



# Vrije Universiteit Brussel

Education, Research & Societal Commitment



Vrije  
Universiteit  
Brussel





Welcoming  
the world

Values **04**

---

 **10** Education

---

Research **14** 

---

 **21** Societal Commitment

---

Excellence  
in results **26** 

---

**30** Brussels

---



Education



Research



Societal Commitment

# Vrije Universiteit Brussel - Values

*Thinking must never submit itself, neither to a dogma, nor to a party, nor to a passion, nor to an interest, nor to a preconceived idea, nor to anything whatsoever, except to the facts themselves, because for it to submit to anything else would be the end of its existence.*

Henri Poincaré (1854–1912)

*French mathematician and philosopher of science*



## **'Vrije' = 'Free' (in English)**

- Research and thought without dogma
- Open atmosphere of tolerance and diversity
- Active pluralism, respect, open-mindedness

Personal growth, with a positive and critical attitude, in addition to a sense of responsibility and open-mindedness, these are characteristics that you will encounter in everyone here at our university, from professors and researchers to students and staff members. It lies at the very heart of our academic success.

VUB promotes social diversity in its study programmes and in its student and staff policies, guaranteeing equal opportunities for all, without distinction on the grounds of gender, social or ethnic origins, beliefs, sexual orientation, age or disability.

1st Solvay Conference 1911, changing the world of physics

# VUB, a tradition of knowledge sharing



Max Planck

Ernest Solvay

Marie Curie

Henri Poincaré

## 180 years of history



Albert Einstein

In the spirit of Belgium's independence in 1830, a university was founded in its capital, Université Libre de Bruxelles (ULB). It was to become a university independent from state and church, where academic freedom would reign.

ULB grew apace and rapidly occupied a prominent position in the national and international scientific landscape. For example: Ernest Solvay, chemist, industrialist and philanthropist was deeply connected with the University and founded several scientific institutes, the most famous being the Solvay Business School, which is still part of ULB and VUB.

He also set up the famous Solvay Conferences, changing the world of physics and chemistry.

Vrije Universiteit Brussel (VUB) split off as the Dutch speaking homologue of ULB in 1969 and it became a separate legal entity in 1970. Since then, VUB has established an extensive Dutch and English taught portfolio.

VUB-ULB can be proud of 5 Nobel prizes and many other awards in science.

# VUB in a nutshell



green international  
campuses

- + On campus libraries
- + Language center
- + Computer labs
- + Job service
- + Career center
- + Sports facilities
- + Medical care
- + Counselling
- + Housing services
- + Restaurants and cafes
- + Cultural activities



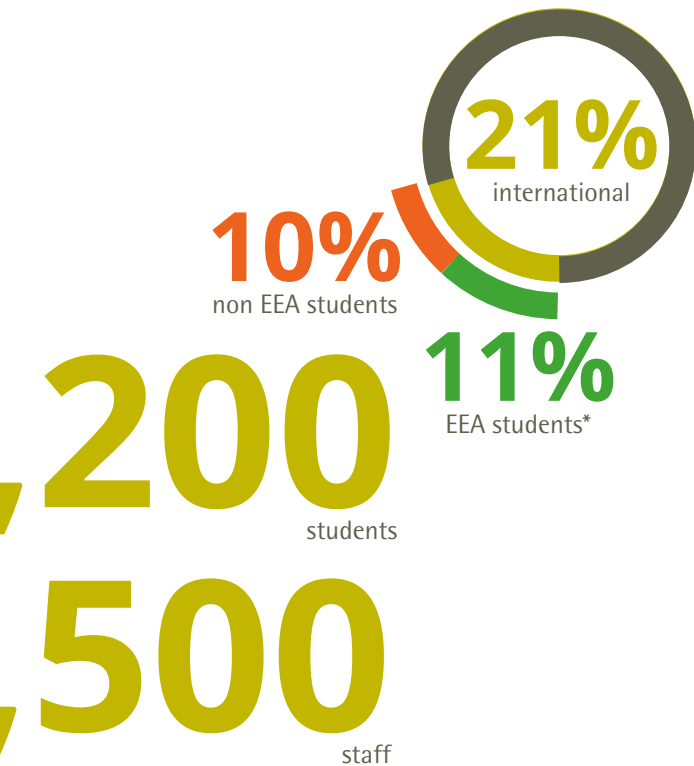
Brussels University Hospital

- + 721 beds
- + 305,875 consultations/yr
- + 54,201 hospitalisations/yr
- + 3,450 staff, incl. academics
- + 10 expert research domains
- + Pioneer in 'circle of life' care



