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Deutscher Akademischer Austauschdienst  
German Academic Exchange Service

## Wissenschaft weltoffen

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Studies and Research in Germany and WorldwideIncludes data  
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2021

DZHW German Centre for  
Higher Education Research and Science Studies

This is an excerpt from the publication

## “Wissenschaft weltoffen 2021”

Since 2001, the DAAD has been analysing data on the internationalisation of studies, research and higher education from Germany as well as from particularly relevant countries and regions such as the USA, the United Kingdom or Asia. The current edition presents the most important results and graphics.

These include figures on international students in Germany, data on mobility behaviour, an overview of students' countries of origin and host countries as well as developments in the field of doctorates. Special data analyses shed light on the status quo and trends at universities and research institutes during the Covid-19 pandemic.

The study integrates international data from OECD and UNESCO as well as national data from the Federal Statistical Office in Germany. In combination with other indicators, it provides a valid basis for long-term analyses.

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The number of international students in Germany rose from around 319,900 in the 2019/20 winter semester to 324,700 in the 2020/21 winter semester, an increase of 2%. However, this increase does not correspond to an upwards trend in the numbers of international first-year students. In the 2019/20 winter semester, there were still 78,700 such students, but their number had fallen to 63,700 a year later, a decline of 19%.

“ The number of international students grew overall in the 2020 summer semester and the 2020/21 winter semester, though there was a sharp decline in international first-year students.

A similar disparity was already apparent in the 2020 summer semester, the first semester that fell during the Covid-19 pandemic and associated global restrictions on mobility. While 293,300 international students were enrolled at German universities in the 2019 summer semester, their numbers increased by 5,000 (2%) for the 2020 summer semester, reaching 298,100. However, there were pronounced differences between universities and universities of applied sciences. While students enrolled at universities fell by 1% during this period, their number

### Data basis

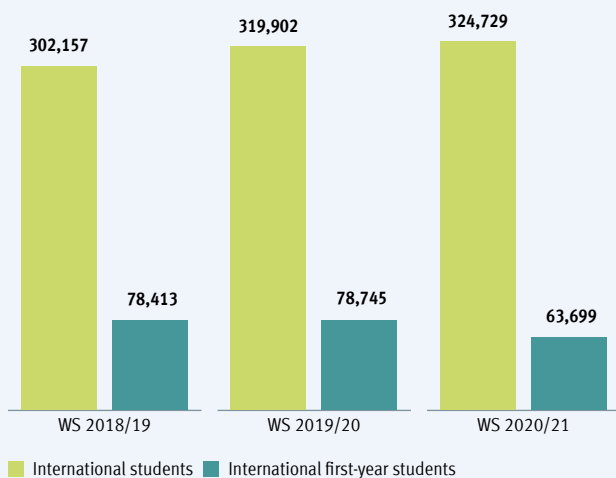
Official statistics for the 2020 summer semester and 2020/21 winter semester were used to calculate the changes in numbers of international students in Germany in 2020. Robust and definitive data are available for both periods. However, at the time of writing, the latest data for the 2020/21 winter semester, which the Federal Statistical Office published in August 2021, were not yet available in a fully differentiated or itemised form.<sup>1</sup>

To undertake the most detailed analysis possible, this Spotlight includes student data on the summer semesters for the first time. Previous reporting in *Wissenschaft weltoffen* had chiefly drawn on figures for the winter semesters. Summer and winter semester data were only referred to in order to present numbers for first-year students and graduates.<sup>2</sup> When interpreting the student numbers here, it should be noted that data for the summer and winter semesters cannot be directly related to each other. Due to differences in the number of first-year students and those who have left the university, there are systematic differences in the student figures between the summer and winter semesters. The figures for winter semesters are higher for all student groups than for summer semesters. Hereinafter the data for summer and winter semesters will therefore not be compared with each other, but only within their respective semester groups.

rose by 8% at universities of applied sciences. By contrast, there was a significant decrease in the number of international first-year students, both for universities and universities of applied sciences, dropping 41% between the 2019 and 2020 summer semesters at universities and 6% at universities of applied sciences. The total number of international first-year students fell by a total of 29% to around 22,800 in the 2020 summer semester (from 32,200 the previous year).

