



## VRIJE UNIVERSITEIT BRUSSEL (VUB)

### Study in Brussels, The Capital of Europe

FREE      QUALITY      CHOICE      FLEXIBILITY

**EVIDENCE**

TAILORED TO YOUR NEEDS

1

#### **INTERNATIONALISATION - a wide pallet of globalisation options**

live in the capital and decision making heart of Europe, become an ambassador for Brussels, be part of the cosmopolitan campus, enjoy the easy interaction of cultures, benefit from lots of institutional international agreements, learn to know our Privileged International Partnership concept, join our networks

2

#### **EDUCATION – select your personalised journey**

competence-based learning in a flexible education system, quality first, promotion of personal initiative, stimulation of entrepreneurship, pioneering education, English taught programmes, tutoring system, modern facilities, fruitful alliances and associations

3

#### **RESEARCH & INNOVATION - choose your theme and focus**

clear research policy, free inquiry, large number of references to our scientific publications, our participation in competitive based European projects, discovery and exploration of new knowledge, development of talent

4

#### **OUTREACH & SOCIETAL ENGAGEMENT - choose your commitment**

prominent role in society, international aid and development, interaction with regional and worldwide actors, economic valorization of university know-how, expert networks

5

#### **GOING SOUTH - choose to be creative**

long lasting friendships, collaboration with organisations and partners, collaboration in funded projects, curriculum enhancement, management of scholarships

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# INTERNATIONALISATION

## VUB in the heart of Europe

### **Belgium, 2015**

Belgium is ranked 18th most competitive country worldwide at the World Economic Forum in September 2014. Next to excellent healthcare and primary education (ranked 2nd), we have a performant higher education and training system (ranked 5th) with excellent mathematics and science education (ranked 3rd), high-quality management schools (ranked 2nd). Belgium benefits from a high level of technological readiness (ranked 14th) and highly sophisticated (ranked 10th) and innovative (ranked 13th) businesses that operate in the high value added end of global value chains.

#### **BELGIUM**

***Excellent Health Care***  
***Excellent Education***  
***Safety***  
***Cultural heritage***  
***Innovative attitude***

Reference

Global Competitiveness Report: <http://www.weforum.org/reports/globalcompetitiveness-report-2014-2015>

### **The Brussels Experience**

Brussels is the capital of Belgium and, as a main center of international politics and business, is regarded by many as the heart of Europe. 33% of its 1.1 million people is from abroad, making a truly international city. With political EU institutions based in Brussels, VUB students have access to a unique and wide range of career opportunities.

The cosmopolitan city has something for every taste. Enjoy Belgian cuisine with its famous chocolate and world-renowned beers, visit a museum, enjoy first-rate events and festivals, learn a language, or relax in the parks that make Brussels one of the greenest cities in the world, all while making friends from around the globe. Brussels is an officially bilingual city (Dutch and French), but many languages are spoken in daily life.

The Brussels Capital Region is one of the European hubs of scientific research and advanced technologies, including university centers of excellence, university hospitals, public and private research centers, and companies in the high-tech sector.

#### **BRUSSELS**

°***1.1 m population***  
 °***cosmopolitan population: 33% of foreign origin***  
 °***multi-lingual – open minded – top 50 QS Best Student City worldwide***  
 °***English spoken in society***  
 °***home to both the EU- and NATO headquarters***  
 °***world's largest press center and largest number of diplomats***  
 °***home to several representations of international institutions and 1,700 international associations***  
 °***cities such as London, Paris, Frankfurt, Amsterdam, Cologne within easy reach***  
 °***unique and cosy center, known for history, culture and arts***

*Reference*

°Video introduction: <http://player.vimeo.com/video/85535649>

°Popular Brussels, website: [www.visitbrussels.be](http://www.visitbrussels.be)

°City of Brussels, website: <http://www.brussels.be>

## **Welcome to VUB**

Ranked as one of Europe's top universities, VUB combines award-winning researchers and a range of study programmes with a supportive open-door policy in one of the most interesting cities in Europe. Almost 200 years of experience and history await you at its two green campuses.

Over 14,200 students, representing more than 120 nationalities (much more than half the total amount of nations worldwide) study at VUB in view of the next step in their career. 3000 of our students – more than 20% of our student population – are international students, making our campus and class rooms a vibrant and truly global one.

VUB organises more than 40 English-taught programmes, supported by outstanding research. Everything you need is at your fingertips and available on-site, near Brussels' bustling city center: an extensive library, modern computer labs, state-of-the-art sports facilities, exciting restaurants, interesting cultural activities, language courses and an invaluable job service.

### **VUB**

°**14 200 students**

**-10% PhD-students**

**-more than 20% international students**

**-more than 120 nationalities on campus**

°**excellent services for international students**

°**largest Dutch employer in Brussels**

°**222 million operating budget - 33% non-governmental funding**

°**Education and Research Excellence**

°**University Hospital**

°**VUB has been a pioneer in education as the first in Belgium to offer Communication Studies, (Applied) Computer Science, Biomedical Science, Gerontology, Photonics and adult education.**

## **VUB, building bridges**

Internationalization is one of the top priorities in the strategic plan of VUB. VUB takes the lead in recruiting high-level international students and professors by offering an attractive international and English taught education portfolio. Exchange of case studies, cultures, ideas and values is an enriching experience for all students. Researchers are integrated in internationally renowned research teams.

In VUB's eight faculties, students can choose to study and explore beyond their own discipline. The University's open-door policy allows students to interact closely with professors, assistant professors and faculty members. Small group workshops are in place to provide interactive training and hands-on experience. All course units offered at VUB have been allocated ECTS-credits and all programmes are accredited.

National and transnational collaboration projects are of crucial importance in ensuring innovative education and cutting edge research. Operating in a network of (inter)national partnerships improves excellence, facilitates exchange of best practices and allows us to guarantee a well-controlled high quality level. VUB makes every effort in creating strong

partnerships with academic institutes, both regional and worldwide organisations, industry, policy makers and governments.

Reference

°VUB video introduction: <https://www.youtube.com/v/P5Bv53ySDWo&x-yt-cl=84838260&x-yt-ts=1422327029>

°Vrije Universiteit Brussel, website: [www.vub.eu](http://www.vub.eu)

### **Why choose VUB?**

VUB incorporates the principle of *Free Inquiry* in its daily operation, education, research, community engagement and outreach policy. For VUB, humanism is not just a theoretical thought, but a life practice. As comprehensive university in the cosmopolitan city of Brussels, we want to be perceived as an *open independent university platform, embedded in international networks*. Our attitude is one of mediation and critical discussion, mitigated by high quality research, without prejudice, dogma or religious bias, so that students from around the world - that otherwise would never come in direct contact with one another - feel at home and participate in a tight community. *"Unity in diversity" means more to us than just the integration of foreigners in the local ecosystem*. This form of diversity, based on tolerance towards diverse philosophies, is the direct implementation of the *Universitas* thought, essential in the education towards independent world citizens that can act locally *and* think globally. We provide capacity for abstraction of everyday problems and we nurture *early adopters* of new technologies, scientific theories and social models. Thereby, we wish to be the source of new creative talent with a clear intercultural focus that *goes beyond the obvious and that is open to new ideas and perspectives*.

**'Vrij' means 'Free' and this really tells you a lot about the aims of our university:**

**°promotion of research and thought without dogmas or prejudices**

**°studying in an open atmosphere of tolerance, diversity and equal opportunities**

**°independent and critically-thinking individuals who can cope with our fast-changing world**

**°nurturing of early adopters of new technologies**

**°source of new creative talent that goes beyond the obvious**

VUB has produced several renowned scientists including: Leo Apostel (philosopher), Jean Bourgain (Fields Medalist in mathematics), Ingrid Daubechies (founder of the mathematical theory of wavelets) and Pattie Maes (leading researcher in intelligent software agents at MIT).

Reference

°Video: <https://www.youtube.com/v/watch?x-yt-ts=1422327029&v=3CWJ5Bn4AIM&x-yt-cl=84838260>

°VUB International feel: [https://www.youtube.com/watch?v=OB4QAltTAXM&feature=player\\_embedded](https://www.youtube.com/watch?v=OB4QAltTAXM&feature=player_embedded)

VUB International students: <https://www.youtube.com/watch?v=YFCzIOqQW7M>

°Annex 1: VUB corporate brochure: 'Education, Research and Commitment'

<http://vubtechtransfer.be/downloads/#download-361> (also in hard copy)

### **Vision on International Policy**

Students who develop into independent individuals, with a commitment towards a *sustainable humanistic society*, who develop into *open minded world citizens*, well prepared for a professional career in an increasingly multilingual environment, graduates that are trained to keep a high employability value throughout their professional career and an "independent" research attitude ... these educational objectives can only be

realized in an environment that stimulates and supports multidisciplinary international skills and competences. *VUB wants to guarantee this*, by further investing in the general education principle of *competence-based learning in a flexible education system*.

