Incoming degree student mobility in Dutch higher education 2018-2019
Summary

- In 2018-2019, there were 85,955 international degree students and 14,344 homecoming students enrolled in Dutch public higher education.
- In 2018-2019, the share of international students in Dutch public higher education increased to 11.5% of all students, compared to 10.5% in the previous year.
- More students from countries outside the European Economic Area (EEA) come to the Netherlands. Over a two-year period, the share of non-EEA students among international students increased from 24.8% in 2016-2017, to 26.9% in 2018-2019.
- In 2018-19, international students represented a total of 170 different nationalities.
- The absolute number of international students grew the most for bachelor’s programmes in research universities (RU). In 2017-2018, international students made up 17.8% of the new enrolments in these programmes, increasing to 20.4% in 2018-2019.
- This growth makes 2018-2019 the first academic year with more international degree students in bachelor’s programmes at research universities (30,500) than at universities of applied sciences (27,186). For master’s programmes, however, the shares of international students are still much higher. Research universities have 25,669 international master’s students enrolled, or 23.6% of all their master’s students, while universities of applied sciences (UAS) master’s programmes have 2,145 international students who make up 20.5% of all UAS master’s students.
- For the third year in a row, Italy is the country of origin with the greatest absolute growth in student numbers, adding 731 students to total 4,814 students enrolled in the Netherlands. Italy has now overtaken China as the 2nd most important country of origin after Germany.
- At universities of applied sciences, Arts and Culture has the highest relative share of international students. In absolute numbers, the field of Economics and Business has the most international students enrolled with 13,535.
- At research universities, Social Sciences surpassed Economics and Business as the largest field of study for international students in absolute numbers. Psychology attracted the most international students with 6,786, also growing the most with 1,369 more international students than in the previous academic year.
- Amsterdam is the city with the largest number of international degree students enrolled at 12,858 which accounts for 11.8% of all students in the city.
- There are 13,439 international degree students who are citizens of the 11 countries where a Netherlands Education Support Office (Neso) is located.

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1 The Neso offices, managed by Nuffic, are representative offices for in particular the Dutch higher education sector in the countries: Brazil, China, India, Indonesia, Mexico, Russia, South Africa, South Korea, Turkey and Vietnam. The Neso in Thailand closed in 2018.
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Introduction

The inflow of international students has been a central topic of public debate in the last couple of years. The Dutch Ministry of Education (OCW) and the Dutch universities’ associations (VH and VSNU) introduced in 2018, new plans for the future development of the internationalisation of education. These parties agree that internationalisation contributes to the quality of education and Dutch society in general, recognising, however, that it also creates challenges related to housing, language policy and accessibility of education.

We hope that this annual report will help policymakers and other decision makers to arrive at evidence based decisions. This report presents the most recent figures on university students coming from abroad to study in the Netherlands, which is technically called incoming degree student mobility. An analysis of the DUO register’s data gives an overview of the current trends and developments. Our goal for this report is to inform the discussion on the internationalisation of Dutch higher education.

In this year’s report, we have only included numbers for degree mobility, meaning international students who are enrolled in full degree programmes, in publicly financed Dutch higher education. We have not included number for credit mobility, meaning international students who come to the Netherlands for part of their study programme or for an internship. The numbers for this last group of international students will be part of a different report, which we expect to publish later in 2019. We have adjusted the definition of ‘international students’ to match the definitions the Ministry of Education and the Dutch universities’ associations use. In this report, we have not considered as international students, those students who have Dutch citizenship and finished their secondary education outside the Netherlands, which we will refer to as homecoming students.

In addition to the text and figures in this report, the research includes interactive online dashboards. The text and figures provide a detailed analysis of the current situation and its most important developments, but you can find more detailed information online, for example, details on specific countries and study programmes. You can check the facts and figures on the interactive dashboards available at www.nuffic.nl/facts-and-figures.
1. Total numbers & yearly growth rates

In the 2018-2019 academic year, a total number of 85,955 international students were enrolled in an accredited degree programme of public higher education in the Netherlands\(^2\). This means that international students make up 11.5% of all students in public higher education in the Netherlands. Compared to the 10.5% share of international students in the 2017-2018 academic year, this means an additional 9,349 international students. Besides the growth in the total size of the international students group, the diversity within this group increased as well. In 2018-19, these international students represented a total of 170 different nationalities\(^3\).

