STUDENT- AND EDUCATION STATISTICS 2021

Field work on Van Keulenfjorden *Photo: Janne Søreide / UNIS*

Contents

1. Preface

UNIS' overall vision, stated in UNIS' strategy for 2019 – 2025, is "*Arctic education and research for global challenges"*. The main aim for the education is to offer research-based higher education with unique field components, taking full advantage of the high Arctic location in Svalbard and strengthening education that provides competences for sustainability.

In the contribution letter for the University Centre in Svalbard AS (UNIS) from the Ministry of Education and Research, dated 16 December 2020, the following primary goal is defined for the grant to UNIS:

"High quality in education and research, based on Svalbard's location in a high Arctic area".

Furthermore, the contribution letter states that "The educational offer shall be at university level and be a supplement to the education at the mainland universities. The educational offer shall be part of an ordinary course of study, leading to exams and degrees on bachelor-, master- and doctoral level. The ministry presupposes that UNIS will further develop the collaboration with universities and university colleges. (…) ***The grant shall contribute to UNIS developing an educational offer amounting to about 220 student years.*** (…) The educational offer shall have an international profile, and the teaching shall be in English. There shall be a balance between Norwegian and international students." The Ministry also states that they understand that it might be demanding to reach the target figures in 2021 but expect UNIS to try to reach the target figures as far as possible given the circumstances with the Covid 19-pandemic.

UNIS is supposed to report on the use of the allocated grant, including a description of results and degree of goal achievement. The report shall, among other factors, contain a description of activities carried out at UNIS. Furthermore, the report shall describe the cooperation with universities and university colleges, including the number of students from each educational institution.

This report is a contribution to document these requirements. It should also contribute to document UNIS' own goals regarding high-quality in education.

UNIS student- and education statistics is compiled in February each year for the preceding year and will together with UNIS' report on educational quality and UNIS' annual report, give a picture of the joint educational activities at UNIS.

Longyearbyen 08.02.22.

Anne Bjørndal

2. Summary

482 students spent shorter or longer periods of stay at UNIS in 2021. The students are divided in course students and guest students. Course students are students studying one or several ordinary courses at UNIS. Guest students spend shorter or longer periods of stay at UNIS while working with their bachelor-, master- or PhD theses.

The Covid 19-restrictions introduced in 2020 were still partly in force in 2021, and thus affected the activity also this year. In spring semester, most master- and PhD courses were cancelled, and the maximum number of students in each course were reduced to 80 % of normal capacity. In autumn semester, most restrictions on courses or number of students were lifted. The number of students and ECTS production in 2021 are therefor still reduced when compared with previous years. We experience an increase from 2020 when the Covid 19-restrictions were even more strict, yet we are still not back at the same level as before the pandemic. Some of the results from 2021 will therefore not be directly comparable to corresponding results from previous years.

60 % of the students were registered at study programmes at Norwegian universities, while the percentage of Norwegian citizens was 40 %. This is an increase when compared to the years before the pandemic. The discrepancy between Norwegian citizens and students from Norwegian universities is due to foreign students registered at ordinary study programmes at Norwegian universities. UiT – The Arctic University of Norway is the Norwegian university sending most students to UNIS, while the relative increase has been greatest at NTNU. Students from 32 nations were present at UNIS in 2021. As stated earlier, 40 % of these were Norwegian citizens, followed by students from Germany (18 %) and Netherlands (10 %).

The originally planned educational offer at UNIS amounted to 238 student years in 2021. Due to cancellation of courses and reduced number of students in each course, the actual educational offer ended up with 157 student years.

162 student years were produced at UNIS in 2021. These are divided in 131 student years from courses, and 31 student years from guest students. The production due to courses is higher than in 2020, but still lower than the pre-pandemic years. The production due to guest students has increased and is now on an all-times-high level.

All scientific departments have experienced a reduced production when compared to the pre-pandemic years, but an increase since 2020. Department of Arctic geology has still the highest production at UNIS and is also experiencing the greatest increase in guest students. Arctic Safety is back on the same level as before the pandemic since their master courses run in autumn semester and were therefore carried out as planned. Neither has the course “The History of Svalbard” been notably affected by the Covid 19-restrictions.

The results from final exams have been generally good, with B as average grade. The percentage of failing marks is low (1 %). The dropout rate is lower in 2021 than previous years.