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, we gradually develop the university network as the *basic instrument* to fulfill our functions and to which our individual university belongs. Only by doing so, we can prepare for new career paths, taking into account the extended life span, longer careers, faster job changes and the required flexibility, shorter economic cycles, the worldwide war for talent and the much needed global intercultural skills.

In such a network, *privileged partnerships* are extremely important to realize more than just individual *in- and outgoing student mobility* and exchange, but also to build, next to occasional research synergies, 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. Whenever collaboration leads to added value, *the bi-diploma should be standard for the PhD*, rewarding each party for its contribution. International *joint research laboratories* are according to us (i) a guarantee for quality support of the joint education and (ii) a breeding ground to realize social, economic and cultural impact through knowledge and technology transfer, with the aim of a.o. contributing to inter-regional development, including (i) the creation of new economic activity through *spin-offs-born-international*, (ii) the cooperation with existing industry, government and the nonprofit sector and (iii) the pursuit of societal and cultural synergies. The VUB strives for a minimum of 5 and a maximum of 10 privileged partnerships.

**°students are trained to keep a high employability value throughout their career**  
**°education principle of competence-based learning in a flexible education system**  
**°building of sustainable cooperation structures with trustworthy partners**  
**°gradually developing the university network as the basic instrument to fulfill our functions – network of Privileged International Partnerships**  
**°breeding ground for economic, societal and cultural impact**

Reference

Annex 1: Vision text International Policy VUB, J. Cornelis, Feb 2014

## **Privileged International Partnerships**

Key in VUB's international policy is the aim to create institution wide structural links with well-selected leading universities to provide for interdisciplinary solutions to the global challenges of today. That's why VUB launched the concept of 'Privileged International Partnerships' or PIP's, which was approved by the VUB Board end of January 2014. A fully-fledged PIP is typically structured following a three layer concept, so that the synergy between the regional interests and the triple university's mission increases the creation of societal, cultural and economic value, which in turn intensifies the R&D and educational collaboration:

**Level 1:** Education - from organising mobility for students and staff to jointly organising educational programmes and awarding double or joint degrees.

**Level 2:** Jointly organised research, joint doctorates, joint labs, jointly setting up expert centers.

**Level 3:** Societal development through knowledge transfer, from creating business centers to interregional development.

PIPs experience a continuous evolution towards extension of the collaboration over these three levels. Several incentives are made available by VUB to support the process. VUB currently has one PIP, namely Northwestern Polytechnical University, Xian, China. Two new partnerships are on the verge of becoming a PIP.

***VUB aims to build up 5-8 Privileged International Partnerships***

Reference

Annex 2: Privileged International Partnerships, J. Cornelis & J. Couder, Nov 2013

**Development Cooperation**

Fuelled by the origin and history of the university, VUB is strongly engaged in the creation of societal value and impact - next to and originating from groundbreaking research. This explains why *development cooperation* takes a prominent place. Securing the expertise relevant for development cooperation is a major concern. In our actions we strive for long-term continuity, sustainable even when the temporary subsidies stop. We want to embed specialized master programmes, with particular relevance to developing countries, into our curriculum. The network of host institutions for our students in developing countries will be further expanded. In addition to capacity building in the South, it is our vision to realize *continuity by supporting the peer-to-peer relationships in a sustainable way*. Therefore, we strive for (i) diversification of the channels of funding, a.o. towards international sources, (ii) rejuvenation of the generation of initiative takers, (iii) capitalizing on senior expertise, (iv) personal appreciation for achievements, (v) encouragement of student participation (vi) focus on a few countries for the major projects.

In Belgium, university development cooperation is a well-developed concept and recognized as highly effective by its principal donor, the Belgian Federal Government. For the Flemish universities, federal funds are channeled by the University Development Cooperation Secretariat of the Flemish Interuniversity Council (VLIR-UOS). Funding is competition based through calls, which guarantees creativity, autonomy of ideas and a targeted collaboration with high quality output. This proves to be a unique concept when compared to other countries where university development cooperation has no specific funding. VUB was part from the very first beginning of these VLIR-UOS activities, and has already a long lasting experience with university development cooperation or collaboration with higher education institutions in the South. The combination of the very long experience at institutional level, with a fully integrated development cooperation unit to administratively support the academic projects, gives VUB a quite unique position in the international landscape.

As stipulated in the most recent law for Development Cooperation, university development cooperation is not implemented by universities only, but rather in close collaboration with both non-governmental and governmental actors, in search of synergy and resulting in higher efficiency.

***°Belgium has a specific budget for University Development Cooperation***  
***°VUB has a long standing experience with University Development Cooperation***  
***°short and long term (10 years) projects are possible***

## Reference

<http://www.vliruos.be/en/>

<http://www.btcctb.org/>

### **Alliances/Associations/Affiliates**

#### Vesalius College (VECO)

<http://www.vesalius.edu/>

Vesalius College, an American-style college, was founded in 1987 by the Vrije Universiteit Brussel and Boston University to offer undergraduate education in English.

#### Brussels University Alliance (BUA)

<http://www.brusselsuniversityalliance.com/>

The role of the Brussels University Alliance, an alliance between the Brussels universities ULB and VUB, is to develop synergies between the universities and to set up transversal activities and joint projects in the domains of education, research, service to society, infrastructure and logistics.

#### Brussels University Association (UAB)

<http://universitaireassociatiebrussel.be/en/>

The Brussels University Association was created on the 8th July, 2003 and has the Vrije Universiteit Brussel (VUB) and the university college Erasmushogeschool Brussel (EhB) as partners. The legal guidelines for the formation and operation of associations are set in the 'Education Reform Act' (Structuurdecreet 4/04/2013) (in Dutch).

#### Erasmus University College (Dutch: Erasmus Hogeschool Brussel) (EhB)

<http://old.erasmushogeschool.be/en/international-students>

Erasmus University College Brussels comprises professional education in eight disciplines, namely Architecture, Audio-visual Arts, Healthcare, Business Management, Industrial Sciences and Technologies, Music and Performing Arts, Education, Social Work and Applied Linguistics. Education is in Dutch.

#### University of Ghent (UGent)

<https://www.ugent.be/en>

VUB and UGent have created an alliance to offer joint educational programmes and to accommodate joint research groups in several fields. Joining forces in the Flemish landscape offers benefit of scale, extended capacity and a broader breeding ground for new research and ideas.

VUB also collaborates closely with the Royal Military School, the Brussels' branch of Kent University, Kobe University and others, all located in Brussels.

### **VUB, member of Networks - some examples**

National and transnational collaboration projects are of crucial importance in ensuring innovative education and cutting edge research. Operating in a network of (inter)national partnerships improves excellence, facilitates exchange of best practices and allows us to guarantee a well-controlled high quality level.

#### UNICA – Network of Universities of the Capital Cities of Europe

<http://www.unica-network.eu/>

UNICA was founded on the initiative of VUB and ULB, our French sister university. The network's headquarters are situated in Brussels. It is an institutional network of 46 universities from 35 capital cities of Europe, combining over 150,000 staff and 1,800,000



students. Its role is to promote academic excellence, integration and cooperation between member universities throughout Europe. It seeks also to be a driving force in the development of the Bologna process and to facilitate the integration of universities from Central and Eastern Europe into the European Higher Education Area.

EUA – European University association  
[www.eua.be](http://www.eua.be)

With 850 members across 47 countries, EUA is the largest and most comprehensive organisation representing universities in Europe. EUA provides unrivalled opportunities for members to share best practice by participating in projects, events and other mutual learning activities involving a wide range of universities.

T.I.M.E. – Top Industrial Managers Europe  
<https://www.time-association.org/>

T.I.M.E. is a network of 53 leading Engineering Schools and Faculties and Technical Universities which offers, through a system of voluntary bilateral agreements between its members, promotion and recognition of academic excellence and relevance to the international labour market in the form of double degrees in engineering and in related fields.

EIASM - European Institute for Advanced Studies in Management  
[www.eiasm.org](http://www.eiasm.org)

The European Institute for Advanced Studies in Management (EIASM) is an international network for management research and teaching that includes more than 40.000 management scientists from all over the world.