There were also 14,344 homecoming students enrolled in higher education in the Netherlands in 2018-2019. Homecoming students are students who hold Dutch citizenship and have obtained secondary education outside the Netherlands (ISCED 3). These students are more likely to speak Dutch, more likely to have a social network in the Netherlands, and they qualify for subsidies like the other Dutch students coming out of the Dutch secondary school system. Differently from previous years, we do not consider these students as international students in this report, which is also different from the international practice of considering the country where a student went to secondary school to classify them as an international student\(^4\).

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\(^2\) This number includes all international students enrolled in an associate, bachelor’s or master’s degree programme at a university of applied sciences or research university in the Netherlands. Source: DUO 1 Cijfer HO 2018. Number on private education are not included.

\(^3\) The definition of international degree student is based on having a non-Dutch secondary education (ISCED 3), in combination with the degree of proximity to Dutch citizenship, meaning Dutch prevails over any other citizenships including EEA citizenships, and EEA citizenships prevail over non-EEA citizenships. The terms ‘international student’ and ‘country of origin’ in this report refer to the degree mobile students in higher education are sorted by citizenship.

\(^4\) This new definition was established in 2018 by mutual agreement of the Dutch Ministry of Education, Culture and Science, VSNU, and VH. For the UNESCO, OECD and EUROSTAT definition see: migrationdataportal.org/themes/international-students
This is the first academic year with more international degree students in bachelor’s programmes at research universities (30,500) than in bachelor’s programmes at universities of applied sciences (27,186). Over the past decade, most international students have been enrolled in bachelor’s programmes at universities of applied sciences (UAS), but since 2016-2017 the number of international degree students in research universities (RU) has increased faster. Although the total number of international students is highest for bachelor’s programmes, the share of international students in the overall student population in bachelor’s programmes is still rather modest. At UAS bachelor’s programmes, international students made up 6.1% of all students, and 16.6% at research universities. In both RU and UAS master’s programmes, the share of international students is much higher at 23.6% and 20.5% respectively; the former with 25,669 and the latter with 2,600 international students. This probably relates to the larger offer of English-language master’s programmes and the longer duration of bachelor’s programmes.
2. New enrolments

In the 2018-2019 academic year, an extra 4,122 new international students enrolled in the Dutch public higher education system compared to 2017-2018, making up 14.9% of all new enrolments. By new enrolments we mean students who did not previously enrol in a specific study programme, as opposed to re-registration in a specific programme.

Both in absolute and relative terms, the largest group of new international students in 2018-2019 enrolled in RU master’s programmes. The 14,588 new international students made up 28.7% of all new enrolments at RU master’s programmes this year. At UAS master’s programmes, international students accounted for 24.8% of all new enrolments at 1,415 students. The 9,137 international enrolments in UAS bachelor’s programmes made up 6.6% of all new enrolments. Compared to the previous academic year, the share of new international student enrolments among the overall number of new student enrolments increased especially in RU bachelor’s programmes from 17.8% in 2017-2018 to 20.4% in 2018-2019.

3. English-language programmes

Of all unique (N=411) bachelor’s programmes in Dutch research universities in 2018-2019, approximately 58% were offered in Dutch exclusively. Some 28% were offered in English only, and another 15% were offered in multiple languages. Of the 702 master’s programmes at research universities, there were 14% offered in Dutch only, a majority of 76% offered in English only, and another 10% offered in multiple languages. There are marked differences among

5 Due to rounding, numbers do not exactly add up to 100%.
the various fields of study. At bachelor level, Engineering and Liberal Arts and Sciences offer the majority of their programmes in English, while Economics and Business has a more balanced offer. Programmes in all other fields of study are mostly offered in Dutch. English is the most common language of instruction in master’s programmes, except for programmes in Health Care, Law and Education.

