

International degree students in the Netherlands: a regional analysis

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Introduction

Access to international talent is becoming increasingly important in sustaining modern knowledge economies. For cities and regions, international talent is vital both to local knowledge intensive industries, and an important factor in attracting new knowledge intensive business to the region. According to PBL, the Netherlands' policy in attracting and retaining knowledge migrants is still in its infancy.¹ Meanwhile, the OECD concludes that international students enrolling in the Netherlands higher education system have become a most sizable group of (potential) knowledge migrants.² International students are enrolled at higher education institutions throughout the Netherlands, but there are distinct regional differences in the international students populations. These differences align with different countries of origin, bachelor- vs. master programmes, and fields of study. These resulting differences in turn affect the stay rate of international students after graduation, and warrant a regional approach to attracting and retaining international students.³ This report describes the regional makeup of international student- and graduate populations in the Netherlands

Overall picture

The number of internationally mobile degree students enrolled in the Netherlands has doubled between 2006–07 and 2016–17, from over 40,000 to over 80,000⁴. The international student population in the Netherlands is becoming increasingly diverse, now totalling 164 different nationalities.

The number of degree students from the Netherlands enrolled abroad is about a fifth to a quarter of this number, resulting in an inbound to outbound student mobility ratio of between 1-in-4 and 1-in-5⁵. Worldwide, there are over 4 million mobile degree students, giving the Netherlands a global market share of about 2%.

When looking at international students at a local level, the picture differs markedly across provinces and municipalities. Maastricht and Amsterdam have the most international degree students enrolled, with about 10,000 each. In Maastricht this constitutes over half of the total student population, whereas in Amsterdam this is less than 10%. The Hague, Delft and Wageningen host sizable numbers of international students, which make up around 20% of their total student populations. All other municipalities listed below host sizable numbers of international students, which make up between 5–15 % of their total student populations.

¹ Planbureau voor de leefomgeving (PBL, 2014), [Buitenlandse kenniswerkers in Nederland – waar werken en wonen ze, en waarom?](#)

² OECD (2016), [Recruiting immigrant workers: the Netherlands](#).

³ A blueprint, based on the evaluation of *Make it in the Netherlands 1.0*, for such regional approach is proposed in the '[Welcome, to Work](#)' report by Blaauwberg, 2016.

⁴ [www.nuffic.nl/en/internationalisation/mobility-statistics/incoming-degree-mobility](#)

⁵ [www.nuffic.nl/en/internationalisation/mobility-statistics/outgoing-degree-mobility](#)

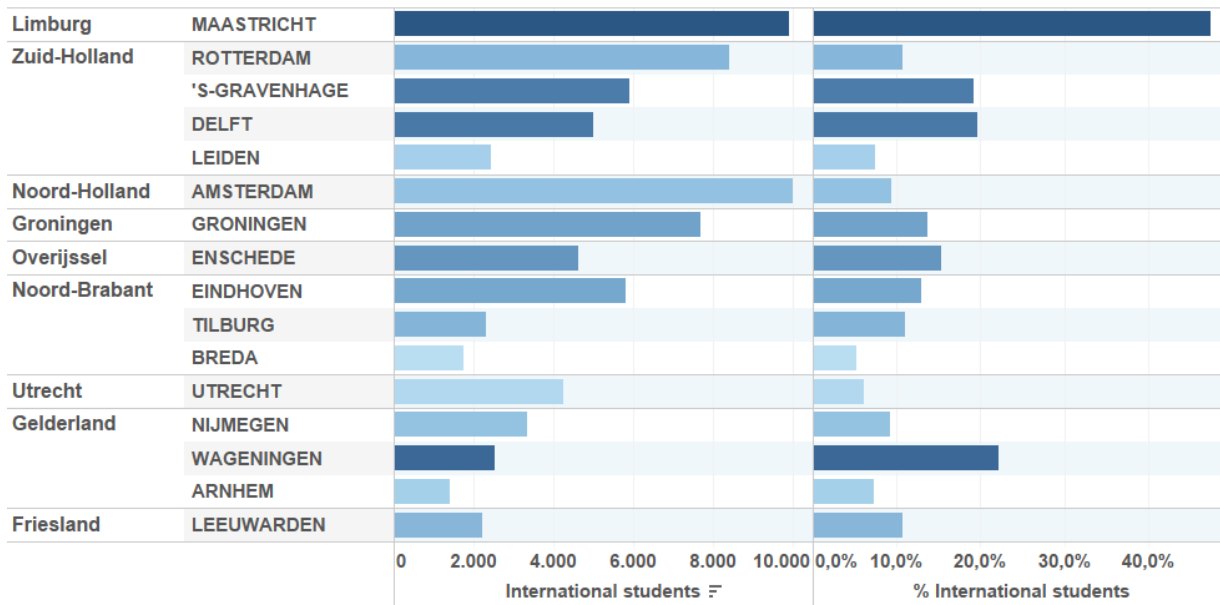


Figure 1: The number (left) and percentage (right) of international degree students enrolled in higher education in the Netherlands, divided by municipality. Minimum number of international students = 1000.

