

# LOOKING FURTHER

## PROFILE OF VU UNIVERSITY AMSTERDAM



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## PURPOSE OF THIS DOCUMENT

In July 2011, the Dutch Ministry of Education, Culture and Science (the Ministry) published its White Paper on Higher Education, Research and Science, entitled *Kwaliteit in verscheidenheid* (Quality in Diversity). All of the Dutch universities were invited to indicate by spring 2012 how they would respond to the major themes included in the White Paper: improvement of their Teaching and Learning performance, enhancement of their teaching and research profiles, and alignment with the future's grand challenges and the needs of business and society.

In December 2011, the Association of Universities in the Netherlands and the Ministry signed an *Hoofdlijnenakkoord* (General Agreement), in which the Dutch universities pledged to sharpen their respective profiles and to enter into contracts on their Teaching and Learning performances based on these profiles. The Ministry subsequently appointed a Review Committee to compare and reflect on the profiles and contracts submitted. The task of the Committee is to evaluate the level of ambition in these submissions, together with the viability of their proposals and the anticipated contribution of these proposals to national policy goals.

The Ministry made 5% (€ 105 million) of the annual teaching grant conditional upon agreement having been reached on the White Paper targets. A further 2% (€ 38 million) was withheld and will be assigned selectively to the universities on the basis of their profile.

This document describes the process and choices made by the VU University Amsterdam (VUA) in education and research and thereby creating a profile of the university. As well as a draft proposal for an agreement with the Ministry, it includes a description of the initiative of the VUA and the University of Amsterdam (UvA) to develop the Amsterdam Academic Alliance (AAA).

Numeric data of the VUA are publicly available on its website and in the annual accounts. To some extent this document amends the VUA Strategic Plan 2011 – 2015. However, it specifically addresses the issues in the White Paper and does not constitute a new or revised Strategic Plan. Nor can it be seen to cover all the policies currently in effect at the VUA.



# SUMMARY

## *VU University Amsterdam*

VU University Amsterdam (VUA) stands for universal university values such as academic freedom and independence, firmly rooted in its tradition the core values responsible, open and personally engaged. Academic research and education at VUA is characterized by a high level of ambition, and encourages free and open communications and ideas.

## *Profile of VUA*

The research and education at VUA will be presented through four themes that are inspired by the university's core values. The four themes are: Human Health and Life Sciences (H2LS), Science for Sustainability (S4S), Connected World (CW) and Professional Services (PS). Showcasing activities along these four distinct themes will enable us to provide a clear window onto the university for businesses, government, students, researchers, grant providers and other partners. The four themes are well connected to the economic and societal challenges at EU, national (EL&I) and regional (AEB) levels. The themes are linked across different academic disciplines and interdisciplinary research institutes in order to reinforce each other. VUA and the VU medical centre (VUmc) together have established 14 interdisciplinary research institutes with excellent research track records.

## *Amsterdam Academic Alliance*

VUA and the University of Amsterdam (UvA) have the ambition to intensify their collaboration, as well as with other knowledge institutions based in Amsterdam, in line with the recommendations of the OECD in 2010. VUA and UvA will endeavour to mobilise this potential through the Amsterdam Academic Alliance (AAA). The aim of the AAA is to make Amsterdam a hub for international competitiveness and academic excellence but the Alliance

in no way excludes partnerships with university departments elsewhere yet aim to strengthen the position of Amsterdam, the Netherlands as well as the institutions involved. The collaboration can result in different outcomes and pace per academic domain. Based on existing collaboration, the first concrete steps in AAA co-operation will include an intended integration of the Science Faculties and the creation of several joint graduate schools. In other fields of interest, the AAA will facilitate the establishment of joint graduate or research programmes. As part of the AAA, UvA and VUA will set up an AAA Fellowship Programme in order to provide funding to talented and promising research leaders from abroad.

## *Education and research*

VUA promotes an intensive and challenging study climate and strives to improve the teaching and learning performance. In the bachelor VUA places a strong emphasis on the student's academic development. In its graduate education, VUA focuses on improving and streamlining its master's programmes, preparing students for an international and intercultural future, shortening the time to degree and promoting selectivity. In its research, VUA places strong emphasis on societal relevance and by tightening the university's research profile, and concentrating on a select number of themes, it boasts internationally acclaimed research.

## *Connecting to business and society*

VUA attaches great importance to its role in transferring knowledge to society and facilitating real-world applications of knowledge. VUA therefore strengthens its cooperation between government, businesses and knowledge organisations in the Amsterdam region to the benefit of the Triple Helix in Amsterdam. VUA wants to offer pro-

grammes of importance to the human capital agenda and the clusters of the Amsterdam Economic Board (AEB).

# 1

## CHARACTERISTICS OF THE VUA



## 1.1. HISTORY

The VU University Amsterdam (VUA) was founded in 1880 by Abraham Kuyper, Prime Minister of the Netherlands from 1901 to 1905. At first the university was only open to Reformed Christians and was entirely financed by their fund-raising efforts and donations. Since the 1960s, however, VUA has opened up to students and staff with other backgrounds and became funded in the similar manner as the other Dutch universities. Despite this development, VUA retains its tradition of standards and values. This finds among others expression in the strong emphasis placed upon societal relevance of the university's research and teaching. And we pursue diversity in all its many forms with regard for the human dimension.

VUA stands for universal university values such as academic freedom and independence. Academic research and education at VUA is characterized by a high level of ambition, and encourages free and open communications and ideas. However, science and academic pursuit can never be free of values, and values are always based on some form of conviction or philosophy. VUA attaches great value to different convictions, distinguishing itself from other universities by its willingness to open them to discussion. Since its foundation in 1880, the university has sought to maintain a link between academic pursuit on the one hand and the Christian conviction on the other. In recent decades we have engaged in open dialogue with other faiths and ethical systems. Convictions, whether personal or institutional, form a basis for critical reflection on the value, function, content, limits and effects of science. Such reflection permeates all education and research at VUA, leading to academic practice that is bound by personal responsibility and marked by a keen focus on issues of societal importance.

The university regards diversity, whether in culture, conviction, nationality or prior education, as a source of innovation and progress, and hence as a special strength. Given the diverse background of its students and its many first generation students, VUA places a strong emphasis on the student's academic development to turn them into academic citizens. VUA encourages students to discuss academic issues with those who hold different views and perspectives, and to do so with respect and an open mind. VUA will introduce an academic core in all its bachelor programmes that is not only devoted to academic skills, but also to the identity and core values of the university, to ethics and to integrity, and to the historical and cultural context of science and society. This will enrich the overall learning process. It will also provide an excellent preparation for a career in a society in which the international context is of growing importance and where people must be able to address differences in culture and conviction in a constructive manner.

The basic philosophy of VUA is expressed in three core values that serve as a guide to the work and actions of employees and students. These values are inextricably linked to how VUA defines outstanding research and teaching. The core values of VUA are:

- 1. Responsible:** VUA works in the service of society. The key value of 'responsibility' underpins the choice of subjects taught and researched at VUA, all of which are relevant to the major societal themes of today in both the local (Amsterdam) context and beyond. It underpins the education that students receive, fostering a sense of service to each other and to society. The form and content of our education programmes encourage our students to take a clear position in the world, remaining open to other people and ideas.
- 2. Open:** VUA is open to diversity in disciplines, nationalities, ideologies and social convictions. The university aims

to be an inspirational meeting place where people work to establish links between disciplines, cultures, religions, social convictions and personal choices in an environment of mutual respect. Encounters with those of different beliefs and backgrounds give rise to new insights, innovations, focus and academic excellence.

**3. Personally engaged:** VUA is an academic community in which each member is fully acknowledged. Each must be able to develop his or her full potential while at VUA. Personal interaction is always marked by respect while also demanding engagement and moral integrity.

VUA today is a comprehensive institution with firm roots in research and education and is one of the leading research universities in Europe.

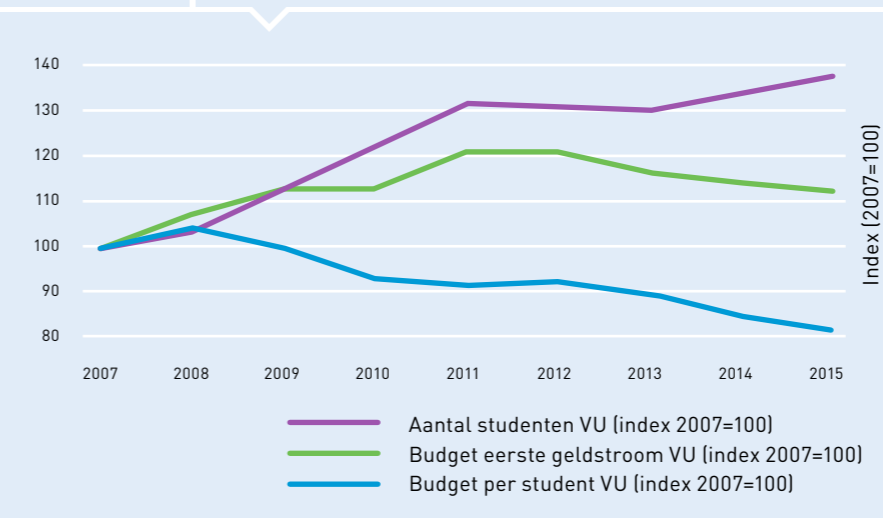
## 1.2. STRATEGIC PLAN 2011-2015

The VUA Strategic Plan 2011-2015 charts the course along which the university will be guided during the years. It includes its ambitions, objectives and policy measures in relation to research, undergraduate and graduate education, internationalisation, operations and the university's premises. The university adopts a recognizable profile in line with its educational and research priorities, serving its identity and core values. The Strategic Plan has given us a unique preposition for the institutional profile and performance agreement. The Strategic Plan, together with the profile and final agreement between the Ministry and VUA, will be the guideline for the VUA in the coming years.

Meanwhile, the number of students entering higher education in the Netherlands will likely continue to grow until 2020 due to the demography, where after decline is expected. Yet the government funding for education and research per student decreases, as is

FIGURE 1

GROWING DISCREPANCY BETWEEN RESEARCH AND TEACHING BUDGET (PER STUDENT) SINCE 2007



reflected in figure 1. External funding sources for both education and research will gain increasing importance.

In order to respond to this and other developments, VUA has determined a 'Vision for VUA 2025', based on internal and external developments and the university's identity. In accordance with this vision VUA will profile itself:

- as a strong research university, performing leading international research that makes an important contribution towards solving major societal issues;
- by means of a nationally and internationally competitive range of graduate research and academic programmes;

- as a scientific and academic education institution serving students and employers within the greater Amsterdam region and collaborating with other knowledge institutions in the region. VUA provides solid and structured academic training to students with pre-university qualifications (the Dutch VWO school diploma), developing them into critical and socially engaged scientists and scholars;
- by virtue of its unique character. The university's three core values inspire and inform all education and research activities and are reflected in day-to-day interaction between staff and students.

Over the years VUA has already made choices in its research profile. By doing so, the university has realized a substantial increase in productivity, as the table below shows in a number of key figures. This creates the confidence and trust that the VUA also in the year to come can fulfil its ambition, retain and further strengthen its international standing in the context of its immediate economic region, Amsterdam.

TABLE 1

KEY PERFORMANCE INDICATORS SINCE 2002

VUA Facts & figures	2002	2011	Growth
Students	15.777	25.063	+59%
BA programmes	44	50	+14%
MA programmes	91	97	+7%
Academic publications (excl. PhD dissertations)	4985	6870	+38%
PhD dissertations	206	324	+57%
Academic staff (FTEs, excluding the VUmc)	1658	2153	+30%
Turnover in M€1 (excluding contract research at VUmc)	344	459	+33%



# 2

## THE AMSTERDAM ACADEMIC ALLIANCE



 UNIVERSITY OF AMSTERDAM

 VU UNIVERSITY AMSTERDAM

### 2.1. GLOBAL TRENDS IN HIGHER EDUCATION: THE MAIN RATIONALES FOR COLLABORATION

VU University Amsterdam (VUA) and the University of Amsterdam (UvA) are both located in the capital city, but they have distinct institutional histories and profiles. As comprehensive universities, they both demonstrate strong research performance and growth in the student market. Yet they believe the global changes in higher education require greater collaboration if they are to continue to compete in the international top.

Joining forces seems particularly necessary since:

- The impact of globalisation in higher education leads to increased competition for financial and human resources.<sup>1</sup> The capacity to attract R&D funding and the most talented academics at the international level is a key to growth in academic performance and competitiveness.
- Global challenges such as health and the quality of life, energy sustainability, and food security put new demands on universities, as does the Knowledge Economy's need for innovation in order to spur the creation of jobs and economic growth.<sup>2</sup> Global challenges require them to develop interdisciplinary approaches and to interact more effectively with key stakeholders in industry and government.
- A further differentiation in the mission and provision of higher education is needed in order to better respond to the increasingly diverse needs of students, employers, business and industry, and society at large.

The need for further differentiation in higher education systems is recognised in Europe.<sup>3</sup> The OECD found the Dutch higher education system to have an insufficient level of differentiation, where excellence in particular is underrepresented and the international dimension needs to be enhanced.<sup>4</sup> Consequently,

advice was obtained from the Veerman Committee,<sup>5</sup> on the basis of which the Ministry of Education, Culture and Science published its White Paper entitled *Kwaliteit in verscheidenheid* (Quality in Diversity)<sup>6</sup> and launched its new policy to stimulate diversity in the higher education sector.

The OECD review of the higher education sector in Amsterdam<sup>7</sup> provided a closer look at the issues listed above. It concluded that:

- By making targeted investments in human capital, the Amsterdam region can greatly enhance its innovative potential. A large supply of highly skilled workers will help attract and retain firms and investment in the region.
- In that respect, higher education institutions should be considered as major agents of economic growth and a driving force for the creation of new products and new companies.
- Moreover, the higher education sector should be seen as a key to growth and sustainable development, and Amsterdam, with its strong global image, can be seen as an education hub with the city as its central attraction.