Compared to the previous academic year, Dutch research universities offer more programmes overall in English and fewer programmes in Dutch. The percentage of bachelor’s programmes offered in English at research universities increased from 23% to 28%, and for master’s programmes, it grew from 74% to 76%. This shift is especially noticeable in the fields of study related to agriculture and environment. In 2017-2018, all bachelor’s programmes in environment studies were offered in Dutch, but in 2018-2019 there were 5 study programmes offered in English.

Visual 3: Number and share of RU programmes offered in English, Dutch and multiple languages, per type of education and field of study in 2018-2019 (HOOP)

Most UAS programmes are offered in Dutch. In 2017-2018, out of 825 bachelor’s programmes, 82% were offered in Dutch, only 5% in English, and another 13% in multiple languages. For the 160 master’s programmes, UAS offered 68% in Dutch, just 23% in English and the remaining 9% in multiple languages.

6 Data on language of a programme is not centrally registered, but based on an assessment by the VSNU. For more information see: vsnu.nl/taal-en-opleiding.html
7 For universities of applied sciences, the study programme language was not yet validated for 2018-2019 at the time of writing. Source: Vereniging Hogescholen.
4. Countries of origin

There were 62,932 international students from countries in the European Economic Area (EEA) enrolled in an accredited degree programme in public higher education in the Netherlands in the 2018-2019 academic year. This means that 73.2% of all international degree students come from within the EEA. Of all international degree students, there are 26.8% or 23,023 students from non-EEA countries, a group that is slowly increasing its presence in public Dutch higher education institutions. Over a two-year period, the share of non-EEA students increased from 24.8% in 2016-2017 to 26.9% in 2018-2019.

In comparison with students from the EEA, students from outside the EEA enrol relatively often directly in master’s programmes. In both RU and UAS master’s programmes, about one third of the international students, 35.9% and 34.7% respectively, comes from a non-EEA country. Although the percentage of non-EEA is much smaller in bachelor’s programmes, it increased slightly in 2018-2018 compared to the previous academic year from 19.7% to 21.1% in RU.

Visual 4: International students in by institution type, degree and nationality (EEA or non-EEA), 2018-2019. In total numbers and in percentages.

8 Countries in the EEA include all 28 countries in the European Union, plus Iceland, Liechtenstein, Norway and Switzerland.
bachelor’s programmes, and from 22.5% to 24.2% in UAS bachelor’s programmes. In master’s programmes, the portion of non-EEA students increased from 33.2% to 34.7% in UAS and remained stable at 35.9% in RU in the same period.

Visual 5: New international students from top countries of origin, by nationality, 2018-2019 (left), and number of additional students by country of origin comparatively to 2017-18 (right).

Italy is the country with greatest absolute growth for the third year in a row, adding 731 students more than in 2017-2018, to total 4,814 students enrolled. Italy has now overtaken China (4,547, +83) as the 2nd most important country of origin behind Germany (22,584, +452). Other countries from where more students went to the Netherlands include India (+ 631), Romania (+582) and Bulgaria(+542), which have moved up to the Top-15 of most important countries of origin. Fourth place Belgium had 3,620 (+358) international degree students enrolled in the Netherlands in 2018-2019. The United Kingdom continued to grow steadily (+304), now taking the 5th place with 3,383 students in the Netherlands. The number of students from 7th place Greece increased by 311 to 2,947. France and Spain, which added a substantial 435 and 251 students each, have now moved to 9th and 10th places respectively, with approximately 2,700 students each.

The near double increase in the number of Syrian students stands out: 482 new students to total 971 in 2018-2019. This is possibly a consequence of the inflow of Syrian refugees since 2015, some of whom are now enrolling in Dutch higher education⁹. The number of students from Indonesia (- 85), Bangladesh (-20) and Colombia (-18) decreased slightly.

⁹See: www.uaf.nl/wat_doet_het_uaf/belangenbehartiging.
**Current development 2: Brexit effects**

The United Kingdom is currently one of the leaders in international higher education, attracting more international students than any other country except the US. British universities are often the premier partner of Dutch universities in student and staff exchanges (Erasmus+) and scientific collaboration.