Programme preferences

This reports looks specifically at the top fifteen countries of origin of international degree students enrolled in Dutch higher education, in 2016–17. Together these nationalities represent 64% of all 80,000+ international degree students in the Netherlands. Neighbouring countries (Germany, Belgium, the United Kingdom), southern and eastern European countries, and Asian countries constitute the most important regions of origin, which is as such reflected in the top fifteen.

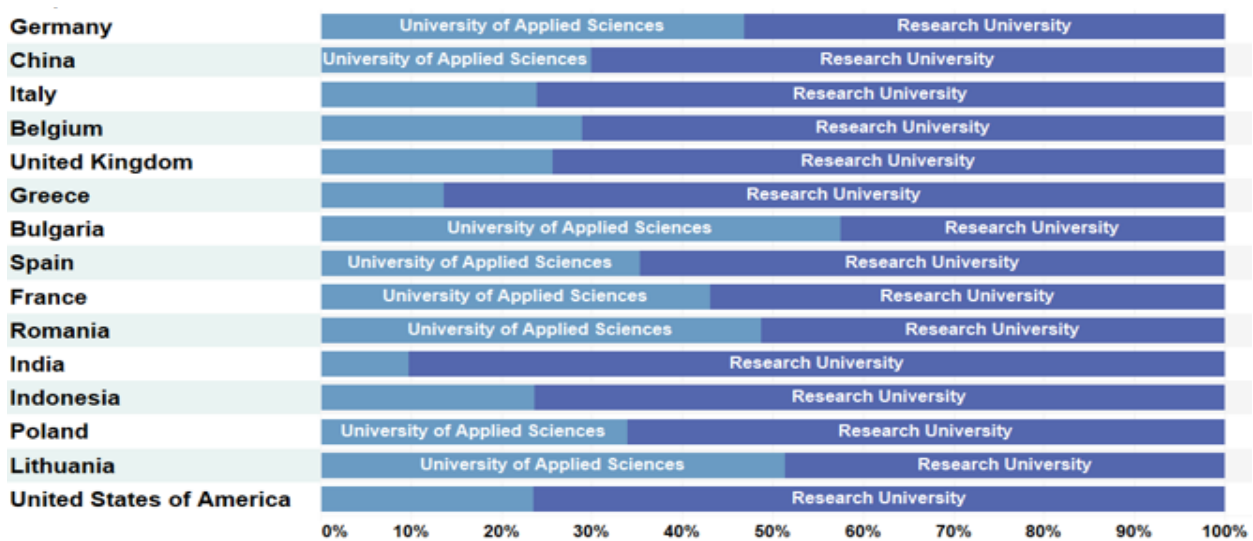


Figure 2: Percentage share of international degree students enrolled in universities of applied sciences and research universities, for the top 15 nationalities enrolled in the Netherlands 2016–17.

It is noteworthy that these international student groups often have distinct preferences for study programmes in either universities of applied sciences (UASs), or research universities (RUs), and for distinct fields of study (CRHOHO – HOOP). Students from Central European and eastern European countries with a binary system of higher education seem somewhat inclined towards a more even division over both types of institutions.⁶ These preferences in turn affect the possible and likely locations, cities and regions in which these international students enrol, and hence mediate the geographical spread of students.

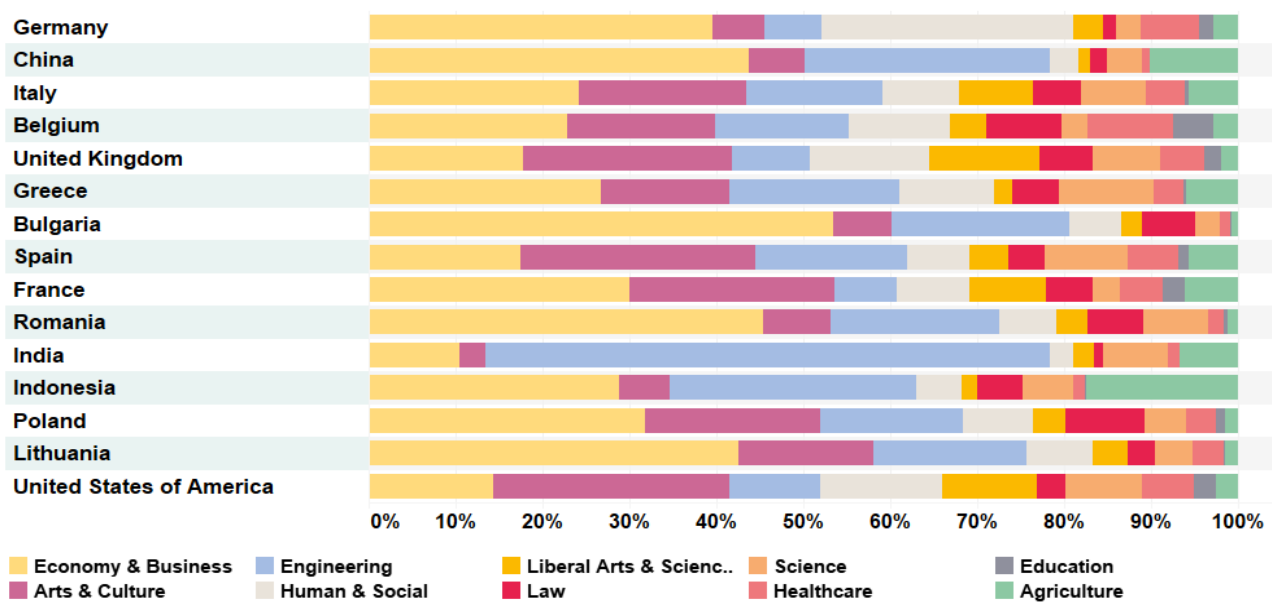


Figure 3: Percentage share of international degree students per field of study (CROHO-HOOP), 2016-17.