More specifically, with respect to UvA and VUA it stated that:

- The research universities must continue to aim for focus and to build centres of excellence in the fields of their research activity. Individually they are not strong enough to be world leaders, but collectively they can make a significant impact in selected areas.
- To this end, they should also amplify their internationalisation strategy to resonate with the global city formation process, and intensify their relations with business and industry through knowledge clusters and technology transfer activities.

These observations and recommendations resulted in the creation of the Amsterdam Economic Board (AEB),

which concentrates on seven knowledge clusters and has adopted the Triple Helix model<sup>8</sup> (see chapter 4).

### 2.2. THE AMSTERDAM ACADEMIC ALLIANCE: AIMS AND AMBITIONS

The concentration of academic institutions in Amsterdam provides a unique infrastructure. Amsterdam has two well-known comprehensive universities, both with large University Medical Centres. In addition, Amsterdam is home to a large number of publicly funded research institutes belonging to the Netherlands Organisation for Scientific Research (NWO) and the Royal Netherlands Academy of Arts and Sciences (KNAW), as well as to several medical research centres such as the Netherlands Cancer Institute (NKI) and Sanquin, the blood research foundation. Together these institutions employ some 7,500 scientists, or – if one includes the teaching staff of the art academies and universities of applied sciences (hogescholen) – nearly 10,000.

UvA and VUA will endeavour to mobilise this potential through the Amsterdam Academic Alliance (AAA). The aim of the AAA is to make Amsterdam a hub for international competitiveness and academic excellence.<sup>9</sup>

The results envisaged are:

- Attracting more, highly talented students and academics from around the world;
- Attracting more competitive research funding from European and other external sources
- Providing a stronger knowledge base for the region, in terms of relevance for the innovative potential of business and industry, i.e. the creation of new products, companies and jobs.;
- Delivering a larger and better-qualified supply of higher education graduating to the regional workforce to attract and retain firms and investment in the region.



The profiles of both universities are complementary as shown in Figure 3. It illustrates the breadth of the AAA's knowledge base, and thus provide a natural basis for joining forces as well as possibilities for further focusing, for instance in (grand challenges) areas such as health and sustainability. The envisaged co-operation within AAA will support this.

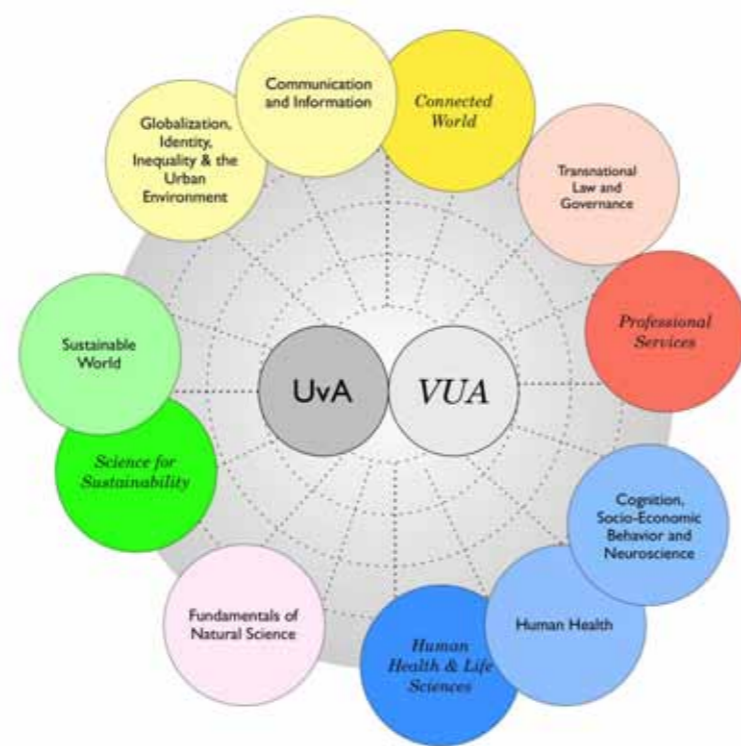
### 2.3. THE SCOPE OF THE AAA

Collaboration within the AAA will directly involve UvA, VUA, their respective University Medical Centres, the AMC and the VUmc (the latter two of which have already explored their joint potential) and the Amsterdam university of applied sciences, the Hogeschool van Amsterdam (HvA). The other partners are the Amsterdam-based research institutes of the NWO and the KNAW, the other Amsterdam universities of applied sciences and several medical research institutes such as the National Cancer Institute and Sanquin.

The Alliance in no way excludes partnerships with university departments elsewhere. On the contrary, it strengthens the position of Amsterdam in such (inter)national research programmes. For example, with respect to the Humanities and for reasons of complementarity and effectiveness, cooperation is being sought with Utrecht University, particularly where research and teaching in the fields of Media Studies, Languages and Culture is concerned.

In launching the AAA, the two universities have indicated it is not their intention to prepare a merger. Both are large and comprehensive institutions which, especially at the level of undergraduate education, have too many students to expect a qualitative advantage as a result of a merger. But they have already shown that selective Bachelor's programmes designed to promote excellence, such as the Liberal Arts and Sciences programme offered by the Amsterdam University

FIGURE 3 COMPLEMENTARY RESEARCH PROFILES OF UVA-VUA



College, are best done together.

It is a different matter, however, at the graduate level. Here, the complementary profile in research provides a natural basis for joining forces. Students should have easy access to courses from both institutions, and thus benefit from a broader range of choices. There are already many examples of successful collaboration between research groups. Today, the two institutions should look very closely at where more formal collaboration might offer opportunities for true improvement. This will most likely be at the level of joint Graduate Schools and, occasionally, the integration of faculties. UvA and VUA already have past experience in both modes of collaboration, and have demonstrated their ability to achieve international excellence, for example in:

- the Tinbergen Institute, a graduate school involving the UvA, the VUA and Erasmus University Rotterdam, which has been able to attract a large number of excellent students

from abroad to take their research Master's and PhD programmes in Amsterdam;

- ACTA, the joint UvA-VUA dentistry faculty, which now is one of the most prominent in Europe.

UvA and VUA will build on this experience and, in the coming five years, expect to undertake more such joint ventures. To stimulate the rapid international positioning of such institutions, they will provide Triple A Fellowships to attract young faculty members from abroad.

The first concrete steps in AAA cooperation will involve:

- The intended integration of the Science faculties, which step represents a key pillar of the AAA. The integration will create unity among strong disciplinary nuclei that will feed interdisciplinary research and teaching within and outside the realm of Science and that will prevail at the top end of the value chain ('from idea to artifact'). The new joint venture,

the Amsterdam Faculty of Science (AFS), will involve 9,000 students, 3,000 staff and an annual budget of about € 250 million. This budget is an estimation, based on the status quo of the current faculties of VUA and UvA. The AFS will be the largest Science cluster in the Netherlands and thus well-positioned to build alliances with the best Science centres in Europe. Size is not a goal in itself, but in Science size matters. Size makes it feasible to perform and sustain top-class research over the broad range of disciplines in Science (Physics, Chemistry, Biology, Ecology, Geology, Informatics, Mathematics, Astronomy) and of the 'grand challenge' themes (such as Sustainable Earth, Astroparticle Physics, Cognitive Science, Human Health and Life Sciences, Globalisation and ICT, Connected World). The AFS will benefit from premium locations near the Academic Medical Centers and the Amsterdam Science Park, where connections can readily be made with existing NWO research institutes. From a unified view of nature in the 19th century, the different Science disciplines diverged in the 20th century. But in the 21st century they will again focus on the mutual exchange and benefit between the disciplines. Biochemistry and Medicine, Behavioural and Brain Research, Language and Computational Logic are all growing towards each other. The AFS will strengthen the relations with other fields, such as Medicine, Behavioural Science, Humanities and Economics. Its aim is to become a comprehensive cluster of the fundamental sciences that will have an impact on all disciplines and partners in the value chain.

At the undergraduate teaching level, the size of the AFS will enable it to offer the best programmes in all of the Science subjects as well as interdisciplinary programmes such as Biomedical Sciences, Health Sciences, Psychobiology, Earth Sciences & Economics, or Science Business

Innovation. With these programmes, the AFS will benefit not only the regional market but also the human capital agenda of the Netherlands as a whole. With largely English-taught graduate programmes, the AFS aims to play a strong role in Europe based on its extensive research. Located in Amsterdam and cooperating with partners across Europe, the AFS will be highly attractive to international graduate students. Hence, establishing the AFS will lead to an efficiently adjusted educational profile for the science disciplines in Amsterdam.

The critical success factors of the AFS will be: to establish a strong, research-driven management and budget structure under one dean; to connect to the needs of business and government in the Amsterdam Economic Board (AEB), 'top sectors' and European roadmaps; to devise a support structure which bridges the existing differences between the UvA and the VUA with respect to their IT systems and internal organisational structures.

The extremely positive experience with the implementation of the national 'Sector Plan' for Chemistry & Physics, whereby the UvA and the VUA proposed an integral plan for both research and study programmes in these two major disciplines, suggests that the creation of the AFS will be a milestone in the development of these two Amsterdam universities.

- In order to strengthen the health cluster, the AMC and the VUmc agreed, in a Memorandum of Understanding (MoU) on 14 September 2011, on an innovative agenda for collaboration, allowing them to focus on a competitive advantage that will result in a concentration, lateralisation and coordination of tertiary clinical care and the inherent research and teaching. In terms of size, the AMC and the VUmc together are unrivalled in the Netherlands and can compete with the best academic medical centres in Europe. The AMC-

VUmc alliance will concentrate on three principal objectives:

- The creation of thematic centres of excellence in research and top care, building on existing mutual and complementary strengths and specialisations so as to attract the best national and international talents to the PhD programmes;
- The enhancement and sustainability of the quality, accessibility and efficiency of the highly complex but low-volume segments of medical care;
- The intensification of the coordination in acute care for the northwestern region of the Netherlands, taking into account the preconditions regarding availability and security. The 2011 MoU identified 13 focus themes around which their cooperation will be further explored and intensified. Between now and 2015 this may lead to different forms of cooperation or coordination or to the start of a joint venture, depending on each theme's characteristics.
- In other fields of interest, the AAA will facilitate the establishment of joint graduate or research programmes in those areas where a leap in quality seems to be within reach. By thus creating several joint graduate schools we will ensure that Amsterdam continues to offer a first-class teaching and learning experience to both national and international students, and also in particular represents a clear contribution to the national Human Capital Agenda. These graduate schools will be characterised by a strong link between research and teaching, an international dimension and a transparent admissions policy. Wherever KNAW and NWO research institutes contribute to a leap in quality they will be invited to join. The development of these joint graduate schools may vary in tempo and organization by discipline.
- The creation of a postgraduate Amsterdam School of Business and Law, incorporating the existing Duisenberg



School of Finance, will be an asset to Amsterdam's position as the city hosting the most corporate headquarters in the Netherlands.

- As part of the AAA, the UvA and the VU will set up an AAA Fellowship Programme.

The purpose of the Program will be to provide up to three or four years' worth of start-up funding to talented and promising research leaders from abroad, thus enabling the Amsterdam Faculty of Science and other joint UvA-VUA AAA initiatives to give new impulses to their research in Amsterdam. The AAA Fellows will be expected to take part in research as well as excellence tracks in undergraduate and research Master's programmes. This would require a Program in the order of € 15-20 million per annum, based on an average of five 3-to-4-year fellowships, averaging € 1 million per annum.

#### 2.4. DIRECTIONS AND CHALLENGES AHEAD

In the coming period, the UvA and the VUA will take the results of the bottom-up process carried out over the past year in cooperation with the faculty deans, to the next stage.<sup>10</sup>

Key activities will be guided by the Letter of Intent (see also annex 1 Letter of Intent UvA and VUA) and the AAA's mission, vision and strategic narrative. These will include:

- The establishment of a programme management structure;
- The development of governance arrangements;
- Continued consultation with internal and external stakeholders (including the assessment by the Review Committee on Higher Education and Research);
- A review and revision of the present proposal and the business case;
- Internal and external approvals;
- A final implementation plan (short-medium term), including provisions for monitoring and evaluation.

In this process, the bottom-up involvement of faculty deans will be con-

tinued through participation in joint working groups, which will function under a Steering Group consisting of the two university boards, supported by advisory and executive members of the programme management.

The complexity of the process is acknowledged and will require special attention. The AAA process will consist of different projects (e.g. AFS, joint graduate schools), each with their own scope and pace. At the same time, cohesion and transparency will need to be ensured. A partly incremental approach will allow for differentiation between the different projects and for developing greater focus in, for instance, research themes. Synchronised approaches will be necessary to achieve a timely integration of financial, HR and IT systems, and to allow for a rationalisation of the education provision, e.g. through joint degree procedures.

#### 2.5. FINANCIAL IMPLICATIONS

During the past year, UvA and VUA analysed and concluded that their combined production and impact is sufficient in size and breadth to assure that Amsterdam can claim a position among the top institutions of the European knowledge society, providing three conditions are met:

- The complementarity of UvA and VUA will be exploited in the AAA to achieve a leap in quality;
- The cooperation will extend to other scientific partners in the region; and
- Adequate funding will be available.

A comparison with the funding available to top universities across Europe reveals that the AAA must set for itself the following targets for extra future funding:

- A considerably larger return from private tuition fees (bovenwettelijk collegegeld en contractonderwijs), in the order of € 25 million per annum;
- An increase in its share of EU funding, in the order of € 5 million per annum;
- A pro rata share in the increase of EU research funding under Horizon

2020, in the order of € 10-15 million per annum;

- A fair share in funding from the NWO, in the order of € 5 million per annum;
- A considerable increase in the income from joint research with industry, in relation to the Strategic Plan's vision of value creation from research, in the order of € 20 million per annum.