SAR – SCHOLARS at RISK

<http://www.scholarsatrisk.nyu.edu/>

Scholars at Risk (SAR) is an international network of higher education institutions dedicated to protecting threatened scholars, preventing attacks on higher education communities and promoting academic freedom worldwide.

VUBCHINANETWORK

<http://www.chinanetworkvub.eu/>

Serving as an information hub, the VUB China Network is structured around four pillars: education, research, regional projects and scholarships. It addresses primarily academic staff, students and partner institutions. Apart from information on mobility and collaboration, it also provides practical tips and opportunities to staffs & students about visiting and studying in both Belgium and China.

### **VUB, member of R&D networks/institutes – some examples**

i-Minds

<http://www.iminds.be/en/about-us>

iMinds is Flanders' digital research center and business incubator, established by the Flemish government in 2004. Building on the strength of 850+ top researchers located at 5 Flemish universities, including VUB, the network introduces digital innovation in 6 key markets (ICT, Media, Health, Energy, Smart Cities and Manufacturing).

IMEC – Interuniversity Micro-Electronics Center

[www.imec.be](http://www.imec.be)

Imec performs world-leading research in nano-electronics. Imec leverages its scientific knowledge with the innovative power of its global partnerships in ICT, healthcare and energy. Imec delivers industry-relevant technology solutions for a better life in a sustainable society.

### VITO

<https://vito.be/en>

VITO is a leading European independent research and consultancy center in the areas of cleantech and sustainable development. VITO provides innovative and high-quality solutions, whereby large and small companies can gain a competitive advantage, and advises industry and governments on determining their policy for the future. VITO has 750 highly-qualified employees who work on international projects all around the world.

### VIB

[www.vib.be](http://www.vib.be)

With more than 1300 scientists from over 60 countries, VIB performs basic research into the molecular foundations of life, thus aspects of biotechnology. VIB is an excellence-based entrepreneurial institute in Belgium that focuses on translating basic scientific results into pharmaceutical, agricultural and industrial applications. VIB works in close partnership with four Flemish universities – UGent, KULeuven, UAntwerp and VUB and is funded by the Flemish government.

### ECHE

<http://research.vub.ac.be/eu-china-education-research>

The EU-China Higher Education Research Center (ECHE) is a research group and platform at VUB, dedicated to research and cooperation on higher education issues in the EU and China.



# EDUCATION

VUB offers a wide range of academic programmes starting with bachelor programmes and all the way up to PhDs. The English taught programmes cover all study levels except for bachelor. Seven out of the eight faculties within VUB have a long tradition offering English taught programmes.



## **The 8 VUB faculties:**

- **Faculty of Economic and Social Sciences and Solvay Business School (ES)**
- **Faculty of Science and Bio-engineering Sciences (WE)**
- **Faculty of Engineering (IR)**
- **Faculty of Medicine and Pharmacy (GF)**
- **Faculty of Law and Criminology (RC)**
- **Faculty of Psychology and Educational Sciences (PE)**
- **Faculty of Arts and Philosophy (LW)**
- **Faculty of Physical Education and Physiotherapy (LK)**

Reference

Faculty contacts and websites: <http://www.vub.ac.be/english/home/faculties.html>

The diverse academic offer of the VUB has been and still is attracting lots of international students. Out of the approx. 14,200 students, more than 20% are international, coming from over 120 different countries. Within the English taught programmes more than 70% of the students are international. The international student body is represented by 40% doctoral students, 50% master students and 10% bachelor students. VUB counts on 10% international academic staff, growing steadily

Belgium is divided in three communities; there is a Flemish, a French and a German community. Each community is in charge of its own education. Being a Flemish/Dutch speaking university, VUB belongs to the Flemish community. All accredited bachelor and programmes at the VUB are subsidized by the Flemish Government, meaning that students only have to pay a small fraction of the actual cost of the education they get. This holds for students from all over the world. At the VUB the actual tuition fee to be paid by the student can go from 890 to 5200 € per year.

### **Education at VUB**

**°comprehensive university**

**°international student population**

**°education is subsidized by the Flemish government, which is translated in**

**-low tuition fees; on average 2.950 EUR/year for non-EEA<sup>1</sup> and 890 EUR/year for EEA students**

**-subsidized student services**

Reference

°tuition: <http://www.vub.ac.be/en/how-to-enroll>

°annex 4: overview of number of students

### **The educational system**

Already since 2003, VUB adhered to the European Higher Education Area (EHEA), through the signing of the Bologna Declaration by the Flemish Ministry of Education. The standard of education in Flanders today is one of the highest in Europe and it steadily continues to improve. In recent years there have been rapid developments and structural changes in higher education. Universities and university colleges are grouped in associations. As from 2004-2005 they operate within the EHEA, formed by the Bologna process which has initiated a uniform European framework of studies, offering Bachelor and Master degrees.

#### **ECTS**

The Bologna reform or process also introduced a new credit system to be used within EHEA, called "The European Credit Transfer and Accumulation System" or commonly known as ECTS. The ECTS system was developed by the European Commission in order to provide common procedures to guarantee recognition of studies abroad. ECTS also improves access to information about foreign curricula.

ECTS credits are based on the estimated workload necessary for the student to achieve the defined learning outcomes. Workload is an estimation of the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, individual study, assessments) required to achieve the defined learning outcomes. 60 ECTS credits are allocated to the workload of a full-time year of formal learning (academic year composed of 2 semesters) and the associated learning outcomes. One

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<sup>1</sup> EEA: European Economic Area

ECTS credit corresponds to no less than 25 and no more than 30 hours of teaching, learning (home work) and assessment activities. In most cases student workload ranges from 1.500 to 1800 hours for an academic year. This is the total time spent on the study by the student during one year.

Under the Bologna system, a bachelor programme typically takes 3 to 4 years to complete (180-240 ECTS), a master takes 1 year (60 ECTS) or 2 years (120 ECTS).

PhD programmes are not defined by ECTS credits although common principles are currently under discussion.

**VUB educational structure:**

**°Bachelor programmes take 3 years**

**°Master programmes take in general 2 years, with some exceptions:**

**-some master programmes in humanities are still 1 year**

**-master in Medicine is 3 years**

**°One academic year equals 60 ECTS**

**°A PhD takes in general 4 years and is purely research based (no mandatory courses, no mandatory ECTS), although optional courses are available and credits can be gained to elaborate one's own skills or to accommodate the PhD criteria of partner universities when joint PhDs are set up.**

Reference

°The Bologna Process: [http://ec.europa.eu/education/policy/higher-education/bologna-process\\_en.htm](http://ec.europa.eu/education/policy/higher-education/bologna-process_en.htm)

°ECTS: [http://ec.europa.eu/education/tools/ects\\_en.htm](http://ec.europa.eu/education/tools/ects_en.htm)

**Academic offer of VUB**

The key educational concept at the VUB is flexibility. The system of majors and minors enables students to plan their studies in a way that best meets their interests, by supplementing the chosen main subject with a choice of additional courses.

Being a middle sized university has its advantages. First of all, it allows frequent personal contact between students, teachers and teaching assistants. Students are given the opportunity to ask their questions directly to their professors both in class and outside class. This is part of a real direct-contact culture that is well embedded within the university. Additionally, students are strongly encouraged to interact with each other through group assignments within the curriculum and through the various extracurricular activities. VUB alumni are therefore excellent critical thinkers and articulate persons able to network and function remarkably well in society.

Academic bachelor degrees give access to master programmes. Some master degrees will give access to advanced master programmes also known in Flanders as "master-after-master" (at least another 60 ECTS credits after obtaining a master diploma).

VUB has an offer of highly specialized postgraduate certificate programmes that do not lead to a degree/diploma. They are accessible to prospective students who have obtained at least a 4 year bachelor degree (equivalent to 240 ECTS) or master degree. Most of these programmes take also one year, and in some cases even less.

**A complete list of English taught degree and non-degree programmes offered at the Vrije Universiteit Brussel (VUB) can be found in the Course Catalogue.**

**Master programmes in English:** <http://www.vub.ac.be/en/study/masters>

**Advanced Master programmes in English:** <http://www.vub.ac.be/en/study/advanced->

**masters**

**Postgraduate certificate programmes in English:**

**<http://www.vub.ac.be/english/infofor/prospectivestudents/postgraduate.html>**

References (to have the latest overview, always consult the url's above)

°Annex 5: Brochure 'Study in Brussels, The Heart of Europe' (also in hard copy)

°Annex 6: Brochure 'Estudia en Bruselas, El Corazon de Europa' (also in hard copy)

**Knowledge centers of VUB**

The Institute for European Studies (IES)

The Institute for European Studies (IES) at VUB is an academic Jean Monnet Center of Excellence and a policy think tank that focuses on the European Union in an international setting. The Institute offers academic education, carries out advanced research in various EU-disciplines, and provides services to policy-makers, scholars, stakeholders and the general public.