Border mobility

With over 22,000 students enrolled in the Netherlands in 2016-17, **Germany** remains by far the most important country of origin of international degree students in the Netherlands. German students mainly enrol in the border region, for a variety of different study programmes, most often at bachelor's level. The most popular fields of study are, by far, Economy & Business and Human & Social Sciences (see figure 3).

At universities of applied sciences such as Fontys, Saxion, Stenden, HAN and Hanze, study programmes such as International Business and Management Studies (IBMS), Marketing, Social Work and Tourism Management are most popular among German students. Numbers of German students in Social Work have been declining since 2012, causing a significant drop in the number of German students enrolling at UASs.⁷

⁶ A binary system refers to higher education systems that distinguish between higher professional education (*Fachhochschulen, hogescholen, polytechnics, etc.*), and academic higher education, i.e. (research) universities.

⁷ Nuffic (2015), [Drop in German students studying at Dutch universities of applied sciences](#).

At research universities, such as Maastricht University, the University of Groningen, Radboud University and the University of Twente, Psychology and International Business are the most popular study programmes for German students. These are also the two programmes attracting a large number of German master's students. The Erasmus University is no. 10 in attracting German degree students, mainly because of study programmes offered by its reputable international business school.

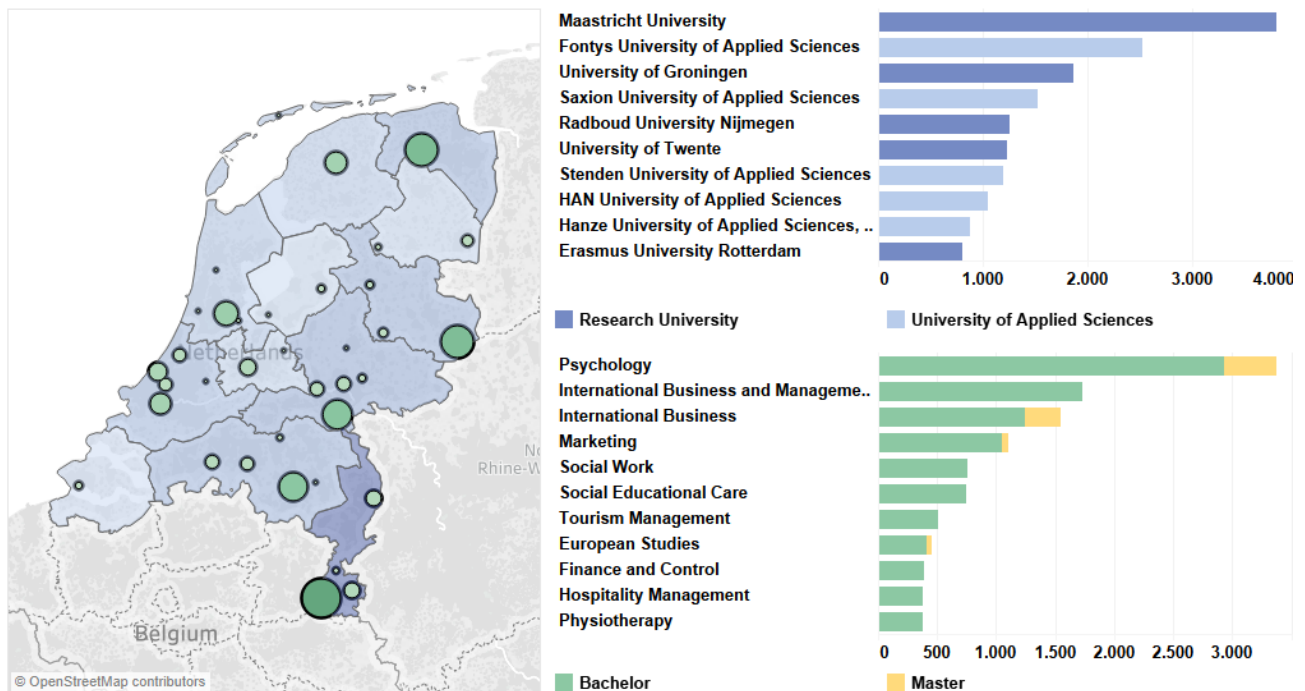


Figure 4: German degree students in the Netherlands higher education, 2016–17.

For Germany, demographic decline in youth and students numbers, coupled with substantial investments in its own higher education system, will most likely decrease the number of students choosing to enrol across the border. In most cases, the international student populations at border institutions have been diversifying at a rapid pace, with an increasing inflow of international degree students of other nationalities and countries of origin.