In 2021, UNIS had an all-times-high number of qualified applicants to the courses. Like previous years, Department of Arctic geology had the highest number of qualified applicants. The use of allocated quota places for the Norwegian universities was 51 %, in line with previous years.

UNIS had 29 PhD candidates in 2021, and seven public defenses were arranged.

3. UNIS students

3.1 Student data – course students and guest students

UNIS distinguish between course students and guest students. Course students are following one or more ordinary courses at UNIS. Guest students spend shorter or longer periods of time at UNIS while working on their bachelor-, master- or PhD theses. Some of them are also following courses at UNIS and are thus counted in both categories.

UNIS had **438 course students** in 2021. In addition, **82 guest students** were registered, divided in **9 guest bachelor students, 54 guest master students** and **19 guest PhD students.** 37 of the guest students also followed courses during their stay at UNIS and are therefore categorized as both course students and guest students. In total, **482 students** were present at UNIS for shorter or longer periods of time in 2021.

Also in 2021, the teaching at UNIS has been affected by Covid 19-restrictions. In spring semester, all short / intensive courses at master- and PhD level were cancelled. This was done among other things to ensure that the semester students should be able to complete their studies in a good way. Additionally, the maximum number of students on the remaining courses were reduced to 80 % of normal capacity. In autumn semester, the number of students and courses were more or less back at normal level. Guest student could still work towards their bachelor-, master- or PhD theses as usual, even though they had to stay in home offices during some periods. Cancellation of master- and PhD courses in spring semester has led to a reduced number of course students in 2021 when compared to "normal years", while the number of guest students has increased from previous years. The number of course students was still higher in 2021 than in 2020 when most of the courses were cancelled due to Covid 19-restrictions.

3.2 Norwegian and international degree students

Norwegian degree students are defined as Norwegian citizens, and / or students admitted to an ordinary study programme at a Norwegian university. International degree students are foreign students admitted to study programmes at international universities. Students on exchange agreements (Erasmus+-agreements etc.) are counted as international degree students.

The percentage of Norwegian degree student has been stable around 50 % the latest years, in accordance with the conditions from the Ministry of Education and Research, stating that there shall be a balance between Norwegian and international students. In 2021, the percentage of Norwegian degree students was 60 % (fig. 1). The percentage Norwegian citizens was 40 % (fig. 2). The discrepancy between the percentage of Norwegian degree students and Norwegian citizens is due to a considerable number of Norwegian degree students being foreign citizens admitted to ordinary study programmes at Norwegian universities, and thus counted as Norwegian degree students.

An explanation to the high percentage of Norwegian degree students in 2021 is the relative higher percentage of students from the Arctic Nature Guide-study (ANG) at UiT – The Arctic University of Norway. This one-year programme has its base at UNIS, and the students follow courses corresponding to 20 ECTS at UNIS (AS-203 «Arctic Safety and Field Leadership» and SH-201 «The History of Svalbard»), in addition to their courses at UiT. The study programme starts in August and ends in June thus two classes are included in the reports each calendar year. All these students are Norwegian degree students registered at UiT – The Arctic University of Norway, and most of the students are normally Norwegian citizens. In total, 48 ANG-students were registered at UNIS in 2021. Due to a lower number of students in total, the ANG-students comprised a relatively higher percentage of the students than normal.

A number of international students experienced entry restrictions into Norway due to the pandemic situation. Students from outside EU had problems getting the necessary entry visa to Norway, as well as approval of their Covid 19 vaccine status. For students from Norwegian institutions, travelling abroad was sometimes difficult, and a study period in Svalbard could be an alternative to international exchange. Based on this situation, students from Norwegian institutions were prioritized for admission during supplementary admissions from the waiting lists in autumn 2021, since they were more likely to actually come to UNIS. This was done following UNIS chairman of the board 7 May 2021 adopting by proxy an exemption from the decision in UNIS' study regulations stating that there should be a balance between Norwegian and international students.

We can assume that the conditions mentioned above due to Covid 19, as well as the relatively higher percentage of ANG-students, have increased the percentage of Norwegian degree students considerably.