***Institute for European Studies***

°***Jean Monnet Center of Excellence***

°***Two advanced Master programmes:***

-***LL.M. in International and European Law (alias: PILC programme)***

-***MSc in European Integration and Development***

°***Summer School (5 ECTS)***

°***E-learning modules (ECTS accredited)***

°***Postgraduate Certificate Programme on European Policy Making (25 ECTS)***

Reference  
www.ies.be

The Brussels Diplomatic Academy (BDA)

Some of the postgraduate courses at the VUB are offered by VUB's Brussels Diplomatic Academy. In the light of the ever-increasing globalisation, and being located in Brussels - a city with the largest concentration of diplomats - the VUB decided to establish the BDA with a clear focus on economic diplomacy and international entrepreneurship and prepares students for a career in diplomacy and international business. It also offers training to diplomats and businessmen.

***Brussels Diplomatic Academy***

°***very well embedded in networks of diplomacy and business, supported by Belgian and European politicians***

° ***a multidisciplinary approach, with courses taught by high-level speakers with an outstanding experience in international business or diplomacy***

°***offer of postgraduate certificate programmes:***

-***Investing in the EU***

-***Economic Diplomacy***

-***International Trade and Investment***

-***China Business Development***

°***comprehensive range of seminars and executive courses to diplomats and***

### ***business people***

***°your first point of call for consultancy, research and coaching on all aspects of diplomacy and international business***

Reference

°BDA brochure:

<http://www.vub.ac.be/sites/vub/files/en/BDA/BrochureBrusselsDiplomaticAcademy.pdf>

°<http://www.vub.ac.be/en/brussels-diplomatic-academy>

### **Summer Schools**

VUB offers a number of centrally organised summer schools as well as more domain specific summer schools organised by faculties and student associations. Below is an overview and more details can be found in annex 7.

Titles:

°European Identity?

°BEST Brussels Summer Course

°European Summer School (Solvay Business School)

°Summer School on European Policy-Making (Institute for European Studies)

°Summer school in Curatorship and Museum Management

°BND Summer School - Belgian Dutch German Summer School on Physics

°Amsterdam-Brussels-Paris Doctoral School on Quantum Field Theory, Strings and Gravity

°Vesalius College Summer School

Reference

Annex 7: Summer Schools at VUB

### **Education and career counseling**

The VUB attaches great importance to helping students familiarize themselves with university life and to providing good student guidance. The study guidance counselors appointed at each faculty help students with their learning path, learning methods and even on how to combine a professional sports career with studies. Students with disabilities that might affect their studies, can also get free of charge help and guidance in fighting their specific challenges.

Internships are a strong curricular component within VUB's bachelor and master programmes. For some of the VUB programmes doing an intra-curricular internship is mandatory, while for the others it is optional. Regardless of this aspect, VUB students are encouraged to gain valuable working experiences during their studies either within Belgium or abroad. Extra-curricular internships are also strongly recommended.

The VUB Career Center helps students search for all the internship possibilities mentioned above, and give them all the orientation and guidance to get started. Additionally, the Career Center operates a jobboard that lists the most recent job and internship opportunities.

### ***Student counseling at VUB***

***°student guidance counselors are available at each faculty***

***°the Study and Guidance Center has an offer on study methods, getting familiarized with examinations,...for local and international students***

***°internships are mandatory in most programmes providing a first experience of a professional work floor; they are guided by the VUB career center and internship supervisors of the faculties***

## Reference

°Study Guidance Center: <http://my.vub.ac.be/en/study-guidance>

°Career Center: <http://www.vub.ac.be/en/careercenter>

## Quality control

At VUB, students have a voice, also when it comes to quality control. To maintain our high educational standards, students anonymously assess their courses every year. Suggestions for improvement are carefully examined and adjustments are made accordingly. The most recent educational assessment indicated that 88% of the students were 'satisfied' to 'very satisfied' with their courses.

VUB does not only check the quality of education at its own initiative, but is also regularly being checked by others. These checks take the form of so-called education visitations organised by the Flemish Interuniversity Council (Vlaamse Interuniversitaire Raad, VLIR). Every university programme in Flanders is periodically subjected to this form of inspection.

Bachelor and Master Degrees can only be granted if the programme in question is accredited. Accreditation is really a quality label that is granted when the programme meets certain minimum requirements relating to scientific level, organisational and educational quality. This formal recognition, which is largely based on the results of the education visitations, is to be granted by a newly established independent authority. In this context, and entirely in the spirit of the Bologna Declaration, Flanders and the Netherlands immediately decided to take a joint approach to this aspect. This resulted in the formation of a transnational authority, so far unique in Europe, called the Nederlands-Vlaamse Accreditatieorganisatie – NVAO (Dutch-Flemish Accreditation Organisation).

### **Quality Control**

***All degree programmes offered by the VUB are accredited by the Dutch-Flemish Accreditation Organisation (NVAO) ensuring that they meet predefined quality standards.***



***All accredited degree programmes are listed in the Flemish Higher Education Register. The Higher Education Register is managed and edited by NVAO.***

## Reference

NVAO: [www.nvaO.com](http://www.nvaO.com)

Higher Education Register: <http://www.hogeronderwijsregister.be/home>

## Rankings

Besides the official accreditation and internal quality control mechanisms, the high quality of teaching and research is confirmed by VUB's presence in the major international university rankings (QS World University Rankings WUR, ARWU/Shanghai Ranking and Times Higher Education THE Rankings). Additionally, VUB ranks especially well in key subjects such as Politics, Geography, Law, Modern languages, Medicine, Communication/Media Studies as confirmed by the QS subject rankings.



<b>181</b> Quacquarelli Symonds (QS) World University Rankings 2014	<b>251–275</b> Times Higher Education (THE) World University Rankings 2013-2014	<b>313</b> Academic Ranking of World Universities (ARWU) 2014
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Reference

°QS WUR: <http://www.topuniversities.com/node/2228/ranking-details/world-university-rankings/2014>

°QS subject rankings: <http://www.topuniversities.com/node/2228/ranking-details/university-subject-rankings/2014>

°ARWU: <http://www.shanghairanking.com/World-University-Rankings/Free-University-of-Brussels.html>

°THE: <http://www.timeshighereducation.co.uk/world-university-rankings/2014-15/world-ranking/institution/vrije-universiteit-brussel>

## Language courses

While studying in Brussels, VUB students are encouraged to take advantage of the exceptional linguistically diverse character of Brussels and learn new foreign languages they can easily practice in the city. Linguistic competence is highly valued in the European business world and opens doors to a wide range of careers. Students can choose to follow free of charge or largely subsidized courses from a diverse offer covering all levels and adapted to the students' academic schedules (morning, afternoon, evening classes, and classes offered through the blended-learning method).

### **Language courses**

**°The Academic Language Center (ACTO) is a central academic department of the VUB, organising language classes, language tests and tuition for VUB students. The institute also organises Dutch and English language tests (including TOEFL) for students seeking admission to VUB.**

**°The Brussels Education Centre (C.V.O.-B.E.C.) is a school for adult education and organises high-quality language courses on the VUB campus at very reasonable prices.**

Reference

ACTO webpage: <http://my.vub.ac.be/en/acto/english-acto-home>

CVO-BEC webpage: <http://cvo-bec.net/site/?lang=en>



# RESEARCH & INNOVATION

 HR Excellence in Research



*Brussels: 1st Solvay conference 1911, changing the world of physics  
Amongst the participants: Max Planck, Ernest Solvay, Marie Curie, Henri Poincaré, Albert Einstein*

The Solvay Conferences ("Conseils Solvay") are probably the most famous conferences in physics and chemistry. They are a key part of the history and development of science and through the decades they have been associated with an astonishing number of Nobel Laureates. The 1911 Solvay Conference in Physics, held in Brussels at the invitation of Ernest Solvay, was the first international conference in physics ever organised. Consequently, the International Solvay Institute for Physics was founded by Ernest Solvay in 1912. The International Solvay Institute for Chemistry was founded a year later in 1913. The two Institutes merged in 1970 as the "International Solvay Institutes for Physics and Chemistry, founded by Ernest Solvay".