However, the teaching and research base of the universities depends on the direct government grant. To make the above targets possible, the direct funding will have to increase by about € 25 million per annum. The UvA and the VUA are therefore applying for:

- € 20 million from the 2% selective budget available under the White Paper;
- A matching grant of € 10 million per annum from the City of Amsterdam and the province of North Holland, for at least the period 2013-2016.

If granted, these monies will constitute a solid basis for achieving the aims set by the AAA. Initially, a portion of the funds will be needed to cover the costs of transition, integration and upgrading, and for positioning the Amsterdam Faculty of Science, the joint graduate schools and other structural UvA-VU initiatives. However, these costs are estimated at € 50-60 million in total, so that half of the extra investments will be covered by the Ministry of OCW, the City of Amsterdam and the province, while the other half will be covered by both universities. From the outset, a significant proportion of the total budget will also be invested in the AAA Fellowship Program, in new facilities to attract AAA fellows and in the support of research consortia which also receive EU and/or industry funding. This estimate does not include investment in new buildings.

As the founding partners of the AAA, the UvA and the VUA are confident that this exciting venture will be successful in ensuring that Amsterdam, and thus the Netherlands, retains its position in the academic top league.



3

## PROFILE OF THE VU UNIVERSITY AMSTERDAM



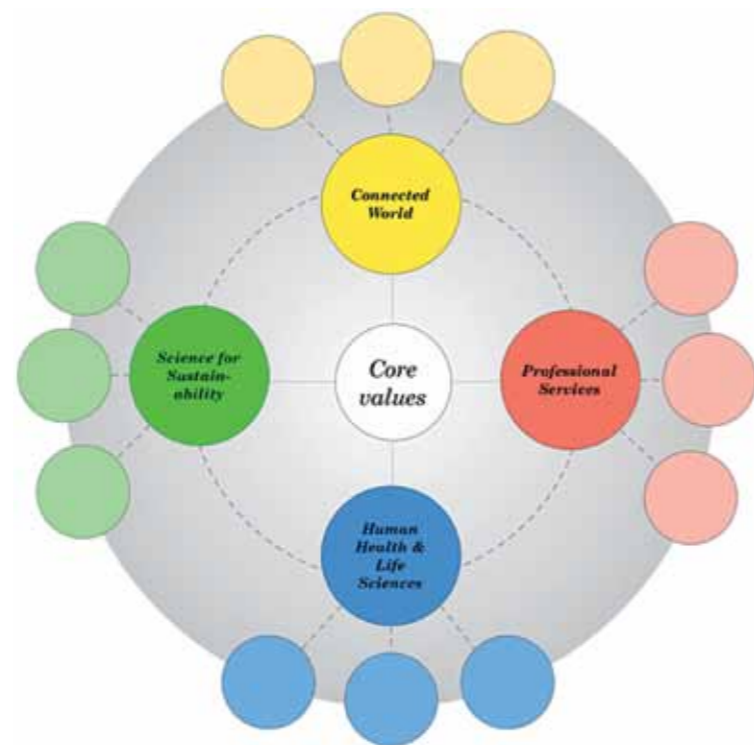
### 3.1. VUA IN FOUR THEMES

VUA research and education will be presented through four themes. These themes are inspired by the university's core values, as anchored in societal relevance and interdisciplinarity. Showcasing activities along these four distinct themes will enable us to provide a clear window onto the university for businesses, government, students, researchers, grant providers and other partners.

The themes are not only interdisciplinary in nature, but are also linked across different academic disciplines within VUA and VUmc in order to reinforce each other. In order to encourage and accommodate interdisciplinary research, the university has established interdisciplinary research institutes (IRI) in which researchers can meet, share their expertise and join forces in the acquisition of external funding (see also chapter 5 on Research). Accordingly, the IRI's are linked to the themes and reinforce the development of each of the four theme. Annexes provides an overview of the IRI's existing at VUA.

The four themes are:

1. Human Health and Life Sciences (H2LS): translational research and teaching in the area of health and life sciences, from single molecules to the individual and human society.
2. Science for Sustainability (S4S): multi-, inter- and transdisciplinary research and teaching in the area of sustainability, focusing on energy, scarcity, climate and governance.
3. Connected World (CW): various facets of the 'network society': the technology making these changes possible, the accompanying structural, social and cultural changes, and the consequences for the world around us.
4. Professional Services (PS): centred mainly within the faculty of Law and faculty of Economics and Business Administration, with teaching and



research in the area of financial and business services and with a special focus on the Amsterdam Zuidas district.

The four themes vary in size, both in research as in education. The following table shows the number of researchers and students present within the four themes.

TABLE 2	NUMBER OF RESEARCHERS AND STUDENTS WITHIN THE THEMES		
	RESEARCH ACTIVITIES	EDUCATION <sup>11</sup>	
		FTEs	BACHELOR
Human Health and Life Sciences	1059	5,320	2,511
Science for Sustainability	212	904	594
Connected World	327	3,253	2,318
Professional Services	129	5,266	2,814
<b>TOTAL</b>	<b>1728</b>	<b>14,745</b>	<b>8,238</b>

Source: 'Interdisciplinaire Onderzoeksinstituten VU jaarverslag 2010' (2010 annual report of VUA's interdisciplinary research institutes) and 'Onderwijsstatistiek 2011-2012 VU' (VUA education statistics 2011-2012)

The four themes have also led to a high level of research performance. The table below shows research outcomes in 2010 within the four themes based on the recognition by prestigious talent programmes en quality assessment according to the SEP protocol .

TABLE 3		RECOGNITION BY PRESTIGIOUS TALENT PROGRAMMES			
		H2LS	S4S	CW	PS
NWO	VENI	40	17	15	11
	VIDI	22	19	6	3
	VICI	10	8	3	1
	Spinoza	2	1		
	Aspasia	8	3	5	
	European Young Investigator Award		1		
KNAW	Academy professor	1	1	1	
ERC	Starting	4	4	5	1
	Advanced	1	2	2	2
Erasmus Mundus Joint Doctorate Programme		2			
Huibregtsen Award			1		
SEP Protocol		Majority of 60 programmes rates very good, 22 rate very good – excellent and 8 rate excellent.	24 research programmes, 11 rate very good, 12 rate very good to excellent	21 of the 33 research programmes were rated as very good to excellent.	21 of the 33 research programmes were rated as very good to excellent.

Source: Annual report VUA 2010; SEP research visitations [reference]

### 3.2 HUMAN HEALTH AND LIFE SCIENCES (H2LS) THEME

H2LS focuses on solutions for problems across the broad field of disease and public health and links all VUA, VUmc/GGZinGeest and ACTA research and education activities in this field. Areas of particular emphasis are neurosciences, oncology, cardiovascular, human movement and prevention and participation that link up with the patient care specializations at VUmc. Research in the H2LS theme reflects the paradigm shift in this domain, from a focus exclusively on disease and care to also on behaviour and health.

Representing a unique concept in the Netherlands and all of Europe, H2LS pursues a clear profile in education and research, together with innovative organizational structures that respond to the needs of both present-day society and generations to come. All research activities are organized within the interdisciplinary research institutes, which also develop educational content, primarily for the master's programmes.

#### VUA PARTICIPANTS IN H2LS

There are tangible shared links and collaboration between (pre-)medical disciplines and between VUmc researchers and VUA faculties (sciences, human movement sciences, psychology & education and dentistry). All research is localized at the compact VUA/VUmc campus. As part of the new building project launched in early 2012, most of the laboratory-based VUA/VUmc research within the H2LS domain will be gathered under one roof in the OI2 building. This building will be connected to the ACTA building and the VU Medical Imaging Centre.

H2LS brings together the following interdisciplinary research institutes with the area of specialisation (in alphabetical order):

- ACTA research institute  
Oral infections & inflammation and bioengineering, reconstruction and function recovery of dental tissue and bone.
- AIMMS, Amsterdam Institute for Molecules, Medicines and Systems  
Molecular mechanisms of biological

processes, design and characterization of molecules and medicines and biomarkers and diagnostics.

- CCA/V-ICI, Cancer Centre Amsterdam/ VUmc Institute for Cancer and Immunology Oncogenesis, immunopathogenesis, disease profiling, innovative therapies and quality of life.
- EMGO Institute for Health & Care Research (EMGO+)  
Lifestyle, overweight & diabetes; mental health; musculoskeletal health; quality of care.
- ICaR-VU, Institute for Cardiovascular Research  
Improvement of cardiac function in heart failure and improvement of vascular function in metabolic diseases.
- LaserLaB, Institute for Lasers, Life & BioPhotonics Amsterdam  
Development and application of novel optical methods, techniques and instruments to study the interaction between proteins, DNA, cells and tissue.
- MOVE  
Study of biological movement in health and disease; regenerative me-



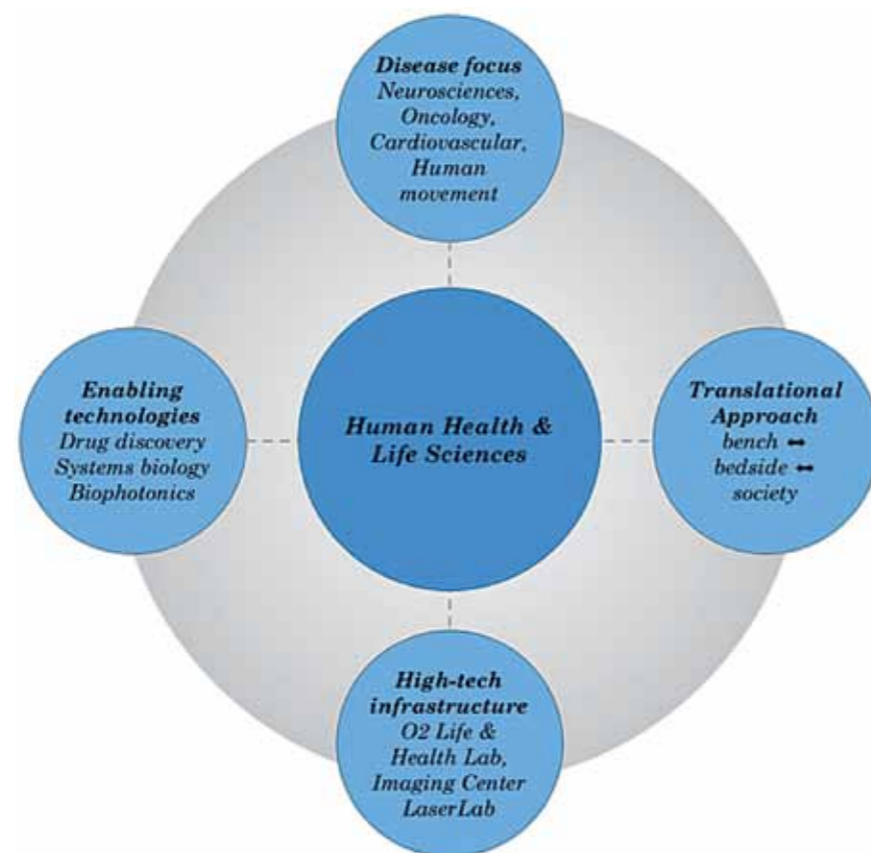
dicine, rehabilitation and sport.  
 – Neuroscience Campus Amsterdam  
 Brain disease, mechanisms, genes,  
 and the brain and advanced technology

There are clear areas of interface and overlap between the different research institutes, making it possible for staff based at fundamental research institutes like AIMMS and LaserLaB to work closely with those at institutes such as the CCA/V-ICI and NCA, which focus on disease and disease-related processes or for researchers at the ACTA research institute to take part in MOVE. At the other end of the translational spectrum the EMGO+ institute contributes, in close collaboration with ICaR, NCA and MOVE, to evidence-based prevention and care by gathering and spreading knowledge with high societal relevance.

Applied research on health promotion through physical activity and sports in EMGO+, as well as on talent development and performance enhancement in sports in MOVE, will be organized in the Netherlands Institute for Sports Science and Innovation (NISSI), with support of NOC\*NSF. The VU and the RUG are principled, founding partners of this national knowledge network, in which various other universities and universities of applied sciences participate and in which the best sports science research and innovation in the Netherlands will be assembled and coordinated. NISSI also aims at improving knowledge utilization and business creation in this domain.

The H2LS cluster also has established collaborative links with other VUA departments, from Law to Economics to Philosophy, e.g. in areas like health law, - economy and - ethics.

*Top international facilities (crown jewels)*  
 The research institutes participating in H2LS have compiled highly valuable databases and biobanks on renowned long-term longitudinal cohort studies:



Twin Register, LASA (longitudinal research on ageing), NESDA (with GG-ZinGeest: research on anxiety and depression), Hoorn Study (diabetes). They also house chemistry/pharmacology libraries with invaluable collections. A recent (2011) bibliometric analysis of the Dutch university medical centre's conducted by the CWTS showed the VUmc and Erasmus MC tied at first place, and further that the impact of VUmc research reflects its multidisciplinary perspective and continues to grow. From 2014, the VUA medical imaging centre will offer top quality in research and patient care, as well as integrating part of the nation's only Laser Centre, which is part of VUA's Faculty of Sciences. In addition, the VUA/VUmc campus is home to the headquarters of the European Advanced Translational Research Infrastructure in medicine (EATRIS).

#### EDUCATION RENEWAL

In fostering access to VUA knowledge, H2LS plays a key role in the resolution of major issues facing society. As soon as students go to study in the H2LS

domain, they also become very closely involved in making such contributions and are trained to be guided by this approach and mindset. Bachelor's students can explore the broad domain of health and life sciences, and can also opt to prepare for follow-up programmes: academic masters, research masters and professional masters (BIG-registered occupations). To facilitate this, Bachelor's programmes in the H2LS domain will be structured along flexible lines, with a H2LS core among the VU academic core, a major and optional electives and specialization. Alongside majors in individual disciplines, VUA will create a limited number of new interdisciplinary majors. Research at the H2LS research institutes will provide content for honours programmes in the H2LS domain. Research masters and PhD-programmes have a strong link to the H2LS research institutes.