Repercussions of a no-deal Brexit could have negative consequences for all collaborative efforts with the UK. Meanwhile, British and international degree students have started looking at countries such as the Netherlands as alternative study destinations. However, the exact effects Brexit will have on international student mobility will be analysed when new data becomes available.

In any case, it is vital for the Dutch higher education sector to safeguard existing and extensive relations with the UK in research projects and student exchanges by way of new agreements, preferably in a EU27-UK setting or otherwise bilaterally.

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Although Germany and China remain important countries of origin in absolute numbers, their relative importance has decreased over the past years. Back in 2012-2013, Germany accounted for 45.5% of all international students in the Netherlands, and China for 8.2%. By 2018-2019, their shares have decreased respectively to 26.3% and 5.3%, which means that...
other countries have grown more in this period, and the diversity of nationalities in the Dutch international student population has increased. The stabilising trend in German and Chinese students has been mostly caused by their decreasing numbers in Dutch UAS over the past 7 years. While the numbers of German and Chinese students in research universities steadily increased between 2011-2012 and 2018-2019, in UAS programmes their numbers decreased over the same period from 14,394 to 9,054 and from 2,197 to 1,102, respectively. In the same timeframe, Bulgaria, in contrast, reached 1,808 students in 2018-2019, rising to 2nd most important country of origin for international students in UAS programmes, while Romania reached 3rd with 1,329 students.

Current developments 4: The difference between EEA and non-EEA students

It is important to establish the distinctions among Dutch and homecoming students, EEA students and non-EEA students. During their studies, students from countries in the EEA have the same economic rights as Dutch students and therefore pay the same tuition fees as Dutch students. The Dutch government provides subsidies to Dutch students, including homecoming students, and to students who are citizens of countries in the EEA. Students from outside the EEA, on the other hand, pay institutional tuition fees set by each higher education institution by cost coverage or break-even calculations. The Dutch government does not provide subsidies to students who are not citizens of countries in the EEA.

This distinction remains relevant even after graduation. In our 2018 study on stayrates¹, we found that about 25% of all international students stay in the Netherlands after graduation. These international graduates who stay contribute at least € 1.64 billion annually to the Dutch treasury. Graduates from non-EEA countries, have a higher average stayrate than EEA graduates, thus contribute relatively more to the treasury.

5. Fields of study: Universities of applied sciences

At universities of applied sciences, the field of study which has the highest relative share of international students is Arts and Culture. The 5,914 international students in this field account for 34.0% of all students in Arts and Culture, a share that has been more or less constant over the last decade. The most popular programmes in this field for international students are Music, Visual Arts, Dance, Theatre and Architecture.

In absolute numbers, Economics and Business has the most international students in the UAS with 13,535. Engineering also attracts a large number of international students, holding the 3rd position with 5,180 international students. Within Economics and Business, International Business is the most popular study programme among international students, while in

¹ INCOMING DEGREE STUDENT MOBILITY IN DUTCH HIGHER EDUCATION 2018-2019
Engineering is the most popular field of study, followed by Information and Communication Technology (ICT). However, the relative shares of international students in these fields are much smaller than in Arts and Culture, at 8.6% in Economics and Business, and 5.5% in Engineering.

All other UAS fields of study have even fewer international students and smaller shares of international students, with Education having the smallest share: only 1.8% of the students in this field come from abroad. This poses a particular challenge in education, as students aspiring to become teachers themselves will deal with an increasingly diverse society and school environment as professionals after graduation, but remain the least likely to encounter foreigners as fellow students\(^\text{10}\).

International Business, Music, Hospitality and Management, Design and Creative Business are the study programmes with the most students in universities of applied sciences, in absolute numbers. Proportionally though, Music stands out with almost half of the students enrolled being international students. Compared to the last academic year, the UAS study programmes with the highest increases in international students were Design (+185) and Information and Communication Technology (+167).

Teacher training programmes should thus be a prime focus of future strategic internationalisation plans.