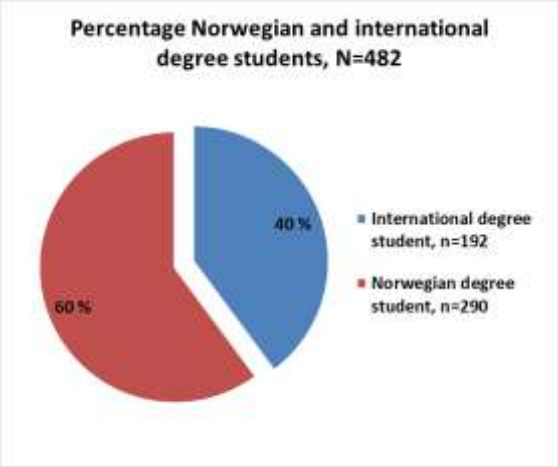


Fig. 1. Norwegian and international degree students at UNIS 2021. N=number of students.

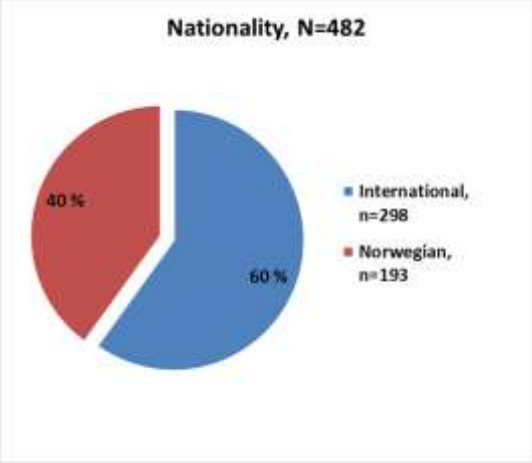


Fig. 2. Norwegian and international citizens at UNIS 2021. N=number of students.

3.3 Gender distribution

Over the latest years, UNIS has had a quite balanced gender distribution, with a small predominance of women. The gender distribution in 2021 is in accordance with previous years and shows that 56 % of the students were women (fig. 3).

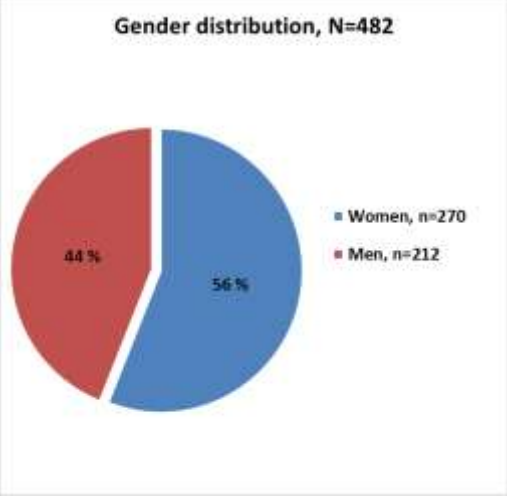


Fig. 3. Gender distribution among UNIS' students 2021. N=number of students.

3.4 University affiliation

UNIS has entered into a cooperation agreement with nine of the Norwegian universities; University of Bergen (UiB), University of Oslo (UiO), Norwegian University of Science and Technology (NTNU), UiT – The Arctic University of Norway (UiT), Norwegian University of Life Sciences (NMBU), University of Stavanger (UiS), University of Agder (UiA), Nord University and the University in South-Eastern Norway (USN). Students from all these universities, except USN were present at UNIS in 2021. International students on exchange agreements are registered at their host university. All international students without an exchange agreement are registered at UiT. Thus, UiT receives a great portion of the student body when international students are included (fig. 4). International guest students are not required to have an agreement with a Norwegian university and are not registered at UiT unless they take courses granting ECTS at UNIS. This group consisted of 24 students in 2021 and are registered as "INT" in fig. 4.