#### 3.3. SCIENCE FOR SUSTAINABILITY

Achieving sustainability in resource use is the only path to a sustainable



Md/PhD

MA

BA

future for mankind. It requires the production of fundamental new knowledge of the biological, chemical, and physical aspects of generating and using nature, energy, nutrients, minerals, metals, and water. Importantly, it also cannot do without a parallel improvement in our understanding of the social, economic, and political aspects that may bring about the necessary changes and transitions in human behaviour and society.

S4S has four core themes:

- Climate: climate change, including adaptation and mitigation; natural and cultural heritage.
- Scarcity: minerals, nutrients, nature, biodiversity, food, land (including valuable cultural landscapes), and water and water management.
- Energy: both sustainable use and supply of current systems, transitions to different energy systems, photovoltaics, photosynthesis.
- Governance and policy: new agreements, natural and cultural heritage, arrangements for sustainable use of resources.

A unique feature of VUA's S4S-based programmes is that fundamental knowledge is tied to knowledge about implementing change in society. This means each core theme within S4S extends across the entire chain from fundamental research to applied research to application (and vice versa), and both in past present and future. From the disciplinary building blocks

of the sciences involved, a multifaceted approach is built that provides the basis for multi-, inter- and transdisciplinary approaches. The education programmes that will be offered within the S4S domain will be guided by this approach.

VUA participants in S4S

The following interdisciplinary research institutes take part in S4S:

- The Amsterdam Global Change Institute  
 Climate change and ecohydrology; Ecology and ecosystem service assessment; Environmental economics and responses to climate change; Governance and policy studies; risk analysis chemistry and genomics; spatial analysis and resources management.
- CLUE, the research institute for the heritage and history of the Cultural Landscape and Urban Environment  
 The impact of environment and climate on cultural heritage, the value of heritage in the context of spatial, cultural and economic transformations; Landscape and urbanization in a European perspective; Water and water management: 'history matters';
- The LaserLaB - Energy  
 Development and application of novel optical methods, techniques and instruments to study the process of photosynthesis to develop more efficient solar cells or biofuels.
- AIMMS, the Amsterdam Institute for Molecules, Medicines and Systems  
 Research into new synthetic me-

thods, reagents and catalysts, and development of reactive intermediates aimed at the sustainable use of chemicals.

Additional partnerships are with the Athena Research Institute and research groups at the faculties of Psychology & Education, Economics & Business Administration, Social Sciences, Law, Philosophy and the Centre for World Food Studies (SOW).

#### EDUCATION RENEWAL

VUA is currently investigating options for developing a broad, flexible Bachelor's programme in the area of sustainability. The new programme will be structured along flexible lines and will allow cross-fertilization between disciplines. This will enable students to choose their own pathway that matches their personal interests and to take a comprehensive curriculum in the field of sustainability studies, i.e. a curriculum that covers virtually all topics that professionals in the field are expected to master and also equips them to pursue further specialization in a Master's programme in Amsterdam or elsewhere in the world. Sustainability studies are by their very nature multidisciplinary. It is therefore typically an area in which an interdisciplinary flexible bachelor will add considerable value.

#### 3.4. CONNECTED WORLD

In today's increasingly globalized and digitized world, people, businesses,

government organizations and knowledge institutes are more interconnected than ever. Due to the increasing connectivity on a global and European scale - socially, geographically, technologically, culturally, legally and economically - we are living in a 'Connected World'. This development radically influences for instance how our economies and businesses operate, the role of the nation state, how people communicate, how we approach the past, it influences our language, as well as the way in which we raise and educate the young. Fundamentally it influences society, our view of humanity and our interpersonal relationships as people have countless possibilities for building relationships all over the world.

Increasing global connectedness and dependence create a dynamic environment, but also give rise to frictions and create new risks. Immigration, changes in the labour market, and safety and security issues demand policy measures that redraw existing social, economic and legal boundaries.

Researchers in Connected World study various aspects of the 'network society' and, working across the humanities, social sciences and natural sciences, their approach is unique in the Netherlands. They investigate the structural, societal and cultural changes, the consequences for the world around us, and the technology these changes make possible. Connected World looks at connectivity at every level, from the micro level of the individual to the macro level of society. Research in this area is quintessentially interdisciplinary, drawing on contributions from the realms of social sciences, humanities, philosophy, informatics, theology and religious studies, psychology, pedagogical sciences, law and economics. As such, the domain attracts students with diverse backgrounds and interests.

Research questions addressed within the Connected World domain include:

- How do digital media facilitate new and better forms of communication and interaction?
- Which information technologies will take us to the next step in the development of the Connected World? And how do behavioural patterns determine technological digital media innovations?
- How do globalization, digitization and developments in the creative industry influence our perception of the past and the way we treat heritage in our living environment?
- How do developments such as digitization and globalization influence our outlook on life and how can we draw on our life-outlook to reflect on the best way to handle these developments?
- How do we identify solutions to immigration, safety and security issues arising from our Connected World and how do we translate these solutions into integration and anti-crime policies?
- Do new social and technological networks help improve public administration, or do they actually undermine democratic legitimacy?
- Is the Connected World really for everyone? Or does it create new divisions within society and between people? What do the changes mean for the governance of society, the welfare state and the labour market?
- How do education and upbringing contribute to child and adolescent personal development in the Connected World?

The humanities and social sciences have also been caught up in the push towards expanding computerization. Where previously there was the rise of e-Science, parallel developments are now taking place in the humanities and social sciences (e-Social Science, e-Humanities). We are seeing increasing possibilities for taking quantitative measurements in large-scale populations and for creating computational models of social structures. At

the same time, a growing number of contemporary and historical cultural creations are becoming available in digital form. In turn, these new measurement and observation methods are giving rise to yet new large-scale data analysis techniques.

#### VUA PARTICIPANTS IN CONNECTED WORLD

VUA has a number of research institutes working in the domain of Connected World:

- Network Institute  
Researchers study technical, economic, social and communication-related aspects of networking.
- Phoolan Devi Institute  
Security and measures to fight crime are the object of research. Researchers work closely with the NWO's Netherlands Institute for the Study of Crime and Law Enforcement (NSCR), which is based at VUA.
- Migration and Diversity Centre  
A central question of research is: how does the process of migration give rise to tensions between citizenship and human rights. Researchers study migration and diversity from both a contemporary and a historical perspective.
- LEARN!  
Knowledge and expertise in the field of education. VUA also explores the (non-excluding) collaboration between the teacher training at VUA and the universities of applied research Inholland, IPABO and Windesheim.
- VUA Institute for the study of Religion, Culture and Society (VISOR)  
Research into the dynamic between religion, culture and society, focusing on religion's role in the public domain past and present. VUA works closely in both education and research with the Protestant Theological University (PThU), which is to take up premises in 2012 on the VU campus. This collaboration will enable VUA to strengthen its position in academic education and research

concerned with religion and conviction. The Protestant Theological University (PThU) is also increasingly an important participant in VISOR.

- CLUE: interdisciplinary research on modern-day and historical transformations of the cultural landscape and urban environment. How the treatment of landscape and heritage are effected by globalization, new media and international tourism.
- The VUA Center for Work, Care and Welfare studies the socio-economic and institutional implications of the new social risks within the welfare state. The institute aims to defend against the 'new social risks' and achieve a balance between 'social protection' and 'social promotion' in implementing the institutional changes needed by acquiring knowledge over participation, social security and public management.

#### EDUCATION RENEWAL

The Connected World theme ties in closely with the academic core that is to become part of all Bachelor's programmes. This academic core forms the foundation of students' academic training, with most subjects taught by the faculties involved in the CW theme. VUA aims to develop a joint Bachelor's in Philosophy, Politics and Economics and two joint minors in Web Science and e-Humanities with the potential to grow into full-fledged programmes.

Bachelor's programmes offered at the Faculty of Arts will be reduced from the current 12, with the remaining programmes to become more flexible. Apart from eliminating certain Bachelor's programmes, a number will be taught in closer collaboration with the UvA, and seven will be merged to form four new, broader programmes: (1) Media, Art, Design and Architecture; (2) Communication and Information Sciences (CIW); (3) Literature and Society and (4) History. The Faculty of Social Sciences is considering reorganizing its Bachelor's programmes along similar lines. From 2012 onwards, the MA

programmes of the department Ancient Studies of the Faculty of Arts will merge within the newly established Centre for Archaeology and Ancient Studies (ACASA) with the counterpart MA programmes at the University of Amsterdam. From 2012 the CROHO-labels of the MA programmes in the Humanities will be reduced (see also annex 2).

#### 3.5. PROFESSIONAL SERVICES

The thematic domain of 'Professional Services' focuses on legal, business and economic aspects of the provision of financial and other services, with a special emphasis on:

- the financial and business services sector, together with their legal and economic frameworks (including supervisory bodies) and the climate for businesses (including financial sector) in which these services are provided;
- the actual businesses that supply (professional services firms) or buy these financial and professional services.

Professional Services is a key theme for the Amsterdam region. The Amsterdam Economic Board has designated 'Financial Services' as one of its seven knowledge clusters. For an active hub of internationally organized professional financial services, one needs to look no further than Amsterdam's Zuidas district. Where VUA once lay at the periphery of Amsterdam, today the university is at the heart of Zuidas, where some 30,000 people were already working in 2011, and a further growth is envisaged to as many as 80,000 before long. Zuidas comprises a cluster of head offices of multinational corporations, banks, asset management companies, law firms, accountancy firms and other professional and financial service providers.

Professional service providers account for the largest number of jobs (around 60%) and the largest share of GDP (around 70%) in the Netherlands today. The sector's role in improving effici-

ency in various industries furthermore provides a positive impetus for economic development. Professional service providers are among the most profitable businesses in the world, play a valuable part in knowledge development, fulfil a public role in representing their clients and third parties, and contribute to public prosperity by enhancing the quality of life.

#### VUA PARTICIPANTS IN PROFESSIONAL SERVICES

Programmes at the faculties of Law and Economics and Business Administration already include a focus on financial and professional services, and in recent years have built up a strong presence at Zuidas, launching a 'Zuidas MA' and the Zuidas Institute for Financial Law and Company Law (ZIFO). VUA's Business Administration curriculum has been keyed to professional services from its inception. In cooperation with the UvA, Professional Services also has close ties with the following:

- Duisenberg School of Finance (DSF)
- Tinbergen Institute (TI)
- Amsterdam Centre for Service Innovation (AMSI)
- Amsterdam Business Research Institute (ABRI)

A significant share of VUA professors, researchers and lecturers in the fields of economics and law also work part-time in the financial or professional services sector as practitioners. Their experience enhances the exchange of knowledge between the university and field of practice, benefiting both education and research.

Certain areas within the professional services sector, and especially the financial sector, have come under increased social and moral pressure in recent years. Programmes in this domain are therefore designed to incorporate a strong, structural focus on governance issues, corporate social responsibility, compliance and integrity, thereby giving tangible expression to the unique character of VUA. At the VUA Centre



for Law and Governance, research activities centre on regulatory issues and public-private partnerships. VUA plans to scale out this research and further integrate it with research in the area of financial and legal services.

#### EDUCATION RENEWAL

Many students are attracted to the field of professional services and will ultimately pursue careers in this sector. Bachelor's programmes in this domain are broadly oriented and typically have a high student intake. Starting from the 2013-2014 academic year, enrolment quotas will be set for the Bachelor's programmes in Business Administration and Law, with the programmes themselves to select students. This should help to minimize drop-outs and to build a student population that does well in an academic environment. Students who are admitted will be better served as a result and more challenged to achieve their personal best. Teaching is to be intensified and programmes will seek to increase student engagement.

Master's programmes will offer more room for in-depth and focused study. A sizable number of Master's programmes in the Faculty of Economics and Business Administration spotlight professional services.<sup>19</sup> The Master's in Company Law (the Zuidas MA) is a selective programme designed to draw talented students to the Zuidas district. Programmes are offered in close cooperation with and with input from the offices and organizations based at Zuidas, and centre chiefly on financial and legal services provision.

Postgraduate programmes are offered via the Post Graduate School of Professional and Executive Education, which caters to those already active in the professional services sector. The VU Law Academy (VULA) is also active at Zuidas, with programmes including Law, Leadership & Management and subjects in the area of mergers and acquisitions. Also the cooperation with the UvA will be intensified, placing a particular

focus on internationalization and quality improvement as a means to build a stronger presence in Amsterdam. Initial steps in this direction have already been taken with the development of a joint business school for professional executive education, accommodating the graduate/Master's Law programmes and postgraduate programmes in Business Administration.



4

CONNECTING  
TO BUSINESS  
AND SOCIETY

#### 4.1. RELATION TO THE RESEARCH AGENDA

In line with its social mandate, VUA attaches great importance to its role in transferring knowledge to society and facilitating real-world applications of knowledge. Though various investments were made in this area in the past period, VUA has identified further additional steps it wishes to take. In 2010, the OECD called attention to the 'Amsterdam knowledge paradox': the region has a wealth of knowledge organizations, but is not fully utilizing this asset for innovation and economic development. VUA therefore observes a clear need to strengthen cooperation between government, businesses and knowledge organizations in the Amsterdam region.

It goes without saying that the four themes reflect the development of the VUA profile over recent years. They are therefore well linked to national and international research priorities. For example, VUA has been involved in drawing up the national 'Innovation Contracts' between science and business under auspices of the Ministry of Economic Affairs, Agriculture and Innovation (EL&I). This involvement resulted in the submission of several Letters of Intent, in which VUA expressed their interest in participating in these initiatives. Furthermore, VUA has informed EL&I about its position with regard to the national innovation policy and its interest and willingness to contribute to the further development of the research agendas for the so-called 'top sectors'.