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\(^{10}\) Low attraction of foreign students in the education sector is mirrored by low outgoing credit mobility. Download. Teacher training programmes should thus be a prime focus of future strategic internationalisation plans.
6. Fields of study: Research universities

In research universities, Social Sciences surpassed Economics and Business as the largest field of study for international students in absolute numbers. Adding 2,383 students from the last academic year, Social Sciences reached 12,370 international students enrolled in 2018-2019. Economics and Business is the 2nd largest field of study for international students in absolute numbers with 12,169. Yet, proportionally, Economics and Business with 26.8% still has considerably larger share of international students than Social Sciences at 23.9%.

![Visual 9: International degree students at research universities, per field of study (CROHO) 2017-2018.](image)

Liberal Arts and Sciences programmes, however, have the largest share of international students enrolled at 36.9%. Programmes in this field are exclusively offered at university colleges in broad and intensive bachelor’s formats. The relative share of international students in Liberal Arts and Sciences has slowly increased since 2006-2007, when the share was 27.4%. The exponential growth of the field in general – a sevenfold increase in total student numbers since 2016-2017 – matches the growth in international student numbers: from slightly over 400 in 2006-2007 to 4,170 in 2018-2019.

In other RU fields of study, the numbers and shares of international students vary somewhat. Education, Healthcare and Law are the least popular with international students, which is unsurprising because the curriculums of these programmes and their distinct connections to the local labour market and public sector, require heavy emphasis on the use of Dutch as an academic language.

![Visual 10: Total number and percentages of international degree students at research universities, per study programme, 2018-2019.](image)
Psychology attracted the most international students in 2018-2019 with 6,786, presenting the highest growth in comparison with the previous academic year (+1,369). Most of these international students follow a bachelor’s programme. However, because Psychology is also one of the largest study programmes in total numbers of students, the 35.1% share of international students in the total student population is rather modest. In absolute numbers, International Business (2,485, +67) and Economics and Business Economic (2,305, +439) hold the 2nd and 3rd position. Computer Science and Engineering (724, +429) stands out because the number of international students more than doubled in 2018-2019, increasing the share of international students from 14.1% to 26.5%. Artificial Intelligence, another programme in IT, also attracted considerably more international students, increasing the share of international students in these programmes from 20.5% to 22.5%.

7. Institutions

Looking at the total number and the percentage of international students in different higher education institutions in the Netherlands, we see quite some variety. We roughly sort the universities into 5 different groups.

Maastricht University (UM) stands out as the institution with the most international students by far and the highest portion of international students among all Dutch research universities. Maastricht University had 9,227 international students in 2018-2019, making up 53.7% of all its student body. Students from nearby Germany and Belgium form the largest groups, accounting for about 55% of the total foreign students. Yet, Maastricht University also hosts considerable numbers of students from Italy, France, the United Kingdom and Spain.

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11 Psychology refers to the study programme, so it includes programmes offered under different types of education and different universities.
The technical research universities in Delft (TuD), Twente (UT) and Eindhoven (TuE), along with Wageningen University (WUR) are the 4 specialised technical or agricultural universities commonly referred to jointly as the 4TU. They attract relatively high shares of international graduate students, primarily at the master’s and PhD levels. The total number of international master’s students at these institutions has almost quadrupled since 2006-2007, from just under 2,250 to almost 8,300 students in 2018-2019. At Twente, the share of international students grew most in the last 2 years, increasing from 21.3% in 2016-2017 to 26.8% in 2018-2019. At Delft and Wageningen, the overall share of international students is around 21%, giving them the 6th and 7th places in the list of institutions with the highest shares of incoming degree students. Eindhoven ranks 13th, with just under 13.3% of international students.
Institutions specialising in Hospitality, such as Hotelschool The Hague, have highly international student populations. Institutions specialising in fine arts, such as the Amsterdam School of the Arts and ArtEZ, also have international classrooms. This is even more true for the small fine arts institutes, such as the Gerrit Rietveld Academie, the Design Academy Eindhoven and Codarts.