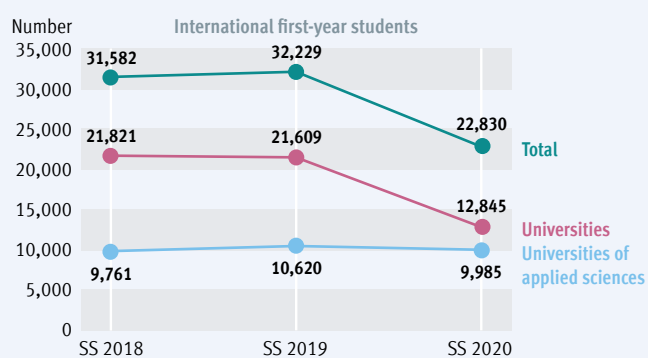
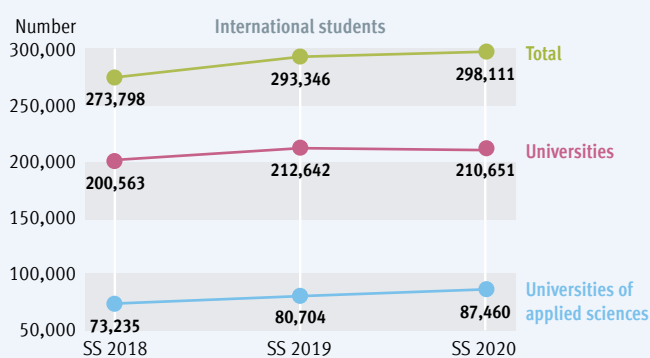
The only explanation for the astonishing rise in total international student numbers for the summer and winter semesters, despite the Covid-19 pandemic and a simultaneous decline in numbers of international first-year students, is that more international students in later semesters stayed at university. We can therefore assume that the number of graduates in the 2020 summer semester and 2020/21 winter semester is lower than for the preceding semesters. Major reasons for this could be that the switch to new digital forms of learning in many study programmes caused students to delay graduating from university (Lörz et al 2020) or that students were delaying graduation to avoid having to find employment under pandemic conditions, which have had a considerable economic impact. Furthermore,

BS1 International students and first-year students in Germany, since WS 2018/19



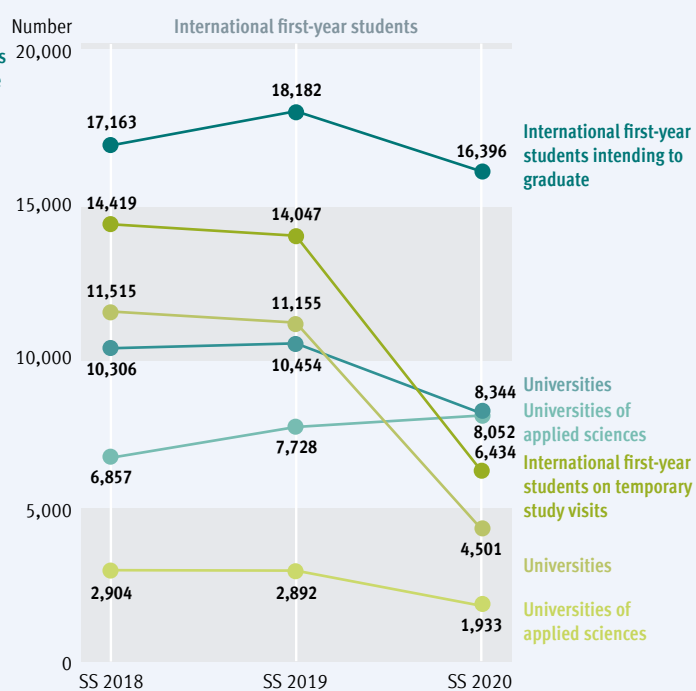
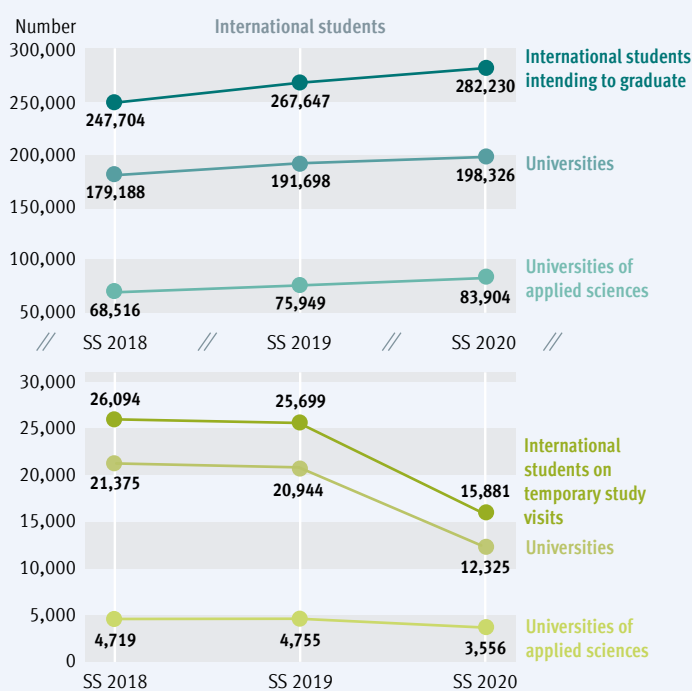
Source: Federal Statistical Office, student statistics