Research groups from UvA and VUA participated in the round-table sessions of the Amsterdam Economic Board. UvA and VUA were among the initiators of the Amsterdam Economic Board (AEB), founded in 2010 to facilitate co-operation between regional government, business community and knowledge institutions - VUA, UvA, but also the Hogeschool van Amsterdam, University of Applied Sciences (HvA)

TABLE 1 CONNECTION OF THE VUA THEMES TO REGIONAL, NATIONAL AND EUROPEAN CHALLENGES						
EU - Horizon 2020	NL - Top Sectors	Amsterdam - AEB	H2LS	S4S	CW	PS
Climate action, resource efficiency and raw materials	Chemistry		x	x		
Secure, clean and efficient energy	Energy			x		
	Water			x		
Food security, sustainable agriculture, marine and maritime research and the bio-economy	Horticulture and Agro-Food	Flowers and Food	x	x		
Health, demographic change and well-being	Life Sciences	'Red' Life Sciences	x			
Inclusive, innovative and secure societies					x	
	High Tech (incl. nano, ICT)	ICT	x		x	
Smart, green and integrated transport	Logistics	Logistics and Trade				x
	Creative Industry	Creative Industry			x	
	Head Offices	Financial and Business Services				x
		Tourism and Conference Services			x	

and InHolland University of Applied Sciences (Inholland) - and in particular to aid in establishing a joint strategy for bolstering the economic development and innovative capacity of the Amsterdam metropolitan region (given the OECD conclusions in 2010). The AEB works to promote co-operation in research and to synchronise education supply and job market demand. Over the next several years, this collaboration will be scaled up and fleshed out with concrete projects in seven key clusters. These Amsterdam-based clusters closely parallel the EL&I 'topsectors'.

The table above summarises the mutual connection between the four themes and the current economic

and societal agendas at EU, national (EL&I) and regional (AEB) levels. The relations indicated in the table will develop over time when more details on funding from the EU (Horizon2020), from national and regional sources and from interested partners in industry and business become available.

#### 4.2. RELEVANCE IN THE REGIONAL CONTEXT

As stated in section 2.2, the Amsterdam Academic Alliance's third aim is to interact more effectively in the regional context with business, industry and government. Building on the initiatives of the AEB and guided by the Triple Helix model, this will primarily be supported by more collaborative technology transfer (TTO) activities. Universities

have a great major on their region's economy.<sup>14</sup> In the recent BiGGAR report on the Leiden region<sup>15</sup> it was estimated that every euro spent on scientific research brings a fourfold economic benefit to the region.

In the years ahead, VUA intends to step up its efforts in this area, developing valorisation policy for its various academic domains and integrating valorisation as a fixed element in its talent policy. This will involve exploring opportunities to create income from the results of its research, which may be done by selling licenses and patents, by helping researchers to start new businesses or by setting up joint spin-off companies and public-private partnerships with existing companies, facilitating enterprising researchers (part-time professors who are also working professionals), access to academic collections such as bio banks and databanks, and contract research and consultancy. Creating value from research serves both the quality of teaching and research, and the innovative capacity of business and society, including the creation of new jobs.

As a comprehensive research university, VUA wishes to stimulate valorisation activities across the academic spectrum and is exploring different valorisation strategies to facilitate this within each domain.

For instance at the Neuro Campus Amsterdam, a pilot will be conducted with the creation of an Industry Alliance Office. As an academic expertise centre in the field of neurodegenerative diseases, this IAO will target the pharmaceutical industry and serve as a 'one-stop shop' for specialized knowledge and research resources (including bio banks and patients). The ultimate aim of the office will be to forge a number of long term sector relations.

The humanities and social sciences have traditionally been the hardest domains in which to achieve valorisation,

and will require a change of culture and changes in the organization. VUA is developing specific measures with private organisations to address this issue and to generate a flow of knowledge between VUA and society.

Besides research, there will also be a strong focus on valorisation through (executive) education activities.

#### 4.3 AIMS

- In line with the AAA, the UvA and VUA, with AMC and VUmc, have expressed the ambition to bring all their present knowledge transfer bureaus, with a substantial annual budget into an all-Amsterdam Technology Transfer Office. This will be done together with the HvA and with the City of Amsterdam and should be operational in the course of 2013. The TTO, with offices on all major campuses in Amsterdam, will be the channel to connect researchers to business and society and help them create value. It will also have the task of identifying and developing value opportunities and the task of assisting scientists in their bids for EU and industry contracts. The creation of the TTO Amsterdam will provide the regional business community with a portal to 6,500 researchers at four academic institutions, thereby giving the TTO a prominent position in the European arena. Joining efforts will make way for synergy, and improve the means for attracting highly qualified TTO staff to cover all domains, including Humanities and Social Sciences.
- The VUA and VUmc campus at Amsterdam Zuidas will create new collaborative opportunities for businesses. In addition is for emerging small and medium-sized businesses, ready-to-use space has been made available through Matrix Innovation Centre, a joint venture of the UvA, the VUA, the City of Amsterdam and NWO at the Science Park in Amsterdam Watergraafsmeer.
- Embedding in talent policy: A VUA-wide Talent Policy project will be

set up to explore academic career track models that integrate individual agreements on valorisation and acquisition of external revenues. Achievements in this area are among the requisite criteria for advancement to a permanent appointment and/or higher academic position. The existing regulations on intellectual property rights, revenue sharing and conflicts of interest will be revised (within the framework of the VSNU Codes of Conduct).

- The Amsterdam Centre for Entrepreneurship (ACE) – a joint initiative of UvA, VUA, HvA and InHolland – will be involved. ACE provides opportunities for students from all backgrounds to receive training in entrepreneurship. ACE organises and contributes to regular teaching activities at the VUA and the UvA (including a minor in entrepreneurship, a Master's specialisation, and Master's thesis and PhD thesis programmes) and also organises extracurricular activities. The Centre also supports entrepreneurial start-ups by providing facilities (incubators) and connections in local business networks.
- Expanding postgraduate executive education: VUA is keen to meet growing public demand for postgraduate and executive education and plans to expand its programme offering in this area. The target is to increase income from these programmes from € 13 million in 2010 to € 20 million in 2015, building on the success the faculties of Law and Economics & Business Administration, in particular, have already achieved in offering such courses. The Faculty of Law has assembled a very diverse range of postgraduate courses at the VUA Law Academy (VULA), as has the Faculty of Economics and Business at the Duisenberg School of Finance.
- Open Access: The university is keen to promote new uses of VUA knowledge in society, and provides access to that knowledge in various ways. Academic staff at VUA take active part in the public debate on a broad



array of issues. VUA also supports the Open Access policy, providing free and unlimited access to digital and/or paper publications on VUA research to the interested public.

Envisaged results by 2015 are:

- The pan-Amsterdam TTO is up and running and working to the benefit of the Triple Helix in Amsterdam.
- The Matrix Innovation Centre offers ready-to-use space for small and medium-sized research business initiatives.

- The VUA has adapted its human resources policies to the greater emphasis on valorisation.

We aim to have 40% of all VUA publications in Open Access by 2015 and 90% by 2025 (in 2010 the total was approximately 5%), putting VUA ahead of other Dutch institutions.

- \* As a result of the above and as stated in the General Agreement, VUA will have assigned 2,5 % of the research budget to valorization infrastructure.



5

RESEARCH

## 5.1 PAST PERFORMANCE

University research development is an on-going process. VUA has taken decisive steps to promote its research performance over the past few years, and will continue to advance these after laying down this Institutional Profile. Research and education are being focussed on the four themes of Human Health & Life Sciences, Science for Sustainability, Connected World and Professional Services. The 14 interdisciplinary research institutes are linked with the four themes.

VUA has significantly improved its research performance in recent years. The number of academic publications has shown a strong rise (see table 2) and the percentage of research projects receiving external funding has also increased (see graph 2 and table 3).

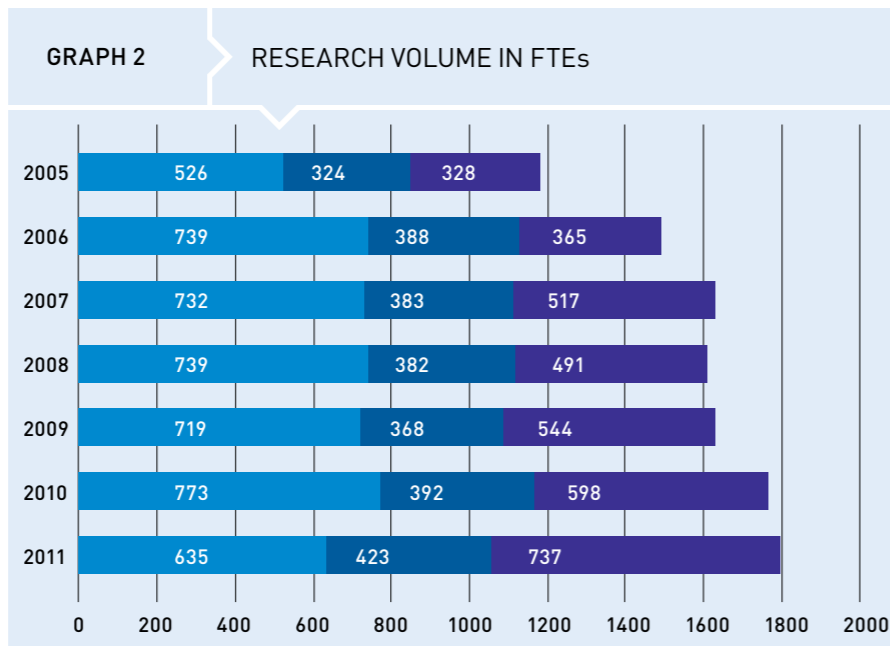
## 5.2 AMBITIONS FOR THE YEARS AHEAD

Guided by its social mandate, the VUA's core ambition for university research is to contribute to the resolutions of major issues in society. Growing international competition means the university needs to work harder to attract research funds and talented researchers. To strengthen its edge and achieve its social and academic objectives in this competitive arena, VUA has committed to boosting its performance even higher. This will entail tightening the university's research profile and concentrating on a select number of themes in which it boasts internationally acclaimed research.

VUA organizes its research to link up with the major themes that are engaging society, in a way that is recognizable for the world at large. It is vital that this research attains the critical mass needed to form consortia with other national and international knowledge institutions and to qualify for large international research grants and participate in shaping the research agendas of major research programmes. To achieve this aim, VUA and the

	2005	2006	2007	2008	2009	2010	2011
Dissertations	241	246	269	264	285	303	324
Academic publications	5,507	5,749	5,89	5,997	5,971	6,336	6,87
Professional publications	1,394	1,22	1,208	1,118	1,316	1,243	1,514

Source: VSNU 2010, Metis VU 2011 [1] Excluding dissertations.



	2005	2006	2007	2008	2009	2010	2011
Government funding	45%	50%	45%	46%	44%	44%	41%
Indirect funding	28%	26%	23%	24%	23%	22%	24%
Contract funding	28%	24%	32%	30%	33%	34%	35%

Source: VSNU 2010, Metis VU 2011

VUmc have been working together over the last few years to cluster fields with excellent research track records at 14 interdisciplinary research institutes<sup>14</sup> which cut across faculty boundaries to explore urgent social issues. This has enabled VUA to forge direct links with a number of national Top Sectors, EU Grand Societal Challenges and regional knowledge clusters. In academic fields in which mass and interdisciplinary cooperation play less of a role a limited number (3-5) of disciplinary research focus areas are formed which pursue excellent research. VUA's decision to develop these new focus areas over the last few years has meant a considerable reduction in the total number of research priority areas.

The 14 interdisciplinary research institutes and disciplinary research focus areas together form the core of research activities conducted within the four defining themes of Human Health and Life Sciences, Science for Sustainability, Connected World and Professional Services.

Placing this strong focus in research puts VUA in a position to attract and retain top-class academic talents to its research priority areas. Targeted investments in additional facilities and dynamic career perspectives are another way in which VUA is promoting talent in these research focus areas, in which academic career paths are to become more contingent on proven achievements (via career track, tenure track).

VUA is also committed to ensuring that academic integrity guides the actions of its employees and is an integral part of education at every level.

## 5.3 AIMS

Based on its research ambitions, VUA has defined the following objectives for 2015:

- VUA will amplify the quality of its research. External research visitations assess research in all VUA programmes with an average score of 4.0 or higher, with 20% of programmes

averaging scores higher than 4.7 (in 2010, 70% scored higher than 4.0 and 14% higher than 4.7).

- The number of academic publications will at least keep pace with the rising international trend.
- VUA will amplify the impact of its research. The indicator used is the Leiden Ranking, that measures the scientific performance of 500 major universities worldwide, and in which VUA ranks among the top 80 (based on the Crown Indicator, the PPtop 10%).





# 6

## EDUCATION

### 6.1. ESTABLISHING THE EDUCATIONAL PROFILE

VUA is a research university with a broad range of programmes. In the bachelor VUA places a strong emphasis on the student's academic development. In its graduate education, VUA focuses on improving and streamlining its master's programmes, preparing students for an international and intercultural future, shortening the time to degree and promoting selectivity.

As would be expected in a research university that puts high value on research-intensive teaching in its teaching & learning policy and degree terms, there is link between the bachelor and master programmes currently on offer at the VUA and the priority areas in the four themes (see annex 3). Even though this alignment, the current portfolio will be reviewed. During the coming years, VUA seeks to further establish its educational profile by clustering the educational portfolio in line with the VUA profile. In the bachelor programmes will be broadened, while existing master programmes with an annual intake of 20 students or less are cancelled by ultimately 2015.