The number of **Belgian** students enrolling in the Netherlands is much more modest (<3,000), and these students are even more concentrated in the border region. Maastricht University alone enrolls over a third of all Belgian students in the Netherlands, in, for example, International Business, but also in Medicine (exclusively taught in Dutch). At the Delft University of Technology, over 175 Belgian students study Aerospace Engineering. Finally, Belgian students quite often enrol at universities of applied sciences in Fine Arts, such as Music or Dance.

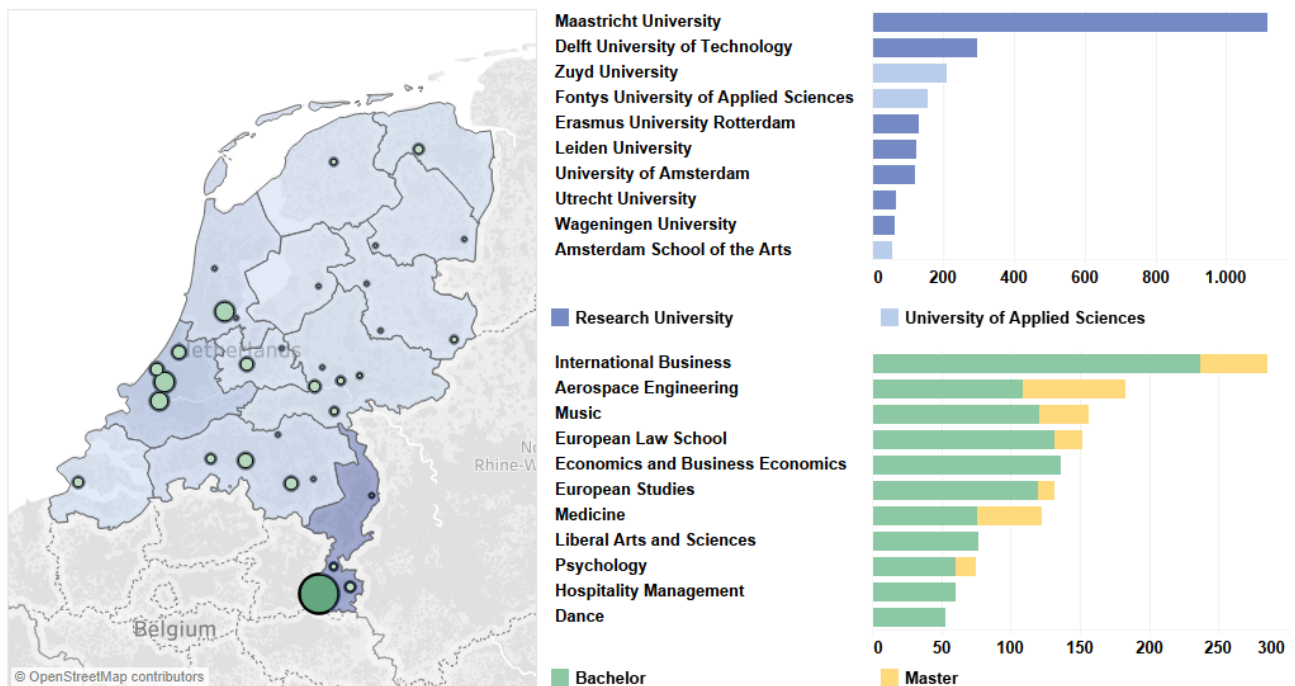


Figure 5: Belgian degree students in the Netherlands higher education, 2016–17.

Finally, the **British** students in the Netherlands come from a somewhat different background. The British higher education does not have a binary character, relies more heavily on private funding than most continental European systems, and also charges students much higher tuition fees. The number of British students quadrupled in the last five to six years to ca. 2,750 in 2016–17. This is partially due to a sharp increase in British tuition fees in 2011–12. British students in the Netherlands mainly enrol at research universities (75% of total), and across all fields of study. The university colleges are especially popular with British students, as are Amsterdam, Groningen and Maastricht, along with The Hague, Rotterdam, Leiden and Utrecht.