The central activity of the Institutes is the periodic organisation of the Solvay Conferences on Physics and on Chemistry ("Conseils de Physique Solvay" and "Conseils de Chimie Solvay"). In 2004, VUB and Université Libre de Bruxelles (ULB) breathed new life into the Conferences. Conferences are still ongoing and the next Solvay Conference in Chemistry will be held on 19 - 22 October 2016. A yearly public event is organised, accessible for the public at large.

## Doctoral Schools

<http://my.vub.ac.be/en/phd>

The Doctoral Training Programme of VUB is organised by **three Doctoral Schools**:

Doctoral School of Human Sciences

Doctoral School of Natural Sciences and (Bioscience) Engineering

Doctoral School of Life Sciences and Medicine

These interdisciplinary and interfaculty Schools support PhD students, stimulate the quality of doctoral research at the VUB and help promote junior researchers. Several faculties are associated with each Doctoral School and they join forces to organise the Doctoral Training Programme. Each Doctoral School is headed by a Director responsible for the day-to-day management. The Director consults with the faculties involved and the other Directors in order to determine the Doctoral Training Programme policy and content.

The Doctoral Training Programme is in principle not compulsory. The large number of seminars and workshops on offer enables PhD students to develop a wider range of skills. The Doctoral Training Programme presents PhD students with a structural framework for acquiring and developing skills which will support their research as well as their teaching abilities, but which will also prove valuable outside their discipline and the academic environment.

The flexible approach fits the image of PhD students as junior researchers who may need a certain degree of guidance and support, yet are themselves best placed to identify their own particular training needs, issues and concerns. In this way the Doctoral Training Programme is tailored to the actual needs of individual PhD students.

Activities are listed on <http://my.vub.ac.be/en/phd/events>

Besides the Doctoral Schools, VUB has a **Central PhD Office**, which is a point of contact for all (prospective) PhD students at the VUB. PhD students can get information on all matters related to the PhD process, which are not specific to their field of study.

## Jointly supervised doctorate with a double diploma or joint PhD

<http://my.vub.ac.be/en/phd/joint-phd>

A joint PhD stands for a doctoral thesis researched, written and defended under the joint responsibility of two partner institutions. In concrete terms this means co-operation between the Vrije Universiteit Brussel and another domestic or foreign institution. The terms of such cooperation are laid down for each PhD student individually in a contract (named 'co-tutelle') signed by the rectors of the two institutions, both co-supervisors and the PhD student. It is a prerequisite for a joint PhD that the PhD student has completed a minimum of six months of his or her doctoral research work at each partner institution during one or several periods. A joint PhD may result in either of two types of diploma, both conferring a doctor's degree: a joint degree or a double degree.

The conditions for conducting a joint PhD in Flanders are set out in the 2003 Decree on the restructuring of higher education in Flanders (Decreet betreffende de herstructurering van het hoger onderwijs in Vlaanderen):

Art. 94 § 4: "A university may confer, in conjunction with another domestic or foreign university, a joint PhD degree or a double PhD degree, provided that a public defence of the thesis has taken place before a jury including professors from the two institutions concerned and that the PhD student has spent a minimum of six months at the partner university for thesis research work."

The partner institution should be backed by similar legislation creating the preconditions for joint PhD projects.

The joint PhD carries a number of advantages. It stimulates and formalizes cooperation between research institutions either on a national or an international level leading to a more intense exchange of knowledge. As a result, both institutions are rewarded for their efforts and the student can perform part of his/her PhD research in the home university, making it less invasive in terms of family bonds and finances. The PhD student will also be in a better position to benefit from external expertise in the course of his or her research project. Moreover, a joint PhD formally underscores the PhD student's (inter)national mobility during the research programme. The PhD degree certificate makes official mention of cooperation with the partner institution, thus making the most of the student's mobility during the research programme. This will prove to be an enormous asset for the graduated PhD in terms of career perspectives, both within the academic community and in the outside world.

***VUB offers a very flexible set up for joint PhD***

***°Students must register each year at VUB. Tuition must only be paid in the year of defense.***

***°Mobility period: min 6 months at host university.***

***°Examination Board: composed of members of home and host university and external members.***

***°Private and public defense: one in home and one in host university.***

***°Language: is usually English and executive summary or abstract in another language.***

***°Degree: double or joint.***

Reference  
Annex 8: Template of co-tutelle agreement

**Research at VUB**

86 million EUR is VUB's yearly funding (in 2014) resulting from competition in calls for proposals, based on scientific merit and networking with societal, cultural and economic stakeholders. 33 % of this amount comes from non-governmental sources. With these 86 million EUR, we double the operating budget provided by the Flemish government.

VUB respects the choice of research themes by individual researchers and/or research groups. Fundamental research is a spontaneous process characterized by academic freedom. The unique property of VUB is that **all** get involved in the quality driven

research culture of one of our 150 research groups constituting nine core clusters. All cluster themes illustrate our commitment to create impact on society: city dynamics, the circle of life, societal challenges, big data and smart engineering, brain & behaviour, smallest particles, fighting diseases, environmental issues.

More than any other university, VUB benefits from an ideal location in the center of Europe and a favorable international and European context to get involved in economic, societal and cultural activities in the Brussels Capital Region, the Flanders Region, Europe and the world. This is an extra motivation for VUB to invest in entrepreneurship, cultural diplomacy, science communication and technology/knowledge transfer. Moreover, we consider conveying entrepreneurial skills to the students, researchers and teachers as a crucial part of the universities mission: not all of them will become entrepreneur, but all have to be entrepreneurial. Investing in entrepreneurship boosts the valorization of the research output and contributes to breakthroughs in innovation. The Technology/Knowledge Transfer Interface coordinates these activities.

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

Research at Vrije Universiteit Brussel		
Small Particles	The smallest ones	
	Molecular Structures	
Brain & Behaviour	Neurological disorders/ Health & Disease	
	Social, Emotional, behavioral, cognitive	
Fighting Diseases	Cancer	Imaging
	Inflammations & Infections	Therapy
	Diabetes	
	Drug Design through structural biology	
The Circle of Life	Reproduction	
	Health control/ Food Technology	
	Gentropole, End of Life	
Societal Challenges	Demographic Challenges	
	Democracy, Gender issues, media	
City Dynamics	Social Changes, Crime & Culture, Construction History	
Smart Engineering	Separating Solutions	
	Materials & Light - Imaging	
	Robotics	
Big Data	Software languages and engineering	
	Electronics & informatics	
	Data based modelling	
Environmental Issues	Global Changes	
	Sustainable Transport	
	Amphibia Research	

*Research clusters at VUB (clustering of existing research is still under construction)*

## Excellence in research

### ERC grants

Excellence is illustrated by the ERC (European Research Council) grant holders that are selected on one feature: excellence. Obtaining an ERC grant is an outstanding performance and one of the most competitive challenges for a researcher. The research topics are illustrating the large diversity in VUB's top research.

ERC grant holders are creating and building up new excellent research; it is an exciting experience to participate in such an endeavor.

### **European Research Council (ERC)**

#### **Consolidator Grants**

°**Peter Schelkens, Sparse Signal Coding for Interference-based Imaging Modalities**

#### **Advanced Grants**

°**Johan Schoukens, SNLSID – Data Driven Structured Modelling of Nonlinear Dynamic Systems**

#### **Starting Grants**

°**Mathieu Vinken, Connexin and pannexin channels as drug targets and biomarkers in acute and chronic liver disease (CONNECT)**

°**Bram Vanderborght, Series-Parallel Elastic Actuators for Robotics (SPEAR)**

°**Nathalie Vermeulen, Next-generation on-chip supercontinuum light sources based on graphene-enabled extreme nonlinear optics (NEXCENTRIC)**

°**Bart de Boer, Advancing behavioral and cognitive understanding of speech (ABACUS)**

°**Ivan Markovsky, Structured low-rank approximation: Theory, algorithms, and applications (SLRA)**

°**Helga de Valk, Families of migrant origin: a life course perspective**

Reference

°Annex 9: info on ERC grants

### Methusalem

For research coordinators that have attained seniority and outstanding performance, VUB provides substantial funding for developing and maintaining the high standards that they have reached (Methusalem funding). Methusalem groups are quite large groups and have proven excellence, through the development of sound and mature research methods. It is an excellent experience for young researchers to be coached in such an environment.

**Methusalem funding**

**°Herman Terry, Design and Prediction of Nanostructured Metal Surfaces - NANOMET-**

**°Inge Liebaers & Karen Sermon, Centre for Reproduction and Genetics**

**°Hugo Thienpont, International Photonics Access and Research Centre 'iPARC@VUB'**

**°Johan Schoukens, Centre for Data Based Modelling and Model Quality Assessment**

Odysseus

The Foundation for Scientific Research (FWO) provides grants for attracting excellent researchers from abroad, the so called Odysseus grants in the context of brain gain and collaboration with foreign institutes and universities.