### 6.2 ACADEMIC CITIZENSHIP

VUA places a strong emphasis on students' academic development. The university-wide introduction of the academic core in all Bachelor's programmes encourages students to reflect on the responsibility they will bear in their future role in society. An important objective is to help young people develop into astute academic practitioners who are able to fulfil important positions in the international and intercultural society of the future, based on a strong sense of social engagement. Accordingly, the university places a strong emphasis on the broad academic education of its students, informed by its traditional core values.

As of 2013, VUA is therefore introducing the 'academic core' in all its Bachelor's programmes. This is a 30 ec

program that includes Philosophy, History of the Sciences, Critical Thinking, Methods & Techniques, Big Books, and Academic English. Enhancing academic skills early in education increases the likelihood that a student will successfully complete the programme. The academic core instills the university's identity and core values, as well as how these values relate to professional practices and societal roles. As indicated, philosophical training plays an important part in the academic core; students are introduced to the history of philosophy and the philosophy and ethics of each scientific domain. The university will link this academic core with a system of tutoring/mentoring. Each tutor or mentor will be the main point of contact for a group of students throughout most of their university careers, providing guidance and advice as necessary. The academic core therefore creates both academic and social ties between students and the university, which has been shown to be an important factor in successful study.

### 6.3. DIFFERENTIATION, EXCELLENCE AND INTERNATIONALIZATION

As stated in section 2.2, the second main aim of the Amsterdam Academic Alliance is to further differentiate teaching programmes, so as to build stronger ties between excellence in research and education and to enhance the international dimension in teaching and learning. The grounding vision of UvA and VUA for was already established in their joint SIRIUS project for excellence in higher education (2008-2012). The three main principles of this project are as follows:

- Developing excellence in the research university requires an integral approach between excellence in research and teaching,
- between the orientation, level, and criteria for admission to excellence teaching programmes,
- and should allow for the most talented and motivated students and

faculty to intensively interact under the best conditions.

The UvA-VUA Excellence Platform (consisting of the presidents of the UvA and VUA honours committees, the AUC dean, and students) supported and monitored the development of honours programmes at undergraduate level, including the mobility across VUA and UvA (incl. AUC) honours courses. The AAA will continue to build on this vision and the successful policy<sup>17</sup> will be extended over the next years by:

- Developing the "Honours 2.0" model in which the honours tracks will be further integrated, i.e. instead of longer tracks (30 EC extra), they will be intensified and lead to more advanced learning outcomes ("hoger eindniveau").<sup>18</sup> Students will continue to qualify based on GPA (> 7.5) and nominal study progress after year 1. Entry into the honours tracks will be extended to freshmen with a >8 GPA secondary school certificate and, by invitation, to other promising students. The level of advanced learning outcomes will be expressed in more comprehensive (honours) thesis requirements (enhanced length, research component, interdisciplinary scope, English language, etc.).
- As more options become available under the higher education act (WHW), individual faculties at both universities may explore further choices for excellence tracks or programmes including options for the selective admission of students and higher learning levels and outcomes. This will better equip and prepare students better for admission to graduate schools.
- The further extension of selective master programmes, which will be supported by the establishment of joint VUA - UvA graduate schools. These programmes will be characterized by a strong connection between research and education. And by a strong international dimension, as expressed in the student body, the faculty profile and English as the lan-



guage of instruction. They will apply a sound admissions policy, according to methods and standards that are internationally recognizable and respectable, as a basis to extend the enrolment of top-talented students from both a domestic and international background.

#### 6.4. EDUCATING FOR AMSTERDAM

The metropolitan economy benefits greatly from the presence of higher education institutions where maintaining and enhancing the educational level of the labour market is concerned. VUA wants to offer programmes of importance to the human capital agenda and to the needs of business and the labour market – in particular those of the AEB's clusters. Already VUA participates in research programmes relating to the Amsterdam metropolitan region, participates in several Triple Helix initiatives.

By 2015, VUA together with UvA and the universities of applied research in the Amsterdam region will:

- provide a stronger knowledge base for the region, in terms of its relevance to the innovative potential of business and industry, i.e. the creation of new products, companies and jobs;
- deliver a larger and better-qualified supply of higher education graduates to the regional workforce in order to attract and retain firms and investment in the region.

With respect to the demographic development and the human capital and labour market needs of the Amsterdam region, the OECD (p. 19) pointed to the importance of making greater use of the potential of non-Western minorities and of improving not only their participation but also their completion rates. Although VUA attracts many students from non-Western background this is an area of special attention. Amsterdam hosts over 180 nationalities, which is key to its cultural richness and global attractiveness. From prior experience and international partners

we have learned that diversity matters, that excellence needs diversity and that this resonates with the global city formation process.





### 7.1. IMPROVEMENT OF THE UNDERGRADUATE SUCCESS RATE

VUA promotes a more intensive and challenging study climate. It advocates a stronger emphasis on intensive, activating and research-oriented teaching models, with more stringent requirements and fewer second chances. Prospective students are informed of these targets during the introductory information meetings. VUA is committed to helping students during their orientation and when seeking the best programme to match their talents and interests.

The university will work to influence student attitudes to study through the following measures:

- The university-wide introduction of the 'binding recommendation on continuation of studies' (BSA) for all first year programmes in 2011-2012. The BSA set clear targets for the level of ambition expected of students. Intensive and targeted guidance is a precondition of the BSA. This includes a system of tutoring/mentoring in the first year.
- As from 2011, the VUA issues a BSA to first-year students with 36-42 ECTS credits. If a student has not completed all 60 first-year credits by the end of the second year, he or she will receive a negative BSA. The criteria applied for the BSA will be tightened and standardized university-wide.
- The impossibility of pre-selection (except for programmes with enrolment quotas) limits the options available for improving success rates. Starting from the 2013-2014 academic year therefore enrolment quotas will be set for the Bachelor's programmes in Business Administration, Law and Notarial Law, with student selection by the programmes themselves. This should help to minimize drop-outs and to build a student population that does well in an academic environment.

A previous agreement between the VSNU, the universities and the Ministry aimed to raise undergraduate success rates above 70%. However, the scope of that agreement was limited to the direct intake of entrants holding a pre-university education (VWO) diploma (i.e. with no interim enrolment at another higher education institute), which has a positive impact on success rates. Nevertheless, the university considers the number of students who do not complete their programmes within the allocated four years to be socially unacceptable, as well as undesirable for the students themselves, particularly now that they are being required to pay a greater share of their own tuition costs. Moreover, increasing the pass rate is an important factor in ensuring that programmes remain affordable.

In bachelor's education, VUA has three main objectives, which are mutually interdependent and which will therefore be addressed simultaneously: to increase the quality of education, to increase the number of students who successfully complete their programme within the set period and to increase cost effectiveness. In its graduate education, VUA is focusing on improving and streamlining its master's programmes, preparing students for an international career, shortening the time to degree and promoting selectivity.

VU University has the following ambitions for its bachelor's / undergraduate programmes:

- Bachelor's programmes are independent courses of study. Under the current standard, students must complete their programme in three years. The standard provides for clear requirements, explicit parameters and effective academic student guidance. A high level of teaching that challenges students and pushes them to work hard and excel promotes good academic results. Excellence is promoted through specific specializations.

- Bachelor's programmes give students a solid academic foundation. They build academic knowledge, insight and skills and develop a critical, independent and reflective mindset. Flexible specializations and room for elective courses allows students to tailor programmes to their specific interests.
- As part of their personal development, and as befits the identity of VUA, students are inspired to reflect on their social responsibility in future positions.
- Diversity in backgrounds is a rich source of learning experiences, both culturally and in shaping students' worldviews, and is therefore incorporated and emphasized in curricula and the classroom.

### 7.2. REDUCTION IN THE NUMBER OF REVERSED STUDY PROGRAMME CHOICES

A new feature in the White Paper is the reduction of choices made by students that they later repeal or repent. Such choices lead to a loss in time and money to the individual, to VUA and to society. It leads to the best brains being made available to the economy and society at large later than should have been possible. The first year of Bachelor's programmes is designed to have a selective, orienting and referring function. However, in view of the inherent loss of time and money, the White Paper requires measures to reduce the number of drop-outs from academic higher education (i.e. students who are no longer registered at the institution after one year of study) and switching between study programmes. Over the past few years, the percentage of drop-outs at VUA has gradually grown from below the national average to above it. The integration and flexibilization of Bachelor's programmes (broad-labels) will reduce the number of drop-outs and switching. Students can then make their final subject choices at a later stage of the programme without risking a delay in graduation, and need

not switch programmes if they decide their original choice was inappropriate. Measures to reduce the number of faulty student choices also focus on the pre-enrolment orientation process.

### 7.3. QUALITY AND INTENSITY OF TEACHING

Against a more ambitious effort on the part of the student, the White Paper calls for more transparent policies on teaching quality on the part of the university. Professionally competent and inspiring teachers are important to the quality of education. It is therefore vital that all teaching staff at VUA possess sufficient academic and education skills. It is also important that qualified teaching staff continue to develop as professionals, both in their own areas of expertise and in education as a discipline.

VUA has adopted the national Basic Teaching Qualification (BKO), which is a teaching certificate for university teaching staff. From 2010, VUA requires all new staff with teaching duties to obtain the BKO. The only exceptions are cases in which participation in the university teacher training programme would clearly not be worthwhile, for example when individuals are teaching for a very short period or in exceptional circumstances not expected to arise again. Currently, 24% of teaching staff is certified with the BKO qualification. To promote a more ambitious attitude towards the professionalization of education, and in line with the White Paper, VUA will work to raise this share to 60% of the teaching staff.

Also, teaching evaluations are to be discussed as soon as possible after they have been submitted, and to be discussed in a consistent manner. If any teaching staff are repeatedly evaluated as performing under par, improvement measures will be taken. Course components found to be under par will be revised immediately. In addition to the BKO, a number of more advanced training opportunities are available to

teaching staff and a Senior Teaching Qualification is to be developed.

In discussions about the intensification of education, the number of contact hours has come to be seen as an important indicator of education quality. In line with the General Agreement, VUA acknowledges the importance of contact hours between students and lecturers, which expand the effective study time of students, particularly in the first year of Bachelor's programmes.

Activities defined as contact hours are lectures, seminars, practical lessons and other education activities that are guided by a lecturer or tutor and scheduled in the Study Guide. The VUA pedagogical model takes the view that sufficient contact hours are a prerequisite but not the only way to increase education intensity. The university-wide introduction of the 'academic core', for example, also aims to improve student engagement and other forms of student-faculty interaction.

Following the amendment of the law, the NVAO can now conduct institutional audits that assess an institution's vision on the quality of education. Though individual programmes are still accredited, the institutional audit contributes to a more uniform and transparent quality assurance system. As a result, the 'accreditation burden' for individual programmes is reduced.

### 7.4 INDIRECT COSTS

The benchmark study recently conducted by Berenschot shows that VUA's generic overhead is approximately 1%-point higher than the national average. With the implementation of the Strategic Plan 2011-2015, VUA has decided to reduce its indirect costs. In order to achieve this, substantive choices have been made in the following areas:

- Improved efficiency and quality of operational management, to be achieved through standardization and the redesign of processes, the

clustering of activities and services where possible and appropriate, and/or changes to management procedures. All work processes must be reviewed and modified, with a view to improving quality and reducing costs. The approach to these work processes will take a more inter-faculty and non-service-specific character. In most cases, support departments will be organized centrally (serving the university as a whole) and, where possible, shared with other organizations. Some activities may be outsourced. Support staff must be both result-focused and service-oriented. VUA is therefore investing in the professional and personal development of its personnel.

- Improved cost-effectiveness of activities, to be achieved by charging actual costs against the budgets of contract activities and by requiring all purchasing to proceed through VUA support services or approved contracted suppliers.
- Focus on core business: VUA wishes to devote the greatest possible proportion of direct government funding to research and education. This means reducing its contribution to facilities outside the core business and primary process of education and research, like sport and culture.

The above measures will combine to improve overall quality while relieving financial pressure.

Further to the White Paper 'Quality in Diversity' and the 'General Agreement' between the VSNU and the Ministry, the VU University Amsterdam (VUA) and the Ministry of Education, Culture and Science agree as follows:

#### Obligations taken by VUA

Regarding the undergraduate success rate:

(1) The success rate of bachelor students that will have earned a bachelor degree before October at the end of their fourth year, will increase from 63% in 2011 to 75% in 2015 according to the definition in the 'Hoofdlijnenakkoord'.

(2) The drop-out percentage of full time bachelor students in the first year will be reduced from 18,3% in 2011 to 15% in 2015.

(3) The percentage of full time bachelor students choosing to switch between studies at VUA will be reduced from 7,2% in 2011 to 7% or less in 2015.

Regarding quality and diversity:

(4) VUA and UvA will continue to pursue the 2009-2012 targets of the Sirius programme through 2015, amended with a 10% degree of participation in the Honours 2.0 programme. The current participation in the honours programmes lies at 7,6%. Every excellent undergraduate student (average grade > 7.5 in year 1 or VWO exam grade > 8) will be offered a place in an Honour's track or other excellence programme (though other promising students may be invited as well). The VUA will extend the number to accommodate this growth.

Regarding staff and funding:

(5) In 2015, 60% of teaching staff will possess a 'BKO' qualification. This applies to staff in the ranks 'docent 2' and upward who have a permanent position or a contract for more than two years.

(6) In their first year, all undergraduate students will receive at least 12 scheduled hours of teaching and tutoring per week, on average during the two 8+8+4 week terms (excluding examination weeks).

Regarding the support organization:

(7) In 2013 VUA will undergo to the Institutional Audit ('Instellingstoets kwaliteitszorg') conducted by the NVAO. Possible issues will be rectified before the end of 2014.