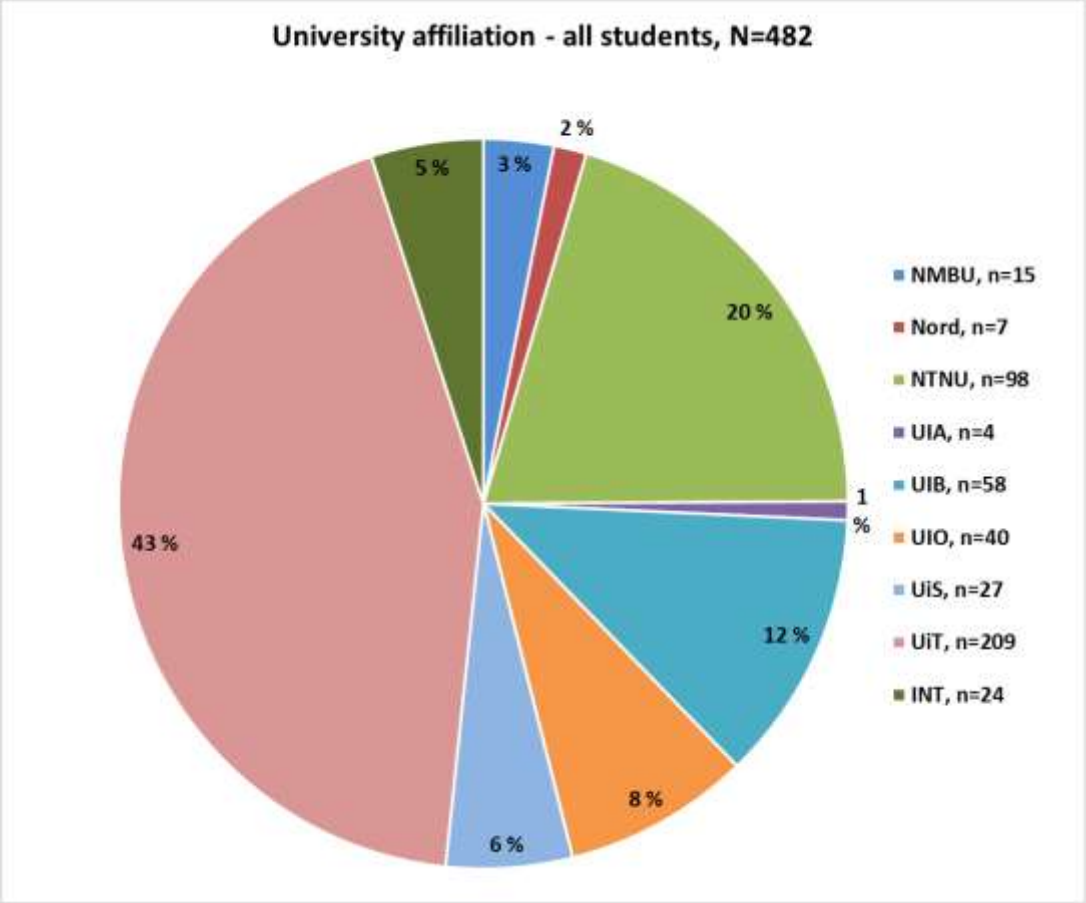


Fig. 4. University affiliation among UNIS' students 2021. All students included. N=total number of students, n=number of students from each university. INT=international guest students without agreement with a Norwegian university.

When considering only Norwegian degree students, UiT is still the university sending most students to UNIS (31 %) (fig. 5). As described in chap. 3.2 this is among other things due to the ANG-students, registered at UiT. In 2020, when the total number of students was even lower while the number of ANG-students were unchanged, this picture was even more predominant, with 38 % of the student body affiliated with UiT.

UiT is followed by NTNU with 27 % of the student body. NTNU has experienced a great increase from last year when they had 23 % of the students. However, in 2019 NTNU had 29 % of the student body, showing that they are now more or less back where they were in 2019. UiS has experienced the greatest

increase from 1 % in 2020 to 8 % in 2021. UiS experienced a great reduction in 2020, from 5 to 1 % of the student body. In addition to UiT, UiB has experienced a reduction in the percentage of students, from 20 % in 2020 to 14 % in 2021. However, UiB experienced a great increase from 16 to 20 % in 2020, so they are also more or less on the same level as in 2019. For the remaining universities there are only minor changed from 2020.

Different courses often recruit a lot of students from one specific university. Cancellation of specific courses both in 2020 and 2021, in addition to the other Covid 19-restrictions, can lead to significant changes in the distribution of students between the different universities. The results from the two last years should therefore be interpreted with some caution.