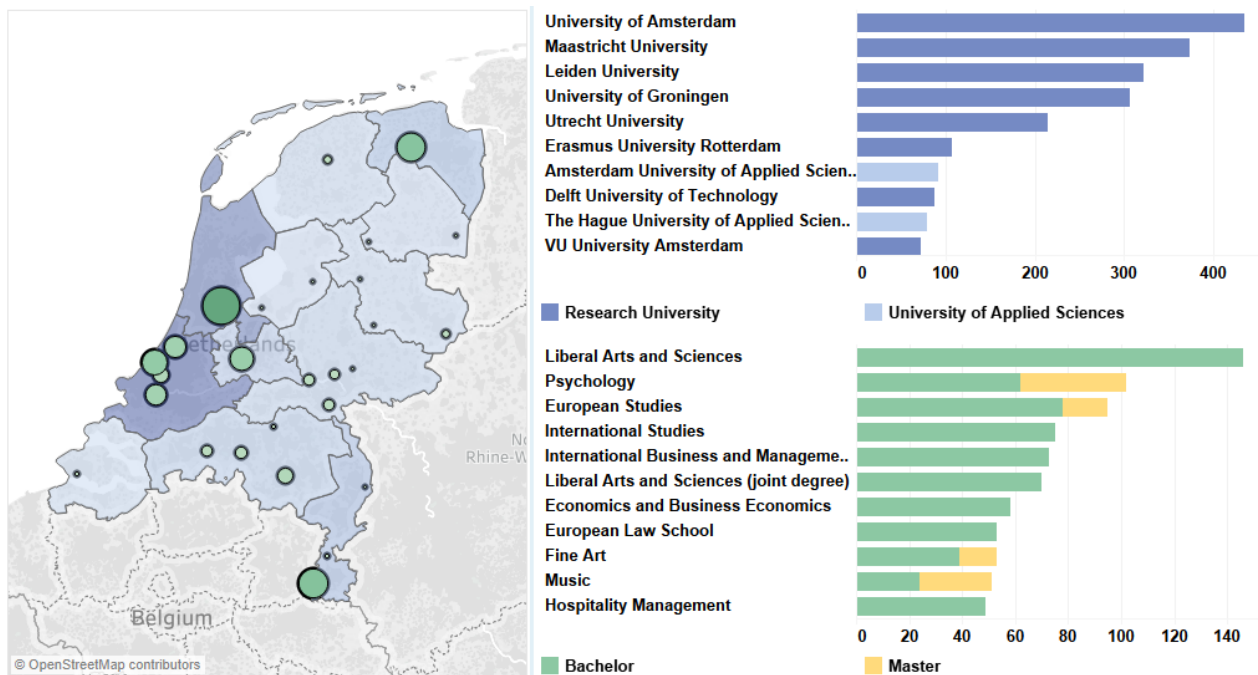


Figure 6: British degree students in the Netherlands higher education, 2016–17.

Although Maastricht University features as a top destination for all three 'border' nationalities, it also hosts international degree students from (exactly) 100 other nationalities. Maastricht University can thus rightfully claim to be the most international university in the Netherlands, as far as its student population is concerned.

Southern Europe

International degree students from southern Europe shows some coherence in their study programme preferences, as well as in their enrolment trends.⁸ This group has shown a remarkable growth over the last years. Southern European students mainly enrol at research universities, which is reflected in the top ten most popular higher education institutions. Eleven out of thirteen research universities enrol more than 200 international students from southern Europe, with Maastricht University, Erasmus University Rotterdam and Delft University of Technology enrolling over 800.

⁸ Southern Europe, following the UN classification of world geographical regions, consists of Spain, Portugal, Italy, Greece, and all the western Balkan states. Portugal and the Balkan states, with relatively few international degree students in the Netherlands, do not make it into the top 15, and as such are not discussed separately.

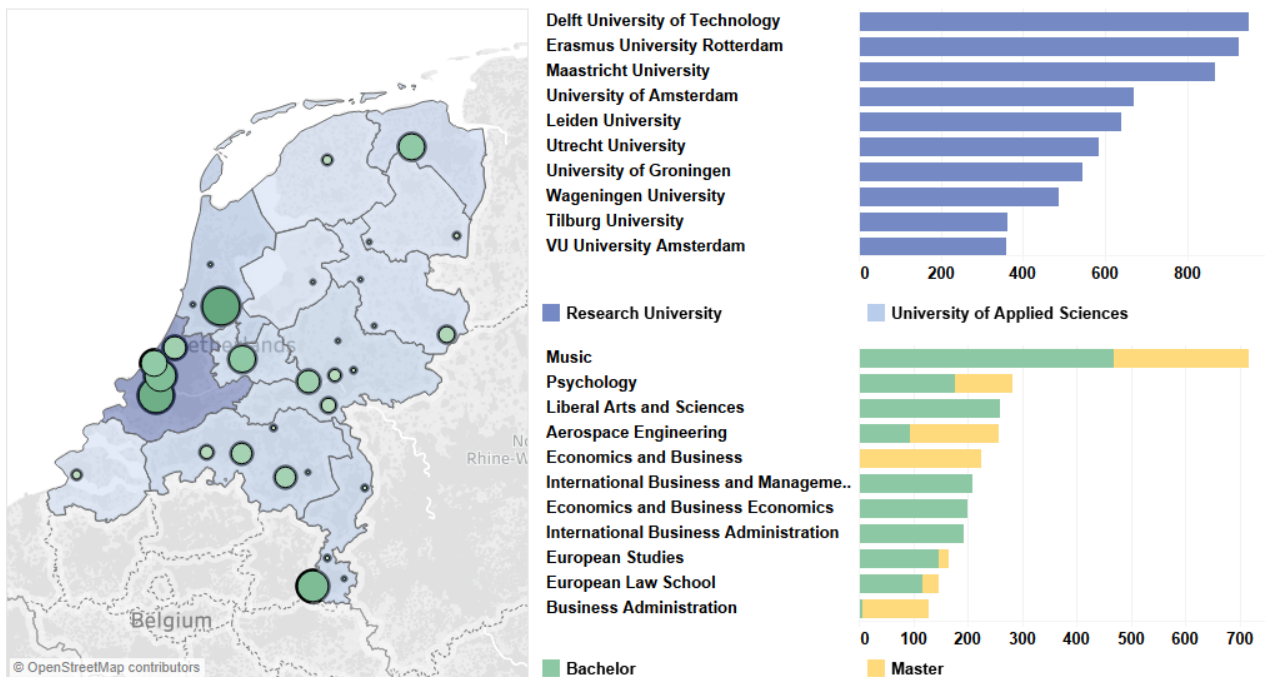


Figure 7: Degree students from southern Europe in the Netherlands higher education, 2016–17.