Excellent researchers choose VUB for (i) its unique setting in biotechnology, including first class experimental equipment (e.g. MRI), (ii) VUB's long lasting research in collaboration with CERN (e.g. the experimental verification of the Brout-Englert-Higgs particle) and several other projects (e.g. Ice Cube), (iii) the theoretical research in "big science" and (iv) the research themes and expertise in the field of social sciences, including some unique data bases and repositories.

**Odysseus fellows at VUB**

**°Peter Tompa, Structural biology of the intrinsically disordered plant chaperone ERD14**

**°Steven Lowette, Searching for Dark Matter with the CMS detector at the Current and Future Large Hadron Collider**

**°Benny Geys, Mico-Level Socialization and the Role of the Institutional Environment in Civic Engagement**

**°Freya Blekman, Search for new physics at the Large Hadron Collider**

VUB research fellows

Another category of very good researchers are the VUB research fellows that are financed by VUB's research council. The list in Annex 10 illustrates the topics that are taken up by these research professors. We list them in Annex 10 for those readers which have a particular interest for participating in a specific research theme.

Reference  
Annex 10: VUB Research Fellows

Strategic Research Programme (SRP) groups

The support of SRP groups is a more recent initiative at VUB. SRP is an alternative for project oriented internal research competition. SRPs have to present a strategic research plan that can be carried out in a period of 5 year. In Annex 11, we list the current SRP



themes and groups at VUB. These can be considered as major research groups that receive extra funding on top of the basic research funding that every department gets for supporting the academic bachelors and masters with the required research. VUB considers that university education has per definition to be coupled with research. All Masters and Bachelors at VUB are supported by research, also those that are not covered by the special research programmes mentioned above. This is the unique property of university education, distinguishing it from other forms of higher education. Annex 11 is a structured list of SRP groups, which is intended for readers that have well-defined interests in a particular research theme.

Reference  
Annex 11: Strategic Research Program Groups

### International joint research groups

An international joint research group assembles researchers from at least one non-Belgian university and from the VUB that are active around a common research line. A research line means a clearly defined thematic research area that includes at least multiple related research projects, PhD's, master dissertations and published papers. The new strategic collaboration within the IJRG should enable both partners to strengthen their position in their individual core competence domains and deliver cross-disciplinary or disciplinary strengthening research contributions.

The international joint research groups serve as:

- High level academic centers for international science & technology cooperation and exchange;
- Platforms for research oriented training and mobility;
- Pools of knowledge, expertise, and - if applicable - infrastructure & equipment;
- Knowledge or technology transfer for creating impact on society, culture, economy, nonprofit sector, governmental bodies, the public at large, ....

International Joint Research Groups					
	kort OG	IJRG Onderzoeksgroep	Woordvoerder VUB	Woordvoerder Partner	OZR
1	LCPR	Liver Connexin and Pannexin Research Group	Mathieu Vinken (GF_FARM)	Bruno Cogliati - Univ. De Sao Paulo (Brazilië)	2/07/2014
2	ISEC	In Situ Electrochemistry combined with nano & micro surface characterization	Iris De Graeve (IR_MACH)	Yaiza Gonzalez Garcia - TU Delft (NL)	3/09/2014
3	BAFF	Belgian-Argentinean Research Consortium on Fermented Food and Beverages	Luc De Vuyst (WE_DBIT)	Fernanda Mozzi - Univ. Nacional de Tucumán (Argentinië)	3/09/2014
4	DeSirE	Centre for the study of Democracy, Signification and Resistance	Nico Carpentier (ES_SCOM)	Ilija Tomanic-Trivundza - Univ. Of Ljubljana (Slovenië)	1/10/2014
5	AVSP	Joint Laboratory on Audio Visual Signal Processing	Hichem Sahli (IR_ETRO)	Yanning Zhang - Northwestern Polytechnical University Xi'An (China)	3/12/2014
6	OBLC	Online and Blended Learning Competence Center	Chang Zhu (PE_EDWE)	Qiong Wang - Peking University (China) / Jo Tondeur - UGent / Sang Guoyuan - Beijing Normal University (China)	7/01/2015

## Publications

Publication output is important in research. It is of course out of the scope of this text to list all high level publications. But, to illustrate that VUB is regularly publishing ground breaking science, Annex 12 lists our recent publications in Science and Nature, the two highest impact factor multidisciplinary journals worldwide.

Reference  
Annex 12: VUB Publications in Science and Nature

## Stimulation of entrepreneurship and creation of spin-offs

Another special feature of the VUB research policy is that it 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. Students learn about project management and design, and can also be involved in the creation of new economy (VUB created slightly more than 1 successful spin off per year during the last 15 years) and offers entrepreneurship modules to its doctoral researchers and master students.

Applied research, leading to successful technology/knowledge transfer has to be coached by specialized experts. Most of these experts are residing in the Technology Transfer Interface (TTI) of the university. Thematic business developers are residing in the IOF (Industrial Research Fund) core research groups within the large departments and R&D consortia, that also deliver patents, generate license incomes, have a large portfolio of industrial and international R&D projects and are capable of creating spin off companies. All this is embedded in the educational and research environment and considered an integral part of the university mission.

### ***Entrepreneurship and spin-offs***

***°Thematic entrepreneurship courses exist in different domains: micro-electronics, photonics, biotechnology, life sciences. They can be chosen as optional courses in regular master programmes.***

***°Doctoral schools provide training in managerial, innovation and entrepreneurial skills***

***°The Technology Transfer Interface (TTI) facilitates VUB's knowledge transfer, the commercial application of promising technologies developed at the university and business development. TTI manages the intellectual property (IP), takes care of contractual agreements with existing companies, licensing and the establishment of university spin-offs.***

***Research groups that are capable of systematically bringing the R&D results to market and to participate actively in business development***

Photonics  
Electronics & Informatics  
Industrial Microbiology & Food Biotechnology

**Electrochemical & Surface Engineering**  
**Chemical Engineering**  
**Diabetes Research**  
**Toxicology, Dermato-cosmetology & Pharmacognosy**  
**Mechanical Engineering**  
**Molecular & Cellular Therapy**  
**Structural Biology**  
**Wind energy**  
**Medical Imaging & Cellular Immunology**  
**Electrical Engineering & Mobility**

Reference

°More information on VUB's active spin offs can be downloaded from:

<http://vubtechtransfer.be/medialibrary/VUB%20Spin-off%20overview.pdf>

°More information on individual spin offs can be downloaded from:

<http://vubtechtransfer.be/downloads/#download-357>

°Information on entrepreneurship courses for researchers can be found on:

<https://my.vub.ac.be/en/entrepreneurship> or

<http://vubtechtransfer.be/partners/teaching-technology-entrepreneurship-at-the-vub/>

°TTI website: <http://vubtechtransfer.be/>

°VUB's "IOF Knowledge Centers" for applied research

<http://vubtechtransfer.be/for-companies/industrial-research-fund-iof-knowledge-centers/>

### **Interuniversity VC fund Qbic**

VUB has launched together with the University of Ghent the first interuniversity VC fund in Belgium, Qbic, for spin-off companies of three universities. Qbic Fund seeks to invest in spin-off companies of the universities of Ghent, Brussels and Antwerp, leveraging the creativity of more than 8.500 researchers. This strategic alliance provides a sufficient level of critical mass to set up a sizeable, professionally managed fund. The fund mainly targets life sciences, new materials, clean-tech and ICT start-ups. Currently the fund is looking for partnerships in international contexts.

Reference

<http://vubtechtransfer.be/news/qbic-fund-will-start-with-over-30-million/>

### **VUB is member of strategic research centers**

VUB fully collaborates and is co-founder of some strategic research centers. Also here there are opportunities for international students and researchers to collaborate with renowned research centers through VUB.