BS2 International students and first-year students, by type of university, since the 2018 summer semester



Source: Federal Statistical Office, student statistics

BS3 International students and first-year students, by intention to graduate and type of university, since the 2018 summer semester



Source: Federal Statistical Office, student statistics

a higher proportion of international students may have progressed immediately from their bachelor's degrees to master's programmes than in previous years. This may have been to avoid difficulties in carrying out placements or study visits abroad, or to circumvent current uncertainties in finding the desired employment.

Apparently, the number of students remaining at German universities was so high that it compensated for the not inconsiderable decline in the numbers of international first-year students. Evidently, international students who were already at German universities in the 2019/20 winter semester were able to come to terms with studying under the conditions of a pandemic.

However, the situation was more complicated for international first-year students who were not yet in Germany by the 2020 summer semester or the 2020/21 winter semester. Firstly, the pandemic caused severe restrictions in the issuing of visas and the ability to enter Germany. Secondly, starting a study programme in a hitherto unknown country under pandemic conditions represented a significant challenge. A considerable number of internationally mobile students who were interested in studying in Germany will therefore have postponed starting their study programmes to a later date when conditions at universities return to normal.<sup>3</sup>

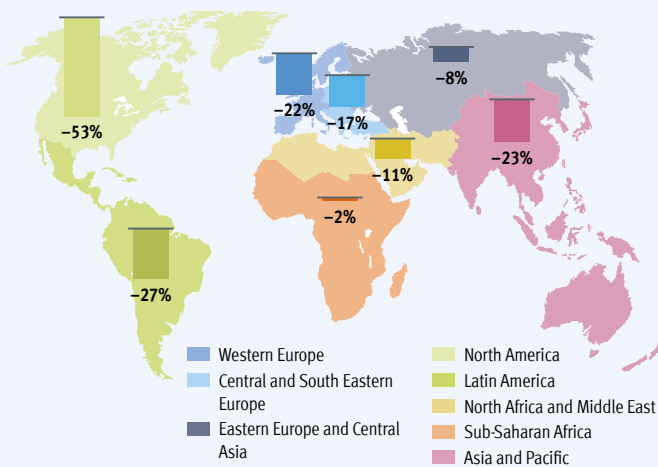
Another option that was offered to international first-year students in many host countries during the 2020/21 winter semester was to start their study programmes digitally from their home countries. In Germany, too, almost three quarters of universities offered international students a service of this kind in the 2020 summer semester and the 2020/21 winter semester (see DAAD 2021, p. 17). Quite a few international first-year students took advantage of this opportunity. The number of students who reported a semester address in a foreign country rose by 25% from 3,900 in the 2019 summer semester to 4,900 in the 2020

summer semester, representing an increase from 12% to 21% of all international first-year students from one summer semester to the next (albeit among greatly reduced numbers of first-year students). Another consequence of the Covid-19 pandemic appears to be a significant increase in the numbers of international students who are enrolled on distance learning courses, some of which replace regular university courses. They continue to represent a small minority of students but between the 2019 and the 2020 summer semesters, their numbers rose by over half from 1,200 to 1,900 (+58%).

Our analysis of trends in numbers of international students during the summer semesters shows that the decline in international first-year students is primarily a consequence of a fall in the number of international students on temporary study visits. During the 2020 summer semester, 5% more international students were enrolled at a German university with the goal of completing a degree. However, during the same period, the number of visiting and exchange students fell by 38%. This trend can be observed at all types of university, although there was a particularly sharp decline in visiting and exchange students at universities, falling by 41%. This shift is particularly marked among first-year students as the

“ 21% of international first-year students commenced their study programmes digitally from abroad in the 2020 summer semester.”