Master's programmes at research universities are relatively popular vis-à-vis bachelor's programmes. The single most popular study programme is Music, within the Fine Arts at various universities of applied sciences. Especially among students from **Spain** (>2,000 students total), Music is the very most popular programme. Students from **Italy** (>3,300) often study Liberal Arts & Sciences, Aerospace Engineering and European Studies. Students from **Greece** (>2,300) study Economy & Business, or major in Psychology.

Eastern Europe

Students from eastern Europe seem to have a small preference for universities of applied sciences, resulting in a more even distribution over different cities in the Netherlands than some of the other regions of origin. Economy & Business is by far the most popular field of study, which is exemplified by International Business and Management Studies (IBMS) being the most popular overall study programme. This is also visible from the the shares in figures 2 and 3 for **Bulgaria** (>2,200), **Romania** (>1,800), **Poland** (>1,100) and **Lituania** (>900).

For all four nationalities, Hospitality Management is a relatively popular programme. Romanian and Bulgarian students in particular can be found in Information and Communication Technology (HBO-ICT), a profession which is in high demand in the Netherlands. The institution hosting most students from eastern Europe is the Hague University of Applied Sciences, in programmes such as Law, IBMS, Communication and European Studies. At the research universities of Groningen and Maastricht these students most often enrol in study programmes in International and/or European Law, whereas at the universities of Rotterdam and Amsterdam they are more often enrolled in International Business.

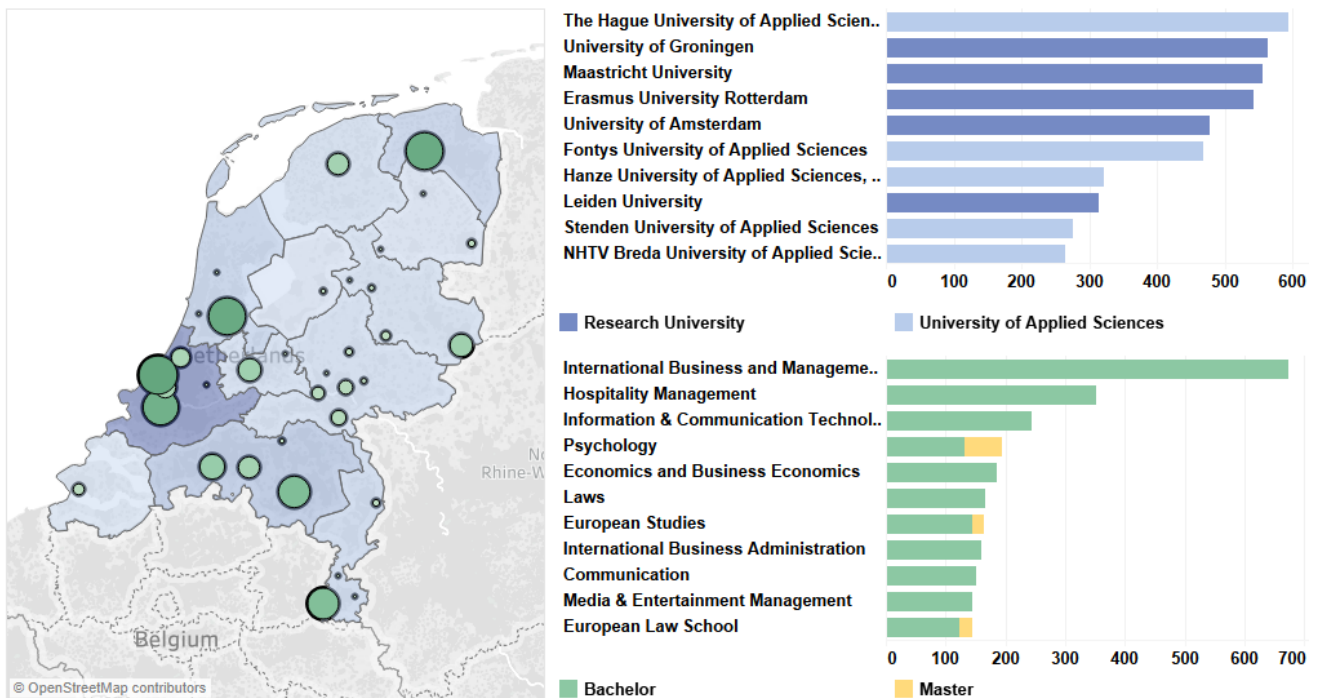


Figure 8: Degree students from eastern Europe in the Netherlands higher education, 2016–17.