14,  
6,

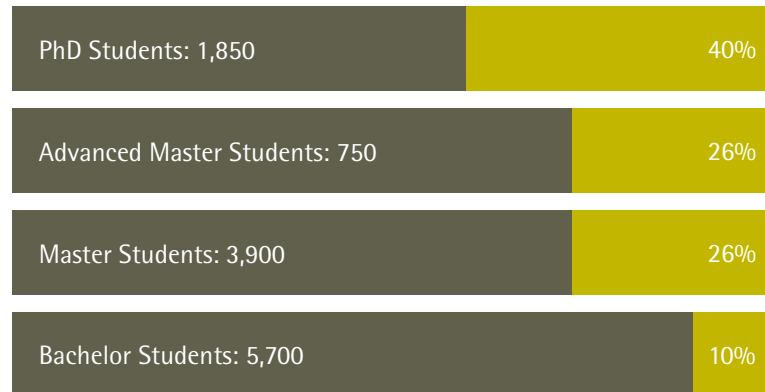




**123**  
nationalities



**222Mio**  
operating budget



■ national (Belgian) ■ international

\*EEA - European Economic Area



# Education

Economic & Social Sciences  
and Solvay Business School

Science &  
Bio-Engineering Sciences

Engineering  
Sciences

Physical Education  
& Physiotherapy

Psychology & Educational  
Sciences

Law & Criminology

Medicine &  
Pharmacy

Arts & Philosophy

**108**

Dutch-taught programmes


**34**English-taught Master/  
Advanced Master programmes**8**English-taught Postgraduate  
Certificate programmes**3**Multidisciplinary  
Doctoral Schools**5**Double degree Engineering  
Master programmes

## Choice – Flexibility – Guidance

VUB offers a full range of Bachelor and Master courses, including various programmes taught in English. The key concept in this range of courses is flexibility. The system of majors and minors enables students to plan their studies in a way that best meets their interests. Many courses are also adapted for working students. An open-door policy and small group workshops ensure close interaction and hands-on experience.

## Doctoral Schools

Our PhD students are seen as junior researchers who are best placed to identify their own particular training needs, issues and concerns. Our Doctoral Training Programme is tailored to meet the actual needs of each individual PhD student. The Programme offers a structural framework to acquire and develop skills that support both research and teaching abilities, and proves valuable outside the academic environment.

A photograph of a group of graduates in black caps and gowns. A semi-transparent yellow rectangular box is overlaid on the center of the image, containing white text. The graduates are looking in various directions, some towards the camera and others away. The background is slightly blurred, suggesting an indoor setting like a graduation hall.

VUB education delivers  
strong individuals, critical  
minds & world citizens

## Unique educational concept

Being a student at VUB means learning in an open atmosphere of tolerance and diversity; it means growing into independent and critically-thinking individuals.

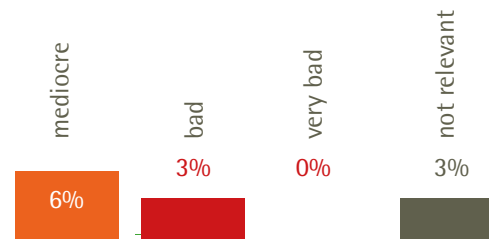
VUB is a pioneer in education, always ready to go beyond the obvious and to meet the upcoming needs of society.

VUB was the first university in Belgium to offer a whole range of new programmes: communication sciences, computer sciences, biomedical sciences, gerontology, adult education, photonics, herpetology,...