(8) In 2015 the generic overhead as a percentage of the Total FTE will be reduced with 1%-point in 2015 from 20.7% in 2010.

(9) The current 50 bachelor programmes in 2011 will be reduced to 40 bachelor programmes or less in 2015. 12 bachelor of arts programmes are merged into four broad bachelor programmes, the sciences-programme's are merged into 5 – 7 (broader) bachelor programmes in the context of the Amsterdam Faculty of Sciences. Also the bachelor programmes in the H2LS theme and the Social Sciences domain will be merged into a reduced number of programmes before the end of 2015.

Obligations taken by the Ministry

Regarding the research profile

(10) The Ministry acknowledges that the description of VUA research

profile in the document satisfies its expectations as set out in the White Paper.

Regarding the education profile

(11) The Ministry will approve the proposed merging of the VUA bachelor programmes based on the required documentation that VUA will provide.

Regarding legal conditions, the government grant and tuition fees:

(12) The amendments to the Law (WHW) agreed upon in the Hoofdlijnenakkoord (General Agreement) will take effect as from September 2014. In addition, the agreement above under (2) is conditional upon the application date being set at 1 May for the academic year 2014-2015 and onward.

(13) The agreement under (5) above is conditional upon the price per student<sup>19</sup> keeping pace with CPI inflation from the 2011 level.

(14) The Ministry will make the 5% 'conditional' teaching grant available to VUA for 2012-2015 on the signing of this agreement.

(15) The Ministry will also contribute 20 million Euro from the 2% 'selective' teaching grant toward the Amsterdam Academic Alliance, initially to cover the cost of establishing the Amsterdam Faculty of Science, and to feed the AAA Fellowship Fund.

(16) The Ministry will not apply budget cuts to the annual government grant to VUA/VUmc and UvA/AMC on account of actual or alleged efficiencies arising from collaboration within the Amsterdam Academic Alliance.



# ANNEX 1.

## DRAFT MEMORANDUM OF UNDERSTANDING UVA-VUA

1. De Universiteit van Amsterdam, gevestigd te Amsterdam, hierbij rechtsgeldig vertegenwoordigd door dr. L.J. Gunning-Schepers, voorzitter van het college van bestuur, hierna te noemen: **UvA**;

en  
2. De Vrije Universiteit, uitgaande van de Stichting VU-VUmc, gevestigd te Amsterdam, hierbij rechtsgeldig vertegenwoordigd door drs. R.M. Smit voorzitter van het college van bestuur, hierna te noemen: **VU**,

### Overwegende dat:

1.

UVA en VU zelfstandige organisaties zijn met een eigen identiteit en een eigen, herkenbaar profiel, die al een aantal jaren op diverse terreinen succesvol met elkaar en met de andere Amsterdamse kennisinstellingen samenwerken;

UVA en VU die samenwerking altijd hebben verwezenlijkt met inachtneming van ieders verschillende juridische positie en bijzondere status en deze ook in de toekomst willen behouden;

het streven naar een intensievere samenwerking de zelfstandigheid van beide organisaties onverlet laat;

de UvA nauw samenwerkt met de Hogeschool van Amsterdam (HvA) en de Colleges van Bestuur van UvA en HvA sinds 2003 een personele unie vormen; de VU een bijzondere universiteit is die waarde hecht aan de eigen identiteit en in de samenwerking de eigen identiteit zal behouden;

de OECD in haar Review of Higher Education in Regional and City Development (2010) voor de Amsterdamse regio heeft vastgesteld dat de regio meer profijt kan hebben als de instellingen van hoger onderwijs beter samenwerken met elkaar en met het bedrijfsleven en de overheid; deze Review voor UvA/HvA en VU

aanleiding is om deze mogelijkheden verder te exploreren, in het perspectief van de Metropoolregio Amsterdam, in de "triple helix" (kennisinstellingen, bedrijfsleven, overheid);

zij daartoe onder meer in 2010 een convenant Amsterdam Economic Board hebben gesloten met de overheden en het bedrijfsleven;

zij tevens van mening zijn dat verdere bundeling van krachten hen een sterkere positie kan geven in de (inter)nationale onderzoeksweld en daarmee de basis van een kwaliteits-sprong kan vormen voor onderwijs en onderzoek, omdat:

- kwaliteit en reputatie belangrijk zijn bij het aantrekken en binden van talent;

- grote (EU) onderzoeksprogramma's vragen om voldoende massa, internationaal gezien;

- deelname aan het interdisciplinair onderzoek van de toekomst de aanwezigheid in een ruim spectrum van disciplines vergt;

- hun gezamenlijke omvang het investeren in research-infrastructuur beter rendabel maakt;

- zij samen (en samen met tal van andere onderzoeksinstituten in Amsterdam) Amsterdam kunnen versterken als naam in de wetenschappelijke wereld;

de beide academische ziekenhuizen, AMC en VUmc, op 14 september 2011 met een intentieverklaring een nauwe samenwerking aankondigden, die niet alleen in de zorg maar juist ook in onderzoek en onderwijs gericht is op versterking van het geheel aan wetenschappelijk potentieel in Amsterdam;

2.

de staatssecretaris van OCW in zijn Strategische Agenda (2011) de universiteiten heeft opgeroepen te komen tot meer profilering en

differentiatie in hun onderzoek en hun onderwijsaanbod, teneinde Nederland te laten blijven aansluiten bij de wereldtop en de grote onderzoeksvragen van de toekomst (grand challenges);

in de regio Amsterdam sprake is van een bijzondere situatie ten opzichte van andere regio's door het binnen korte afstand naast elkaar bestaan van twee grote, brede universiteiten en twee universitair medische centra, alsmede een concentratie van zelfstandige onderzoeks-instellingen van onder andere NWO en KNAW;

UvA en VU samen met AMC en VUmc een betekenisvolle bijdrage willen leveren aan de groeiende maatschappelijke behoefte aan meer bèta- opgeleiden (human capital agenda);

profilering op bovengenoemde en andere relevante wetenschapsgebieden met

zich mee zal brengen dat in Amsterdam krachtenbundeling tot kwaliteitsverhoging op het gebied van onderwijs en onderzoek kan leiden;

UvA en VU samen met de HvA en andere kennisinstellingen in Amsterdam willen aansluiten op de grote behoefte aan hoger-opgeleide kenniswerkers die de economische structuur van Amsterdam genereert,

voor onder meer het bèta- en medische domein (inclusief life sciences), (zakelijke) dienstverlening, de

logistiek, ICT en de creatieve industrie, waarin de stad als centrum van Nederland fungeert;

waarvan de stad als centrum van Nederland fungeert;

### VERKLAREN ALS HUN

#### INTENTIE

#### ARTIKEL 1. INTENTIE EN DOELSTELLING

1.1 VU en UvA hebben, als twee zelfstandige organisaties, de intentie om samen een aantal wetenschappelijke samenwerkingsverbanden (hierna te noemen de Initiatieven) te vormen.

De Initiatieven zullen bestaan uit de krachtenbundeling tussen Partijen, en zo mogelijk met andere weten-schappelijke instituten in

Amsterdam, op het gebied van verschillende wetenschaps-gebieden, en zullen nader uitgewerkt worden in een of meer gemeenschappelijke regelingen. In het kader van de gemeenschappelijke regeling(en) zullen in ieder geval de aspecten inhoud, structuur, services, governance en financiële consequenties nader zijn uitgewerkt.

1.2 Met het vormen van de Initiatieven beogen Partijen:

- een sterke uitgangspositie van "Amsterdam" in (inter)nationale onderzoeksconsortia en bij de toedeling van onderzoeksgelden;
- versterking van de aantrekkingskracht van Amsterdam op wetenschappelijk toptalent, zowel onder studenten als onderzoekers;
- aantoonbare vergroting van de kwaliteit van onderwijs en onderzoek in hun instellingen;
- afstemming en behoud van de breedte in onderwijs en onderzoek die passend is voor de positie van Amsterdam als centrum van cultuur, creatieve industrie en zakelijke dienstverlening;
- een kwaliteits-sprong van "Amsterdam" in de wereld van de wetenschap.

1.3 De UvA en VU samenwerking zal zich richten op alle disciplines waar zij tot voordeel strekt, en worden gedreven door het onderzoeken van de mogelijkheden om te komen tot :

- gezamenlijke programmering van onderzoek op terreinen waarop zij elkaar kunnen aanvullen en versterken;
- de vorming van gezamenlijke Amsterdam Graduate Schools voor initieel en postinitieel masteronderwijs;
- de vorming van een geïntegreerde bètafaculteit.

1.4 Met de initiatieven onder 1.3 en met de oprichting van een pan-Amsterdams Technology Transfer Office draagt de samenwerking bij aan het topsectorenbeleid van het rijk en van de Amsterdam Economic Board, en aan de human capital agenda.

1.5 Partijen maken met de staatssecretaris van OCW afspraken over de meerjaren-bekostiging van de gevormde samenwerkingsverbanden en dragen langs deze weg actief bij aan de wens uit het Hoofdlijnenakkoord OCW-VSNU dat universiteiten meer dienen samen te werken en tegelijk in die samenwerking zich scherper ten opzichte van anderen dienen te profileren.

#### ARTIKEL 2. UITWERKING

2.1 De verdere uitwerking vindt plaats onder leiding van een stuurgroep bestaande uit de Colleges van Bestuur van Partijen (verder te noemen Stuurgroep). Deze Stuurgroep heeft tot taak (de uitwerking van) de samenwerking te sturen en te begeleiden. Daartoe richt de Stuurgroep een programmaorganisatie in.

2.2 Voor elk der domeinen alfa, bèta, recht, economie, gedrag en maatschappij stelt de Stuurgroep in overleg met de betrokken decanen een structuur vast waarin voor het betreffende domein de reeds geïdentificeerde mogelijkheden van samenwerking verder worden onderbouwd en gerealiseerd. De decanen wijzen voor die structuur een programmamanager aan, die tevens verbinding houdt met de programmaorganisatie.

2.3 De domeinen werken binnen de kaders die de Stuurgroep aangeeft en houden de Stuurgroep, via de programmaorganisatie, op de hoogte van hun voortgang en de belemmeringen daarin.

2.4 Partijen verbinden zich tot het slechten van barrières in procedures, bekostigingswijze, toerekening van kosten en systemen die de realisatie van de doelstellingen bemoeilijken, met onder meer als uitgangspunt dat onderwijs en onderzoek, wat gebouwgebonden faciliteiten betreft, gebruik maken van de dienstverlening van de Partij die dat gebouw beheert, zoals zij dat ook voor ACTA en AUC hebben afgesproken.

2.5 Iedere Partij draagt de voor hem

uit de samenwerking voortvloeiende kosten, behoudens indien en voor zover zij kosten aanmerken als gezamenlijk en ieder voor de helft te dragen.

#### ARTIKEL 3. COMMUNICATIE

3.1 De communicatie over de onderhavige Intentieverklaring en het verdere traject binnen de organisaties van Partijen (bijvoorbeeld met ondernemingsraden, studentenraden en raden van toezicht) wordt in goed onderling overleg gecoördineerd en afgestemd.

3.2 Ook de communicatie naar derden (bijvoorbeeld zusterinstellingen, toezichthouders en overheid) wordt in goed onderling overleg gecoördineerd en afgestemd. Een Partij zal geen mededelingen doen aan derden zonder voorafgaande instemming van de andere Partij, tenzij zij daartoe op grond van een wettelijk of statutair voorschrift verplicht is.

#### ARTIKEL 4. SAMENWERKING MET DERDEN

4.1 De samenwerking waarop deze Intentievereenkomst ziet, staat op geen enkele manier de wetenschappelijke samenwerking met andere universiteiten en onderzoeks-instituten in de weg, doch beoogt het creëren van focus en massa waarmee Partijen een betere positie in zulke samenwerking kunnen verwerven.

4.2 Gedurende de looptijd van deze Intentieverklaring zullen Partijen alleen in onderling overleg met derden onderhandelen over geïstitutionaliseerde vormen van samenwerking, samenvoeging of samengaan van (een deel van) hun organisatie met een derde partij. Deze bepaling is niet van toepassing, voor zover de derde een van de met Partijen verbonden academische ziekenhuizen of verbonden partijen is.

4.3 Gedurende de looptijd van deze Intentieverklaring ondernemen Partijen geen acties die afbreuk kunnen doen aan de doelstellingen van Partijen zoals geformuleerd in artikel 1.

## ARTIKEL 5. TIJDPAD

5.1 Partijen streven ernaar per 1 september 2012 een bestuurlijk voorstel gereed te hebben over de juridische, organisatorische en bestuurlijke vormgeving van de beoogde samenwerking in de in artikel 1.3 genoemde typen van Initiatieven. Dat voorstel richt zich, wat de op grond van artikel 1.3 geïdentificeerde samenwerking in het onderwijs betreft, op samenvoeging van opleidingen, liefst met ingang van studiejaar 2013-2014.

5.2 Partijen streven ernaar in 2013 een samenwerkingsovereenkomst gereed te hebben waarin een nadere uitwerking van de gezamenlijke uitgangspunten en randvoorwaarden wordt vastgesteld.

5.3 Alvorens over zal worden gegaan tot feitelijke tekening van de samenwerkings-overeenkomst zullen Partijen binnen de organisaties de reguliere adviestrajecten doorlopen.

5.4 Partijen zullen zich er voorts van vergewissen dat de samenwerking en de gekozen samenwerkingsvorm passend is binnen de relevante wettelijke kaders, waaronder die van mededingingsrecht.

## ARTIKEL 6. DUUR VAN DE INTENTIEVERKLARING EN ONTBINDING

6.1 Deze Intentieverklaring wordt aangegaan per <x> mei 2012 voor een periode van een jaar. Een eventuele verlenging van de duur van de Intentieverklaring wordt uitdrukkelijk schriftelijk tussen partijen overeengekomen.