Students from Asia

International degree students from Asia are a markedly different group from the hitherto discussed students from Europe, in the sense that they come from different national and educational cultures, pay much higher tuition fees in the Netherlands, and are dependent upon a residence permit for studies. They are much more likely to enrol in a master's level programme at research universities, and show a preference for either Economy & Business, or Engineering programmes.

Students from **China** (> 4.300) most often enrol in International Business and Management Studies (IBMS) at universities of applied sciences, and in Electrical Engineering at (technical) research universities. Students from **India** (> 1.500) predominantly enrol for Msc. Programmes in Engineering, in Delft and Eindhoven. Students from **Indonesia** (> 1.500) also enrol in Economy or Engineering programmes, but also show an interest in 'green' programmes, such as those at Wageningen University.

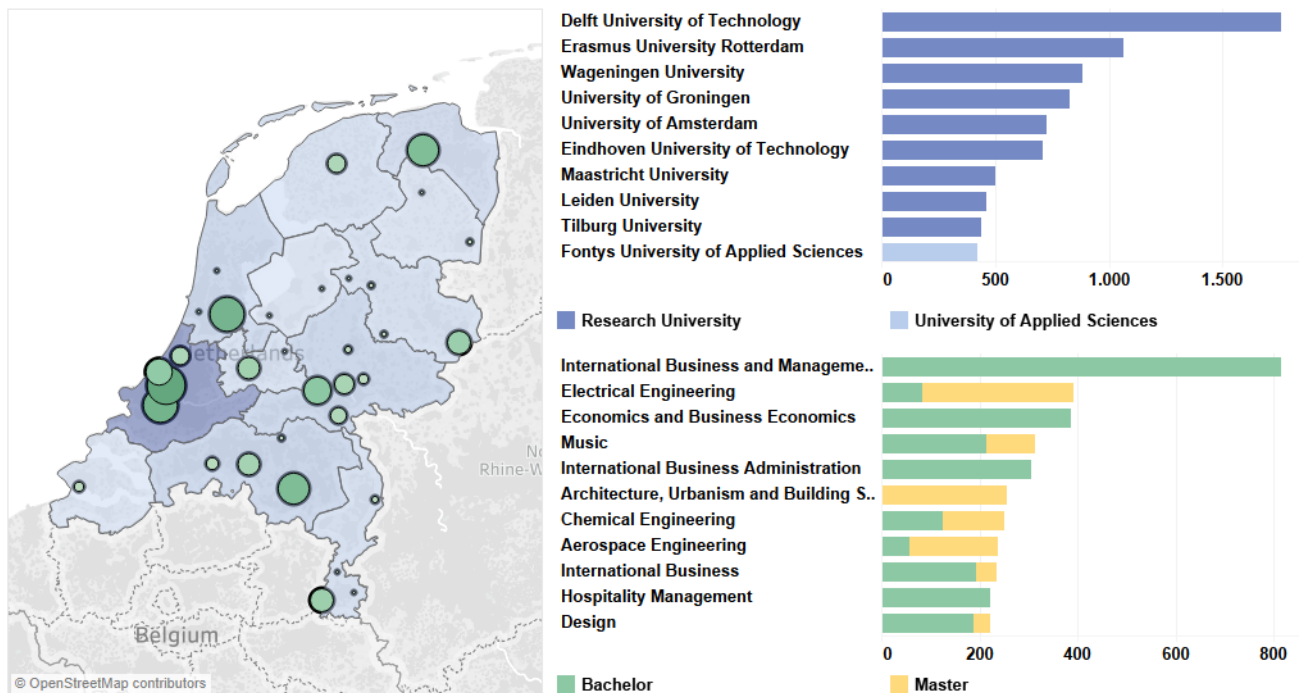


Figure 9: Degree students from Asia in the Netherlands higher education, 2016–17.

The technical universities of Delft, Wageningen and Eindhoven feature prominently among the most popular institutions, as do the universities of Rotterdam, Groningen and Amsterdam – mainly for Business. Due to their preference for technically oriented programmes, international students from Asia contribute significantly to achieving the goals of the *Techniekpact*.⁹

⁹ <https://www.rijksoverheid.nl/documenten/convenanten/2013/05/13/nationaal-techniekpact-2020>

Stay rates per region

In 2016, Nuffic conducted an analysis of the stay rate of international degree students who graduated from an university of applied sciences or research university in the Netherlands. International students from the graduate cohorts 2007, 2008 and 2009 were followed over time, at 1, 3, 5 and 7 years after their graduation.