# 88%

of the students were satisfied according to the course evaluation survey



## Quality first

We do not solely rely on our own education quality assessment. Our students assess their courses every semester and external experts also closely monitor the standard of our qualifications.



All degree programmes offered by VUB are accredited by the Dutch Flemish Accreditation Organisation (NVAO).



**Research**

# Excellence in research



Excellent reputation in the international circuit:

- + large number of references to our scientific publications
- + large participation in European research
- + commitment towards international aid and development cooperation
- + numerous international congresses organised on our campuses

**150**  
research groups

**2,200**  
publications in 2013



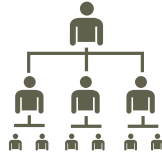
At VUB we advocate the maintenance and development of our own quality-driven research culture, with respect for diversity of hypotheses and approach, personal initiative and long-term thinking. International experts commissioned by the Flemish University Council confirmed this through an assessment of our research.

VUB supports all R&D activities: from scientific discovery and exploration of new knowledge up to invention and development, including interaction with regional and worldwide industrial and economic actors, the non-profit sector, policy makers and governments.

# Research clusters



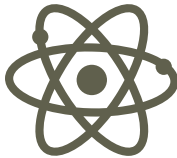
city dynamics



societal challenges



brain & behaviour



smallest particles



fighting diseases



environmental issues



the circle of life



big data



smart engineering





# Connected knowledge centers



Institute for European studies

Study and research facility in European Studies, on the role of the EU



Brussels Diplomatic Academy

Knowledge center for economic diplomacy and international entrepreneurship

# Doctoral research

**172**

PhD degrees awarded in 2013

PhD guidance by dedicated supervisors (charter of the good promoter) and 3  
Multidisciplinary Doctoral Schools: Human Sciences / Natural Sciences and (Bioscience)  
Engineering / Life Sciences and Medicine

# Innovative results through stimulation of research validation

**25<sup>/y</sup>**

reported inventions

**112**

active patent families

The economic valorisation of the research conducted at VUB is one of the university's key missions, implying:

- + organising awareness campaigns
- + stimulating entrepreneurship within the research community
- + creating spin-off companies founded on university know-how
- + following up of the patent strategy
- + maintaining an industrial and financial expert network



VUB industrial gateway



Interuniversity seed capital (spin-offs)

**crosstalks**

VUB science communication platform



2

incubation centers



Business & Technology  
INCUBATOR



IICB NV  
BUSINESS-INCUBATOR  
OFFICES

20

flourishing spin-off  
companies

# VUB stimulates entrepreneurship

The VUB incubation centres ICAB and IICB offer help in setting up business plans for start-ups and provide administrative, juridical and tax assistance.



# Societal Commitment



# VUB & Engagement

Societal Commitment is one of VUB's core values. From a 1,000 km bicycle ride to support the fight against cancer to its circle of life research, from innovative teacher training projects and educational science kits to development cooperation projects and environmental research, Vrije Universiteit Brussel always remains closely connected to the world we live in and participates wherever possible and needed.