#### ***Strategic research Centers***

°***Interuniversity Micro Electronics Center (IMEC)***

[www.imec.be](http://www.imec.be)

°***Institute of Broad Band Technology (iMinds)***

<http://www.iminds.be/en>

°***Vlaams Instituut voor Biotechnologie (Flemish institute for biotechnology (VIB))***

<http://www.vib.be/en/>

°**Strategic Institute Innovative Materials (SIM)**

<http://www.sim-flanders.be/>

°**Flanders Make (manufacturing industry)**

<http://www.flandersmake.be/>

°**Flanders Food**

<http://www.flandersfood.com/>

### **Research round up**

°**At VUB, education and research go hand in hand.**

°**Student involvement in research is essential for us in a university setting.**

°**Excellence in research and an outstanding position in the international scene is one of our main targets.**

°**VUB proves its international presence with participation in most important European and international research initiatives and actions.**

°**VUB treasures the sense of initiative of students and researchers and offer coaching along the life cycle of technologies and knowledge packages ... from fundamental over strategic research to applied research including technology and knowledge transfer to all societal stakeholders.**

#### Reference

Annex 13: Overview of some EU-funded mobility and education projects coordinated by VUB. An overview of EC-funded framework programmes can be provided upon request.



'*Nyctibatrachus vrijeuni*', discovered in India by VUB researchers



# OUTREACH and SOCIETAL ENGAGEMENT

## VUB CROSSTALKS

<http://crosstalks.vub.ac.be/> Crosstalks is VUB's industry-university network

VUB CROSSTALKS is a unique kind of academic and corporate networking launched by VUB in 2003. Working bottom-up and interdisciplinary, CROSSTALKS wants to create a new dynamic of knowledge exchange through thematic encounters, beyond specific disciplines and with the active participation of key players from all levels of society. An open and collaborative approach is crucial in every CROSSTALKS initiative, ranging from small scale professional workshops to big public events.

The results of these events are wrapped up in a series of inspiring publications, giving an impetus to future collaborations in research and development.

Since we live in a fast moving and continuously evolving society, long term visions are fundamental. However, the short term agendas of decision takers do not allow the development of a common ground and the emergence of long term perspectives. This is exactly where CROSSTALKS can make the difference. Crucial about CROSSTALKS is the collaborative partnership and sharing of knowledge in an open and constructive way - the university has to provide a professional, unbiased platform that is trusted by all participants. The cross-disciplinary approach is a key issue to face the global imperatives for innovation, keeping one eye on the quality of our social and individual life and another on the economical sustainability.

## VUB University Hospital

<http://www.uzbrussel.be/u/view/en/17362-Home.html>

The university hospital is a multilingual institute servicing the cosmopolitan population of the Brussels Capital region. The strong university character is illustrated by the clinical research topics listed in a separate brochure: Biomedical research at the University Medical Center- UMC Brussels.

Reference

° <http://vubtechtransfer.be/medialibrary/Biomedical%20Research%20Brochure.pdf>

## Cultural diplomacy

Cultural diplomacy today is a vibrant and innovative academic field of research and has successfully established itself as a stand-alone theory and practice. Our university is proudly investing in Cultural Diplomacy. Prof. Hans De Wolf created a unique methodology, where local artists, curators, universities and businesses get connected. Using the format of an exhibition as the central tool, our projects are always the result of

an in depth interchange between Belgian and local artists and scholars. Each exhibition is modeled for the place of destination and becomes a marvelous opportunity for creating lasting networks. Each event organised by VUB is also accompanied by academic lectures and research questions on the presented theme of the event and this has proven to greatly fascinate the audience.

Taking advantage of Belgium's outstanding reputation as a most fertile ground for the arts, the projects developed by this research group seek to influence positively the image of Belgium/Europe in very diverse areas such as China, South Korea, Italy, Cuba and other places. The projects have brought evidence so far that an intelligent intertwining of cultural potential and academic know how can lead to fully unexpected results, that not only attract cultural, governmental and academic elites, but can also fascinate and inspire local economic actors.

Rudi Vervoort, Minister-President of the Brussels-Capital Region: "I have always considered our art scene in Brussels as one of the most precious assets our city has to offer and to share.....our art scene is a major source of creativity and innovation".

*Participation during the last 2 years by VUB, prof. Hans De Wolf:*

2014:

°Cuba – Semana Belga: event organised by the Belgian Embassy and with sponsorship of the Brussels Capital Region and VUB, named 'Borders and Horizons'.

°China - exhibition at the Central Academy for Fine Arts (CAFA) with sponsorship of the Brussels Capital Region and VUB, named 'Master Mould and Copy Room'.

2015:

°Italy - Biennale Venice: Ca' Foscari, the University of Venice, will host the event of the Flemish Community and VUB, named 'The Revenge of the Common Place'.

°China – event during the State mission to China

°Cuba – Semana Belga (tbc)

### **Doctor Honoris Causa**

<http://www.vub.ac.be/home/DHC/overzicht.html>

VUB has developed a tradition of awarding honorary doctorates to emphasize the recognition and moral support by the University Community of persons that have achieved extraordinary humanitarian work, created a large societal, scientific, cultural impact, have played a critical role in settling major conflicts in the world, restoring peace, bringing together people and cultures and encouraging international and multicultural efforts. All of them are eminent personalities with different backgrounds, e.g. political, diplomatic or cultural.

Some examples:

H. STORCK, H. PEREZ DE CUELLAR, Cmdr. J.Y. COUSTEAU, Chico MENDEZE FILHO, Willy BRANDT, Vaclav HAVEL, F.W. DE KLERK, Nelson MANDELA, Dr. Peter PIOT, Dr. Hans BLIX, Sonia GANDHI (overview <http://www.vub.ac.be/home/DHC/overzicht.html>)

### **VUB Fellows**

<http://www.vub.ac.be/en/fellowship>

Each year we welcome a new class of VUB Fellows to jointly strengthen the ties between Academia and Society. "VUB Fellow" is a title bestowed upon unique personalities such as top-level company executive officers or company staff members, visionary politicians or decision makers, and leading figures of civil society organisations.

In 2012 the Vrije Universiteit Brussel (VUB) initiated its Fellowship programme to actively support interaction and cooperation between academic circles and highly experienced members of society and business. Through the Fellowship platform academia, society and business meet to discuss joint challenges, exchange experiences, share good practices and learn from each other. These exchanges and cooperation benefit the quality of research and academic education, increase the university's innovation capacity and competitiveness, and foster the employability of graduates, resulting in a better service to our society.

### **Career Center**

<http://www.vub.ac.be/careercenter/>

In cooperation with the interim recruitment agency Randstad, the VUB established a central Career Center aiming to inform, advise and coach students and alumni towards a smooth entry on the labour market. The services offered by the VUB Career Center include: initial advice and orientation, mapping competences and skills, career planning, job search skills, placement.

### **Close the Gap**

<http://close-the-gap.org/>

Close the Gap, inaugurated by young commercial engineers at VUB, is an international non-profit organisation that aims to bridge the digital divide by offering high-quality, pre-owned computers donated by large and medium-sized corporations or public organisations to educational, medical, entrepreneurial and social projects in developing and emerging countries. All the projects are demand-driven and share the common denominator of being non-profit-oriented initiatives.

Through its partner WorldLoop, Close the Gap also "closes the loop" by providing local recycling facilities once the IT equipment does reach the end of its life.

### **UCOS – University Center for Development Cooperation**

<http://www.ucos.be/en/home-12.html>

UCOS wants to stimulate the development of a critical vision on the challenges of a global society, international solidarity and sustainable development. It wants to encourage interest in these topics, stimulate and streamline commitment in this field, always based on the organisation's humanistic values.

UCOS wishes to focus its efforts on education for sustainable human development mainly in the target group of students of higher education.

### **iPAVUB**

<http://www.vub.ac.be/iPAVUB/>

The Institute for Continuing Academic Training (iPAVUB) coordinates the lifelong learning programmes at VUB.

### **CVO**

CVO-BEC webpage: <http://cvo-bec.net/site/?lang=en>

The Brussels Education Centre (C.V.O.-B.E.C.) is a school for adult education and organises high-quality language courses on the VUB campus at very reasonable prices.

# GOING SOUTH: VUB and LATIN AMERICA

## OAS VUB collaboration

In total, 154 of our current international students come from OAS countries:

Argentina	4	Colombia	17	Haiti	1	Saint Lucia	1
Bolivia	14	Cuba	6	Honduras	1	Suriname	12
Brazil	23	Dominican	1	Mexico	13	Trinidad &	1
Canada	11	Ecuador	11	Paraguay	1	Venezuela	4
Chile	3	Guatemala	1	Peru	7	USA	23

Since August 2014, VUB and Organisation of American States (OAS) have initiated an active cooperation. The two institutions signed a partnership together, titled OAS/VUB PhD Scholarship Programme. The scholarship lasts 4 years and consists of an annual tuition fee, application fee and health & complementary insurance coverage, covered by the VUB. A webpage has been created for this Programme on the OAS website <http://www.oas.org/en/default.asp> and <http://www.oas.org/en/scholarships/vub.asp>. Per cohort, OAS and VUB aim to reach 60 scholars. 1/3 of the PhD Scholars will be appointed to supervisors within the domain of Educational Sciences and related fields.