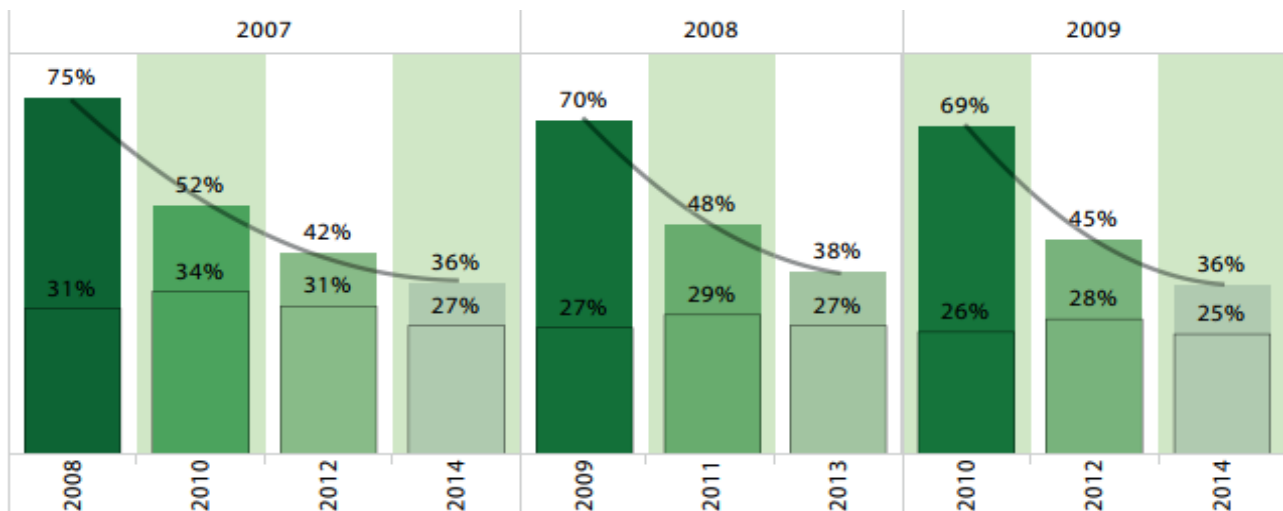


Figure 10: Stay rates (full bar) and working stay rates (lower bar) of international graduates from higher education institutions in the Netherlands, from the 2007, 2008 and 2009 graduation cohorts.

Of the some 12,000 international graduates per cohort, between 36% and 42% stayed in the Netherlands at least 5 years after graduation. Some other conclusions were that non-EEA students, students at universities of applied sciences, and students in Engineering, Science and Healthcare have higher than average stay rates. The labour participation quote of all three cohorts was 70–75%. It was also established that based on the latest student mobility data, CPB econometric models and an estimated lifelong stay rate of 25%, the brain gain for the Netherlands would figure €1.57 billion annually.¹⁰

¹⁰ Nuffic (2016), [Analyse stayrate van internationaal afgestudeerden 2007-2014](#).



Figure 11: Number of staying international students from the 2007 graduation cohort, per COROP region in the Netherlands, measured in 2008, 2010, 2012 and 2014. The 2008 and 2009 cohorts show similar patterns.

Based on the same measurement of these stay rates, it can be established where international graduates go on to live, after their studies. What stands out in particular is that a majority of international graduates goes on to live in one of the four largest cities. At five to seven years after graduation, around 25 % – or one in every four – international graduates lives in the Amsterdam region. Around 11–12% live in Rotterdam, 10–11% live in The Hague and 8–9% live in Utrecht. This indicates that these cities, and above all Amsterdam, are attracting international graduates from throughout the Netherlands.

Furthermore, international graduates in the bigger cities are less likely to leave between one and seven years after graduation than international graduates in smaller and medium sized cities. Finally, the bigger cities have relatively more non-EEA graduates in their population than EEA graduates.

The Netherlands Environmental Assessment Agency (PBL) concluded in 2014 that there is a distinct 'Amsterdam Effect'.¹¹ Amsterdam, and to a lesser extent Rotterdam and The Hague, attract and retain more foreign knowledge workers than could have been expected based on the size and composition of their economic clusters. This effect now also seems to hold true for international graduates staying in the Netherlands after their studies.

¹¹ Planbureau voor de leefomgeving (PBL, 2014), [Buitenlandse kenniswerkers in Nederland – waar werken en wonen ze, en waarom?](#) Pp. 14.

Policy measures

Looking at the regional heterogeneity in international students populations, as well as the city-oriented dynamics of international graduates staying in the Netherlands, three already proposed policy measures are applicable:

- 1) OECD: Create more and better opportunities for, and incentives to, international students to learn Dutch and obtain work experience. Both the level of Dutch and work experience are of great importance to the opportunities of international graduates on the Dutch labour market. Especially in more regionally oriented SME's, a fair knowledge of Dutch language is a must.
- 2) OECD: consider lower salary criteria, or other incentive, for international graduates and other knowledge workers who want to work in top sectors, or peripheral regions.
- 3) Blaauwberg: in discussing a follow up to the successful *Make it in the Netherlands*, start from a regional approach. In both education and the labour market, a regional approach is key.

Further Reading:

- Blaauwberg (2016), *Welcome, to Work. On the retention of international students in the Dutch labour market.* [Download](#).
- Planbureau voor de leefomgeving (2014), *Buitenlandse kenniswerkers in Nederland – waar werken en wonen ze, en waarom?* [Download](#).
- OECD (2016), *Recruiting immigrant workers: the Netherlands.* [Download](#).
- Centraal Plan Bureau (2012), *De economische effecten van internationalisering in het hoger onderwijs.* [Download](#).

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