## *VUB's societal commitment is reflected by its Honorary Doctors*

Toots Thielemans  
*musician*

Kim Clijsters  
*tennis player*

Nelson Mandela &  
Frederik Willem de Klerk  
*politicians*

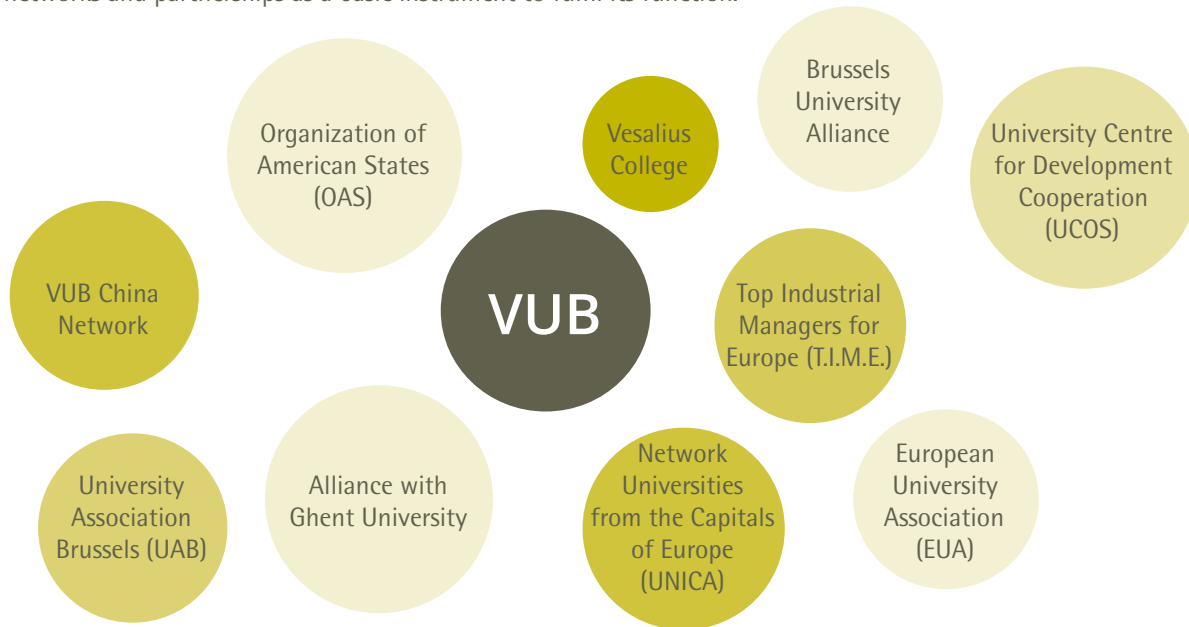
Jacques-Yves Cousteau  
*oceanographer*

Fatou Bensouda  
*chief prosecutor*



# Vrije Universiteit Brussel is strongly connected in powerful partnerships, affiliations and networks

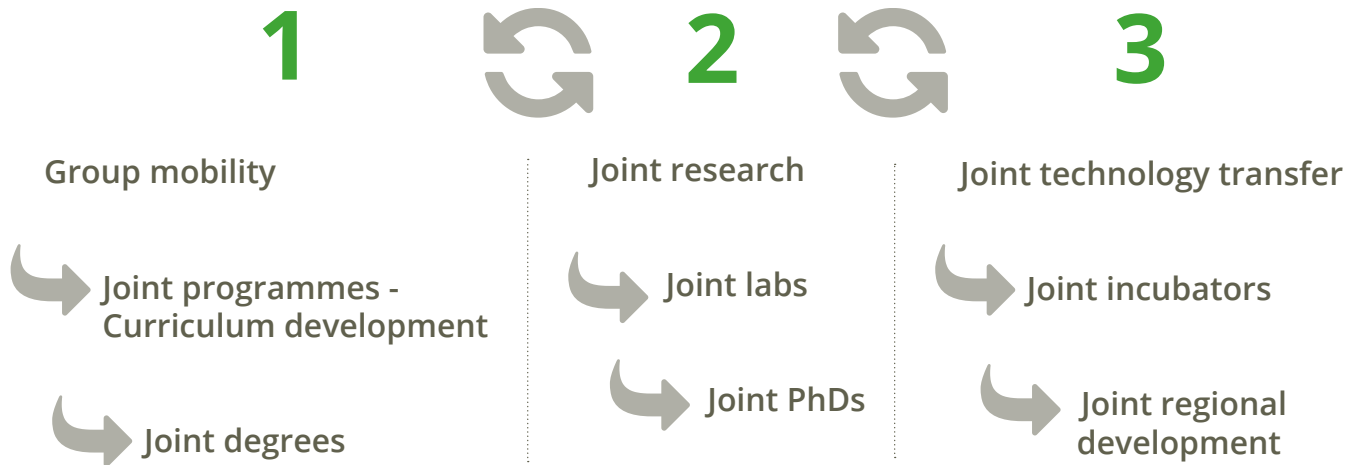
We are convinced that the competences, experience and knowledge within one single university are insufficient to understand the complexity of some research subjects and global problems, to model them and to design solutions. Therefore, VUB is connected through networks and partnerships as a basic instrument to fulfil its function.