For the 1st cohort, VUB offered 59 PhD topics (list of vacancies 1<sup>st</sup> cohort – appendix 1) divided into 3 different study domains: Educational Sciences (1), Public Health (2) & Engineering (3). As part of the second cohort, it was decided to broaden the topics offered compared to the 1<sup>st</sup> cohort (list of vacancies 2<sup>nd</sup> cohort – appendix 2) to offer more opportunities to students of the Americas. 100 topics have been offered towards the applicants of the Programme.

In a common long-term vision, VUB and OAS have expressed their wish to strengthen their collaboration and a new scholarship programme towards *Master students* is under negotiation.

## Coimbra network

In 2014, VUB signed an MoU with Grupo Coimbra de Universidades Brasileiras. In order to initiate research collaboration with Brazilian universities (besides the already existing research collaboration between some professors), VUB will organise a thematic workshop in which Brazilian researchers will participate and explore new ways of collaboration.

## CUBA

Collaboration with Cuba, initially and still now, fits primarily into a capacity building approach in the framework of development cooperation.

1998 was the startup year: a project was launched with a duration of 2 years on the purification of lectins, together with UCLV – LA UNIVERSIDAD CENTRAL "MARTA ABREU" DE LAS VILLAS in central Cuba. Afterwards, VUB participated in 2 other small sized



projects on bananas with KULeuven, and biological herbicides and pesticides with UGent, leading to 3 PhD graduations. In 2003, VUB coordinated a large Institutional University Cooperation (IUC) Programme with UCLV involving also infrastructure and university management processes, together with all 5 Flemish universities as partners.

The number of PhDs is 78 in 10 year, in Cuba or in a Flemish University, in various sectors.

Now VUB coordinates two new large projects: (i) the ICT-network programme coordinated by UCLV in collaboration with several Cuban universities, (ii) a new IUC with Universidad de Oriente in the east of Cuba. We recently engaged in a peer-to-peer collaboration with the University of Havana, UCLV, UCI - Universidad de las Ciencias Informaticas and CUJAE – Instituto Superior Politecnico José Antonio Echeverría. The collaboration is sponsored by VUB and targets double diploma PhDs.

### **PRONABEC and mission to Lima**

VUB has attended the 1<sup>st</sup> International Postgraduate Fair organised by PRONABEC, 11-14 November 2014, Peru. VUB was the only Belgian Higher Education institution present among 50 universities from around the world. An agreement is in the process of being signed.

VUB seized the opportunity of this fair to visit the top 4 Universities in Peru:  
Pontificia Universidad Catolica del Peru (PUCP) – ranked 1<sup>st</sup> nationally  
Universidad Nacional Mayor de San Marcos (UNMSM) – ranked 2<sup>nd</sup> nationally  
Universidad Peruana Cayetano Heredia (UPCH) – ranked 3<sup>rd</sup> nationally  
Universidad Nacional Agraria la Molina (UNALM) – ranked 4<sup>th</sup> nationally

VUB is now looking forward to collaborating with these universities.

### **Bolivia**

Since several years there is a very close collaboration between VUB, the Universidad Católica de Bolivia and various Bolivian NGOs. Originally this collaboration was mainly focused on research on children in vulnerable situations, funded by the federal government through VLIR-UOS, but it has given rise to increased incoming and outgoing student and staff mobility (Masters and PhDs) with several sources of funding for mobility.

### **Colombia**

VUB has collaborated with the Universidad Nacional de Colombia and the Colombian “Fondo Nacional de Desarrollo” in a Europeaid project on landmines that finished in 2012. There is also collaborative research on electronics and informatics in the framework of joint Ph.D’s with the Universidad de los Andes.

### **Suriname**

There is an ongoing collaboration with the Anton de Kom University of Suriname on two themes: Institutional capacity building linked to research, education and services to society, and the organisation of a Master education and research programme on sustainable development, with the involvement of the academic VUB staff of Dept. Educational Sciences.

## **Ecuador**

The University of Cuenca and VUB have joint collaboration on integrated water quality management and pharmacological characterization of medicinal plants, resulting in joint Ph.D's and staff exchange. The VUB department on Water Resources engineering is also involved in a network on Biodiversity.

## **Brazil**

Dept. of Pharmacology of VUB and USP are working closely together. Prof. M. Vinken is guest professor at USP and resides at USP 3 months/year.

## **European-funded projects**

VUB is highly involved within European funded projects, in particular the LLP-programme, Tempus programme (RUMI, UMEI, CORINTHIAM), Erasmus Mundus Programme, Framework Programmes, Horizon 2020 and the newly launched Erasmus+ programme (2014 – 2020), as a coordinator and as a partner.

In the past, VUB took part in two Erasmus Mundus Action 2 Projects. One was in cooperation with Argentina, Bolivia & Peru (lot 18) whereas the *MONESIA* (MONESIA: Mobility Network Europe-South America: An Institutional Approach) project dealt with Brazil, Paraguay and Uruguay, where the Coimbra Group in Europe was involved as an associate partner.

VUB currently takes part in two Erasmus Mundus Action 2 Projects which deal with Latin American countries: *EUREKA* (<http://eureka-sd-project.eu/>) – Mexico, Argentina, Colombia, Brazil, Cuba, El Salvador, Guatemala, Honduras, Nicaragua. *BEMUNDUS* (<http://www.bemundus.eu/>) Erasmus Project has a particular focus on Brazil.

Moreover, as a coordinator, VUB is currently managing an Erasmus Mundus Action 2 Project titled *CARIBU* ([www.caribu.be](http://www.caribu.be)) which deals with the African, Caribbean and Pacific Area. Suriname, the Bahamas and Guyana are present within the Consortium as Caribbean partners of this Programme. The Organisation of American States belongs to the associate partners. In addition to this project, VUB used to coordinate 6 other Erasmus Mundus Action 2 Projects in the past which proves our wide experience in project management and our strong involvement in European funding schemes.

With the new European Programme, Erasmus+ (2014 – 2020), VUB is setting up a new strategy and Latin America is an area of priority, especially as part of Key Action 2 Capacity-Building in the field of higher education. Some projects of this kind are being written and will be submitted soon.

## **More scholarship programmes**

### **°Science Without Borders (Brazil)**

The Flemish Higher Education Council (VLUHR) has signed a Letter of Understanding with CNPq for receiving Brazilian students at the Flemish universities (STEM-fields).

### **°Cenacyt**

Scholarships awarded by the Ecuadorian government.

## °VLIR-UOS

### *Incoming mobility*

VLIR-UOS awards scholarships to applicants from 54 eligible countries in Africa, Asia and Latin America to attend one of the selected trainings (7) or Master programmes (15) taught in English at a Flemish university or university college, covering all related expenses.

VUB is offering 5 master programmes that are eligible for these scholarships:

Master of Science in Biology (Human Ecology)  
 Master of Science in Marine and Lacustrine Science and Management  
 Master of Science in Molecular Biology  
 Master of Science in Physical Land Resources  
 Master of Science in Water Resources Engineering

### *Outgoing mobility*

VLIR-UOS provides on a yearly basis 26 travel grants for Belgian VUB students. These travel grants are meant as financial support for a stay of at least one month in one of the 54 eligible countries, in the framework of the study programme of the student (internship, field work for thesis, ...). Main purpose of the travel grants is raising awareness among Belgian students for development cooperation.

## °Belgian Technical Cooperation - BTC

*Incoming mobility* - As executive body of the Belgian Directorate General for Development Cooperation and Humanitarian Aid, the Belgian Technical Cooperation awards a variety of scholarships (short trainings, Master and PhD programmes) aiming at capacity building in the bilateral development cooperation programmes. They are active in 18 countries.

## °Transition Fellowship Programme

The Transition Fellowship Programme aims to promote exchanges of students between Belgium/Flanders and 4 countries in transition i.e. Brazil, Morocco, Turkey and South-Africa. All students should maintain their student status at their home institution during the period of exchange and there should be a signed cooperation agreement between both universities.

*Outgoing mobility* - For Brazil only outgoing mobility from Flanders to Brazil is possible as a complement to the Science Without Borders Programme.

## °Master Mind Scholarships

*Incoming mobility* - The Master Mind Scholarship programme aims to promote internationalisation of the Flemish Higher Education by offering scholarships to outstanding last year students who apply to take up a Master degree programme at a Flemish university. The home institution of the applicant and the Flemish host university should have signed a cooperation agreement.