BS4 Change in numbers of international first-year students from winter semester 2019/20 to winter semester 2020/21, by region of origin



Source: Federal Statistical Office, student statistics; DZHW calculations

### \* Footnotes

- 1 It was therefore not yet possible to draw conclusions about international students on temporary study visits, the type of university or the types of degree that students were working towards.
- 2 In previous editions of *Wissenschaft weltoffen*, the number of first-year students was reported in relation to an academic year (one academic year = summer semester + following winter semester) and the number of graduates in relation to a graduation year (graduation year = winter semester + following summer semester).
- 3 Many universities in Germany provided similar services to their international first-year students. According to a DAAD survey of international offices in the 2020/21 winter semester, 68% of universities offered their international first-year students the chance to postpone starting their study programmes until the 2021 summer semester (see DAAD 2021, p. 17).
- 4 Only countries with at least 100 international first-year students in the 2020/21 winter semester (increase) or the 2019/20 winter semester (decrease).
- 5 Only countries with at least 50 international first-year students on temporary study-related visits in summer semester 2020 (increase) or in summer semester 2019 (decrease).

BS5 Countries of origin of international first-year students with the largest percentage increases and decreases, winter semester 2019/20 to winter semester 2020/21<sup>4</sup>

Countries of origin	Change WS 2019/ 20–WS 2020/21
Lebanon	+35
Uzbekistan	+33
Afghanistan	+31
Belarus	+26
Yemen	+22
Austria	+22
Iran	+16
Sri Lanka	+15
Bangladesh	+15
Ghana	+14
Slovenia	-46
Taiwan	-49
Malaysia	-49
Norway	-49
Sweden	-50
Argentina	-52
US	-54
South Korea	-56
Australia	-65
Japan	-69

Source: Federal Statistical Office, student statistics; DZHW calculations

majority of international students on temporary study visits only spend one semester at host universities. Between the 2019 and 2020 summer semesters, the number of international first-year students not intending to graduate in Germany fell by 54% overall (60% at universities and 33% at universities of applied sciences). However, among first-year students intending to graduate the decline was less sharp, falling only 10% from the previous summer semester. While their numbers fell by 20% at universities, they actually rose by 4% at universities of applied sciences.

The extent of changes in the numbers of international first-year students varied substantially between the various regions and countries of origin during the Covid-19 pandemic. For instance, in the 2020/21 winter semester, there were particularly noticeable decreases in the enrolment of first-year students from North America (-53%), Latin America (-27%), Asia and Pacific (-23%), and Western Europe (-22%) at German universities, compared to last year. At the level of individual countries, the steepest declines in numbers of first-year students were recorded for Japan (-69%), Australia (-65%), South Korea (-56%) and the US (-54%).<sup>4</sup> However, some countries of origin recorded increases, including Lebanon (+35%), Uzbekistan (+33%), Afghanistan (+31%) and Belarus (+26%).

BS6 Countries of origin of international students on temporary study visits with the greatest percentage increase or decrease, from summer semester 2019 to summer semester 2020<sup>5</sup>

Countries of origin	Change SS 2019–SS 2020
Iraq	+26
Belarus	-45
Netherlands	-46
Hungary	-48
Slovakia	-48
Bulgaria	-49
Thailand	-52
Ukraine	-52
South Korea	-53
Finland	-53
Czech Republic	-53
Croatia	-54
Australia	-56
Greece	-57
Japan	-59
Israel	-61
Canada	-62
Syria	-63
US	-64
Singapore	-70

Source: Federal Statistical Office, student statistics; DZHW calculations

A rather different picture emerges if we consider only students on temporary study visits at a country-specific level. The data available prevent widening the scope of this analysis beyond the 2020 summer semester but the sharpest declines from the previous summer semester were observed among visiting and exchange students from Singapore (-70%), the US (-64%), Syria (-63%), Canada (-62%) and Israel (-61%). The only increase in students on temporary study visits was for students from Iraq (26%).<sup>5</sup>

With regard to the 2020 summer semester in Germany (the first under pandemic conditions), there was a particularly steep decline in temporary international mobility (*credit mobility*), while degree-related international mobility (*degree mobility*) has not (yet) seen any significant losses. The initial reaction of many universities in Germany and abroad to the pandemic was to cancel their exchange programmes, either wholly or in part (see DAAD/DZWH 2020b, p. 36; DAAD 2021, p. 9). It can therefore be assumed that this gap between temporary mobility and degree-related international mobility will have continued in the 2020/21 winter semester (a view supported by the continued increase in the overall numbers of international students against the simultaneous decline in first-year students).