canada	13
McGill University	1
University of Alberta	1
University of Saskatchewan	1
University of Waterloo	5
University of British Columbia	4
University of Ottawa	1





"Place to be"

"Mobilizing people"