The University of Groningen, Leiden University, Erasmus University Rotterdam and the University of Amsterdam stand out as research universities that have seen a remarkable growth in international student enrolment over the last 10 years. In 2006-2007, these research universities had less than 5-10% international students at under 1,000 to 1,500 each. Leading up to the 2018-2019 academic year, these numbers have risen to 6,969 at Groningen (22.4%), 7,016 at Amsterdam (20.6%), 5,329 at Rotterdam (19.8%) and 4,439 at Leiden (15.3%). All other Dutch research universities have between 9.3% and 15.5% international degree students.

Finally, the Hague University of Applied Sciences, Saxion University of Applied Sciences and Fontys University of Applied Sciences, which are all rather large institutions in the top 15 in absolute numbers of international students, have however relatively modest shares of international students between 8.7% and 11.4%.

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12 For the sake of comparison, we have excluded institutions that have fewer than 2,000 students enrolled. Please see www.techniekpactmonitor.nl for reporting on STEM education in the Netherlands.
8. Regional differences

International students show very distinct regional preferences as to where they enrol, at what institutions, and for what type of study programmes. At a provincial scale, South Holland has the most international students enrolled at 22,179\textsuperscript{13}. Though the share of international students in the total student population is modest at 10.6\%, since South Holland is also the province with the largest overall higher education student population. On the level of municipalities, Amsterdam is the city with the most international degree students enrolled at 12,858 but this group amounts to just 11.8\% of all Amsterdam students. Maastricht has the highest share of international students in its entire student population at 53.7\%. International students do not only impact the city while they follow their study, but can also have a more long-term impact on the local labour market if they decide to stay in the Netherlands after graduation. Amsterdam is not only the most popular destination for international students to pursue their

\textsuperscript{13} These numbers represent the place where students are enrolled and not where they live. For place of enrolment we looked at the official main location of each institution according to DUO.
studies; Most international students still living in the Netherlands 5 years after graduation are also living in Amsterdam. 

The 11 countries in which a Netherlands Education Support Office (Neso) is located had 13,439 of their citizens enrolled as international degree students in government-financed Dutch higher education institutions in the 2018-2019 academic year. This number is more than double what it was in 2006-2007. New enrolments from countries where a Neso is located almost tripled in that same period, from 1,785 to 5,251. This makes international students from countries with a Neso the fastest growing group in Dutch higher education, in comparison with students from EEA countries and students from countries outside the EEA without a Neso.

Almost 50% of the students from countries with a Neso enrolled in Dutch higher education follow master’s programmes. This share is high compared to students from other EEA countries (29%) and students from non-EEA countries without a Neso (35%). Students from countries with a Neso are mostly (71.7%) enrolled in research universities, compared to an average of 64% of the students in the other groups.

For more information on the stay rate of international students in the Netherlands see: www.nuffic.nl/en/subjects/stayrates-of-international-graduates/

However, in this respect, the students from countries with a Neso do not form a homogeneous group. Students from India (87%), Mexico (81%) and Turkey (83%) in particular were mostly enrolled in research universities. On the other hand, out of the 956 students from Vietnam, a 67% portion was enrolled in a UAS programme. To a lesser extent, this is also true for students from South Korea (46%), South Africa (43%) and Russia (40%)\textsuperscript{16}.

From 2017-2018 to 2018-2019, the largest increase in students from a single country with a Neso was India’s, with an extra 631 students, keeping India as the second most relevant country of origin with a Neso. For the second year in a row, Indonesia experienced a slight decline (-85), but still holds the 3\textsuperscript{rd} position with 1,402 students. China (+83) continues as the largest country of origin with a Neso since 2006-2007. The total number of students from Mexico (-9) and Thailand (-8) decreased slightly. All other countries sent an extra 40 to 247 students to the Netherlands in the 2018-2019 academic year. Turkey showed the largest relative growth among all countries with a Neso, sending 891 students in 2018-2019, up from 644 in 2017-2018.

\textsuperscript{16} For more detailed information see: \url{https://www.nuffic.nl/en/subjects/neso-countries/}.