# Cooperation for innovation: Capacity building through partnerships and integrated mobility

Partnerships help building sustainable cooperation structures such as international joint educational programmes, joint research laboratories, joint and dual degrees, embedded in a system of quality assurance that transcends the boundaries of the own university. Partnerships provide a breeding ground to realise social, economic and cultural impact through knowledge and technology transfer, with the aim of a.o. contributing to inter-regional development.





**Excellence in results**

# VUB rankings

## 181

Quacquarelli Symonds (QS) World  
University Rankings 2014

## 251–275

Times Higher Education (THE) World  
University Rankings 2013-2014

## 313

Academic Ranking of World  
Universities (ARWU) 2014

## U-Multirank 2014

Research			Knowledge Transfer		International Orientation	Regional Engagement
Citation rate	Research publications (size-normalised)	Top cited publications	Co-publications with industrial partners	Patents awarded (size-normalised)	International joint publications	Regional joint publications
B	A	B	A	A	A	A

A (Very good) - B (Good) - C (Average) - D (Below average) - E (Weak)

# What students and researchers say



Fengna Wang  
VUB-CSC PhD  
candidate, China

*I completed my master degree at the Northwestern Politechnical University (NPU) of Xi'an, China. In the last year of my degree at NPU I worked on a collaborative research project between VUB and NPU. This gave me the chance to apply for a scholarship under the VUB - China Scholarship Council (CSC) Programme and pursue my PhD at VUB, without losing touch with my home university. My hosting department at VUB offers me top research facilities, a friendly atmosphere, social events, a multicultural environment and a platform to discuss any issues or problems with fellow graduates or senior researchers.*

*I am Portuguese and I studied Meteorology in my home country. After my bachelor I wanted to spread my wings and looked on the internet for something like a Master in Geography. Most of the English programmes are on very specific subjects. What attracted me in this master in Brussels was exactly its multidisciplinary approach. Besides your specialisation it also offers you a wide curriculum in physical and social geo-sciences.*



Daniela Pombal

# Prestigious colleagues & alumni

*Europe needs well-trained and critically thinking intellectuals who help shape the policies of the future. The principles underpinning teaching and research at Vrije Universiteit Brussel help to address the challenges we face today, and have been a stimulating factor in my career.*

Ingrid Daubechies  
mathematician

Ulla Werbrouck  
judo champion

Pattie Maes  
Computer scientist at MIT

Karel De Gucht  
former European commissioner

Axelle Red  
singer/Unicef ambassador



# Brussels, one of the world's most cosmopolitan cities



**1.1Mio**  
inhabitants

**33%**  
of foreign origin

**EU + NATO**  
headquarters

**1,700**  
headquarters of  
international associations

# *Vrije Universiteit Brussel - At the beating heart of Europe*

# 33

QS Best Student City  
Rankings 2013

- + World's largest press centre
- + Largest diplomats community
- + First Congress City in Europe

As one third of its 1.1m population is of foreign origin, Brussels boasts an astonishing variety of cultures, styles and nationalities.

English is an important language, due to the numerous international political organisations headquartered in Brussels, such as the European Commission, the Council of the European Union, NATO, Eurocontrol, etc.

Brussels is home to several representations of international institutions, among which several divisions of the UN (UNICEF, UNESCO, etc.), the Organization for African Unity, the International Organization for Migration, etc.

Aside from this vibrant centre of international business and politics, Brussels is a most interesting historical city and an arts centre with a rich cultural heritage and a wide variety of museums, theatres, concert halls, etc.

Brussels is also a delight for your taste buds. Chocolate, delicious local cuisine, waffles and an incredible diversity of beers.

**Vrije Universiteit Brussel**  
International Relations & Mobility Office

Email: [International.Relations@vub.ac.be](mailto:International.Relations@vub.ac.be)

Tel: +32 (0)2 614 81 01

Website: [www.vub.eu](http://www.vub.eu)