6.2 Partijen gaan de Intentieverklaring aan onder de uitdrukkelijke voorwaarde van bevestiging van de zijde van OCW dat de samenwerkingen bedoeld in artikel 1.3 geen grond vormen, noch zullen vormen, voor het toepassen van een doelmatigheidskorting op de rijksbijdrage van Partijen of voor het verminderen van hun gezamenlijke aandeel in de tweede geldstroom.

6.3 Partijen gaan de Intentieverklaring eveneens aan onder de uitdrukkelijke

voorwaarde dat OCW en EL&I bewerkstelligen dat de voorgenomen samenwerking op geen enkele wijze in strijd is met het Nederlandse en communautaire mededingingsrecht.

6.4 Deze Intentieverklaring is, tenzij partijen dit uitdrukkelijk anders overeenkomen, met onmiddellijke ingang en zonder nadere rechterlijke tussenkomst ontbonden, indien:

a) partijen op 31 december 2013 geen samenwerkingsovereenkomst zoals bedoeld in artikel 5.2, of geen verlenging zoals bedoeld in artikel 6.1 zijn aangegaan, of

b) vóór 31 december 2013 voor de in deze verklaring omschreven beoogde vormen van samenwerking niet is verkregen:

- de instemming of goedkeuring van de bestuurlijke en toezichhoudende organen, indien vereist, en/of
- een uitspraak van de Ondernemingskamer strekkende tot instandhouding van de genomen bestuursbesluiten, indien de medezeggenschapsorganen negatief zouden adviseren en daarover een uitspraak van de Ondernemingskamer zouden vragen.

6.5 Indien één of meer van bovengenoemde omstandigheden zich voordoet en het onderhavige traject wordt beëindigd, zijn Partijen over en weer niet gehouden tot vergoeding van enige schade.

## ANNEX 2. ENVISAGED REDUCTION OF 'CROHO' LABELS BY SEPTEMBER 2012

New 'Croho' programmes	Croho code	Old croho programmes	Croho code
Letterkunde/Literary Studies	60813	Literatuurwetenschap	66802
		English Language and Culture	60290
		Franse Taal en Cultuur	66808
		Duitse Taal en Cultuur	66805
		Nederlandse Taal en Cultuur	66804
Letterkunde (resma)/Literary Studies	60814	Phil Letterkunde (resma)	60038
Taalwetenschappen/Linguistics	60815	English Language and Culture	60290
		Franse Taal en Cultuur	66808
		Taalwetenschap	66803
		Duitse Taal en Cultuur	66805
		Nederlandse Taal en Cultuur	66804
Taalwetenschappen (resma)/Linguistics	60817	Linguistics (resma)	60720
Communicatie- en Informatiewetenschappen/ Communication & Information Studies	66826	Communicatie- en Informatiewetenschappen	66826
		Journalistiek	60665
Geschiedenis/History	66034	Geschiedenis	66034
Geschiedenis (resma) / History	60139	Geschiedenis na 1400 (resma)	60297
Archeologie/Archaeology	60805	Archeologie	60805
Oudheidstudies/ Classics & Ancient Civilizations	60821	Griekse en Latijnse Taal & Cultuur	66003
		Oudheidkunde	66704
Oudheidstudies (resma)/ Classics & Ancient Civilizations	60039	Oudheidstudies (resma)	60039
Kunst- en cultuurwetenschappen/Arts & Culture	60087	Comparative Arts and Media Studies	60374
		Kunstgeschiedenis	66824
Kunst- en cultuurwetenschappen (resma)/ Arts & Culture	60829	Visual arts, Media and Architecture (rema)	60036
Erfgoedstudies/Heritage Studies	60808	Erfgoedstudies	60808
Erfgoedstudies/Heritage Studies	60836	Museumconservator	60037
Filosofie/Philosophy	60822	Filosofie in Bedrijf	60042
		Wijsbegeerte	66081
		Christian Studies of Science & Society	60043
Filosofie/Philosophy	60823	Wijsbegeerte van een bep wetenschapsgebied	67084
Theologie & Religiewetenschappen/ Theology & Religious Studies	60824	Theology	60254
		Religie en Levensbeschouwing	66114
Theologie & Religiewetenschappen/ Theology & Religious Studies	60825	Godgeleerdheid	66109
Theologie & Religiewetenschappen (resma)/ Theology & Religious Studies	60827	Religion & Theology (resma)	66118



# ANNEX 3. VUA BACHELORS AND MASTERS WITHIN THE FOUR THEMES

Human Health and Life Sciences	Faculty	Valt ook onder thema
B Psychologie	FPP	
B Tandheelkunde	ACTA	
B Biomedische Wetenschappen	FALW	
B Gezondheid en Leven	FALW	
B Gezondheidswetenschappen	FALW	
B Bewegingswetenschappen	FBW	
B Farmaceutische Wetenschappen	FEW	
B Lifestyle Informatics	FEW	
B Medische Natuurwetenschappen	FEW	
B Geneeskunde	VUMC	
B Biologie	FALW	S4S
B Natuur- en Sterrenkunde	FEW	S4S
B Scheikunde	FEW	S4S
B Wiskunde	FEW	S4S
M Psychologie	FPP	
M Tandheelkunde 2-jr opl	ACTA	
M Tandheelkunde 3-jr opl	ACTA	
M Biomedical Sciences	FALW	
M Biomolecular Sciences	FALW	
M Health Sciences	FALW	
M Lifestyle and Chronic Disorders	FALW	
M Neurosciences	FALW	
M Fundamental and Clinical HMS	FBW	
M Human Movement Sciences	FBW	
M Bioinformatics	FEW	
M Drug Discovery and Safety	FEW	
M Medical Natural Sciences	FEW	
RM Clin. and Dev. Psychopath	FPP	
RM Cognitive Neuropsychology	FPP	
M Cardiovascular Research	VUMC	
M Geneeskunde	VUMC	
M Oncology	VUMC	
M Chemistry	FEW	S4S
M Mathematics	FEW	S4S
M Physics	FEW	S4S

Science for Sustainability	Faculty	also in theme
B Aarde en Economie	FALW	
B Aardwetenschappen	FALW	
B Science, Business & Innovation	FEW	
B Archeologie	LET	
B Oudheidkunde	LET	
M Chemistry	FEW	H2LS
M Mathematics	FEW	H2LS
M Physics	FEW	H2LS
M Archeologie	LET	CW
M Erfgoedstudies	LET	CW
M Oudheidkunde	LET	CW
M Oudheidstudies (research)	LET	CW
M Management, Policy Analysis and Entr.	FALW	
M Biology	FALW	
M Earth Sciences	FALW	
M Ecology	FALW	
M Env. and Resource Man.	FALW	
M Geosc. of Basins and Lith.	FALW	
M Hydrology	FALW	
M Physics	FEW	S4S

Connected World	Faculty	also in theme
B Informatica	FEW	
B Informatie, Multimedia en Management	FEW	
B Religie en levensbeschouwing	FGG	
B Theologie	FGG	
B Pedagogische wetenschappen	FPP	
B Communicatiewetenschap	FSW	
B Cult. Ant. en Ont.soc.	FSW	
B Communicatie- en Informatiewetenschap	LET	
B Kunstgeschiedenis	LET	
B Sociologie	FSW	
B Algemene Cultuurwetenschappen	LET	
B Engelse Taal en Cultuur	LET	
B Franse Taal en Cultuur	LET	
B Geschiedenis	LET	
B Griekse en Latijnse Taal en Cultuur	LET	
B Literatuurwetenschap	LET	
B Nederlandse Taal en Cultuur	LET	
B Taalwetenschap	LET	
B Wijsbegeerte	WIJS	
B Politologie	FSW	
B Criminologie	RCH	
B Bestuurs- en Organisatiewetenschappen	FSW	PS
M Computer Science	FEW	
M Information Sciences	FEW	
M Parallel and Distributed Computer Syst	FEW	
M Communicatiewetenschap	FSW	
M Communicatie- en Informatiewetenschap	LET	
M Comparative Arts and Media Studies	LET	
M Journalistiek	LET	
M Kunstgeschiedenis	LET	
M Museumconservator	LET	
M Visual Arts, Media, Arch. (res)	LET	
M Leraar godsdienst en LEVO	FGG	
M Pedagogische wetenschappen	FPP	
M Leraar VHO Aardrijkskunde	FPP	
M Leraar VHO Algemene Economie	FPP	
M Leraar VHO Biologie	FPP	
M Leraar VHO Duits	FPP	
M Leraar VHO Engels	FPP	
M Leraar VHO Frans	FPP	
M Leraar VHO Gesch. en Staatsinr.	FPP	
M Leraar VHO Gr en Lat T en C	FPP	

Connected World	Faculty	also in theme
M Leraar VHO Latijnse T en C	FPP	
M Leraar VHO Maatschappijleer	FPP	
M Leraar VHO Maatsch. en Mij.wet	FPP	
M Leraar VHO Man. en Org.	FPP	
M Leraar VHO Natuurkunde	FPP	
M Leraar VHO Nederlands	FPP	
M Leraar VHO Scheikunde	FPP	
M Leraar VHO Wiskunde	FPP	
M Godgeleerdheid	FGG	
M Religie en levensbeschouwing	FGG	
M Religion and Theology (research)	FGG	
M Theology	FGG	
M Social and Cultural Anthropology	FSW	
M Christian Studies	WIJS	
M Artificial Intelligence	FEW	
M Business Mathematics and Informatics	FEW	
RM Social Psychology	FPP	
M Cult., Org. and Management	FSW	
M Soc. van Mondialisering en Div.	FSW	
M Social Research (research)	FSW	
M Sociologie	FSW	
M Duitse Taal en Cultuur	LET	
M English Language and Culture	LET	
M Franse Taal en Cultuur	LET	
M Geschiedenis	LET	
M Geschiedenis na 1400 (research)	LET	
M Griekse en Latijnse Taal en Cultuur	LET	
M Letterkunde (research)	LET	
M Linguistics (research)	LET	
M Literatuurwetenschap	LET	
M Nederlandse Taal en Cultuur	LET	
M Taalwetenschap	LET	
M Wijsbegeerte	WIJS	
M Wijsbegeerte Bep. Wet. Geb.	WIJS	
M Political Science	FSW	
M Criminologie	RCH	
M ICC	RCH	
M Stochastics and Financial Mathematics	FEW	PS
M Beleid, Communicatie en Org.	FSW	PS
M Bestuurskunde	FSW	PS
M Archeologie	LET	S4S
M Erfgoedstudies	LET	S4S
M Oudheidkunde	LET	S4S
M Oudheidstudies (research)	LET	S4S

Professional Services	Faculty	also in theme
B Bestuurs- en Organisationswetenschappen	FSW	CW
B Business Analytics	FEW	
B Bedrijfskunde	FEWEB	
B Econometrie en Operationele Research	FEWEB	
B Economie en bedrijfseconomie	FEWEB	
B International Business Administration	FEWEB	
B Notarieel recht	RCH	
B Rechtsgeleerdheid	RCH	
M Stochastics and Financial Mathematics	FEW	CW
M Beleid, Communicatie en Org.	FSW	CW
M Bestuurskunde	FSW	CW
M Marketing	FEWEB	
M Accounting and Control	FEWEB	
M Accounting and Control (deeltijd)	FEWEB	
M Finance	FEWEB	
M Econometrics and Operations Research	FEWEB	
M Economics	FEWEB	
M TI Master of Philosophy in Economics	FEWEB	
M Business Administration	FEWEB	
M Notarieel recht	RCH	
M Rechtsgeleerdheid	RCH	
M International Business Law	RCH	
M Ondernemingsrecht	RCH	
M Philosophy of Man. & Org.	WIJS	
M Spatial, Trans and Env Ec	FEWEB	
B Criminologie	RCH	
M Criminologie	RCH	
M ICC	RCH	
B Notarieel recht	RCH	
B Rechtsgeleerdheid	RCH	
M Notarieel recht	RCH	
M Rechtsgeleerdheid	RCH	
M International Business Law	RCH	
M Ondernemingsrecht	RCH	
M Physics	FEW	S4S

## END NOTES

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- See: <http://www.iamsterdam.com/nl/economic-development-board/over-edba>.
- A 2009 CWTS analysis of the Bibliometric Benchmarking of the Amsterdam Universities indicated positions among the top 50 of the world universities in a range of fields, including clinical medicine, biological sciences, geosciences, economics and various other social sciences.
- This process will follow the lines of a process that develops CAM activity (HEFCE: Collaborations, Alliances and Mergers in Higher Education, March 2012, p. 61).
- Combined total of full-time and part-time students.
- Excluding students enrolled in the VU-UvA joint Amsterdam University College.
- Including specializations such as Financial Management, Human Resource Management, Entrepreneurship, Information and Knowledge Management, Management Consultancy, Strategy and Organization, and Transport and Supply Chain Management.
- See for instance The Impact of Research Universities on Regional Economies: The Concept of University Products, Iryna Lendel, <http://edq.sagepub.com/content/24/3/210>
- BIGGAR Economics, Economic Impact of Research & Commercialisation at Leiden University & Leiden University Medical Centre, 2011, op <http://media.leidenuniv.nl/legacy/biggar-report-aug-2011.pdf>
- For information about these institutes, see: [www.vu.nl/nl/onderzoek/interdisciplinaire-onderzoeksinstituten/index.asp](http://www.vu.nl/nl/onderzoek/interdisciplinaire-onderzoeksinstituten/index.asp).
- The progress in the SIRIUS project received an "A" rating in 2011.
- In line with announced changes in the WHW (brief Staatssecretaris van OCW dd 12 april 2012), expected to become effective for the academic year 2013.
- Meaning the sum of 4 times the legal tuition fee ('wettelijk collegegeld') and the government grant pertaining to a full, low price group ('laagbekostigd'), 4-year curriculum plus ba and ma degree.