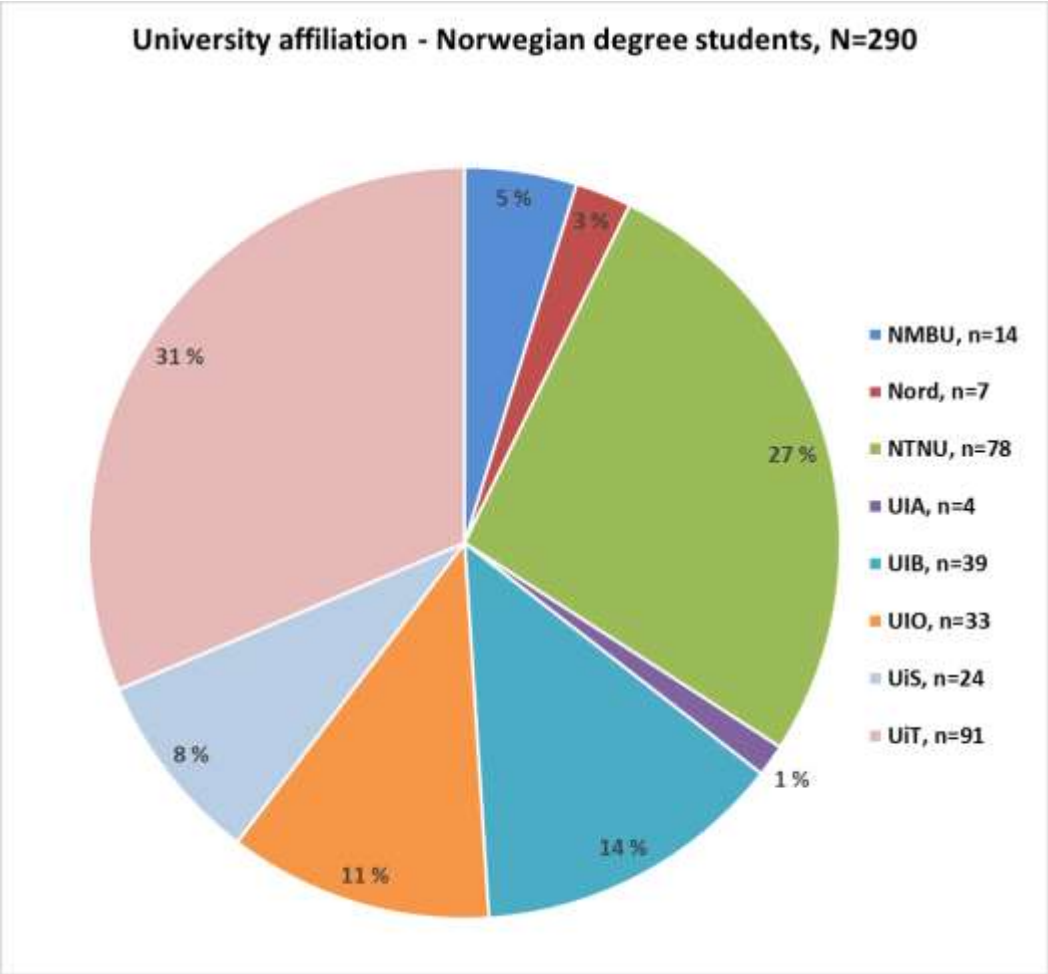


Fig. 5. University affiliation among UNIS' Norwegian degree students 2021.
N=total number of students, n=number of students from each university.

3.5 Nationality

Students from 32 nations were present at UNIS in 2021 (fig. 6). This is the same number of nations as in 2020, but a decrease from 43 nations in 2019. Several countries advised their students against going abroad also in 2021 due to the Covid 19-situation. Additionally, as previously mentioned, it was difficult for students from several countries outside EU to get their necessary visa for entering Norway, as well as approval of their Covid 19 vaccine status.

Norwegian citizens comprised the largest group, with 40 % of the student body, followed by Germany (18 %) and Netherlands (10 %). The top-three nationalities have been the same for years.

UNIS recruit students from all parts of the world, leading to an international study environment. In their evaluation of UNIS, the students specifically emphasize the multicultural student environment, and the possibility for building networks across national borders as positive elements. Most of the students come from European countries, but we also have several students from other parts of the world. These are often international students registered at Norwegian study programmes. In 2020 there was a relative decrease in the number of students from our neighbouring countries Sweden, Finland and Russia. In 2021 the percentage from Sweden and Finland is back on a higher level, while the percentage of students from Russia is still on a lower level than earlier.

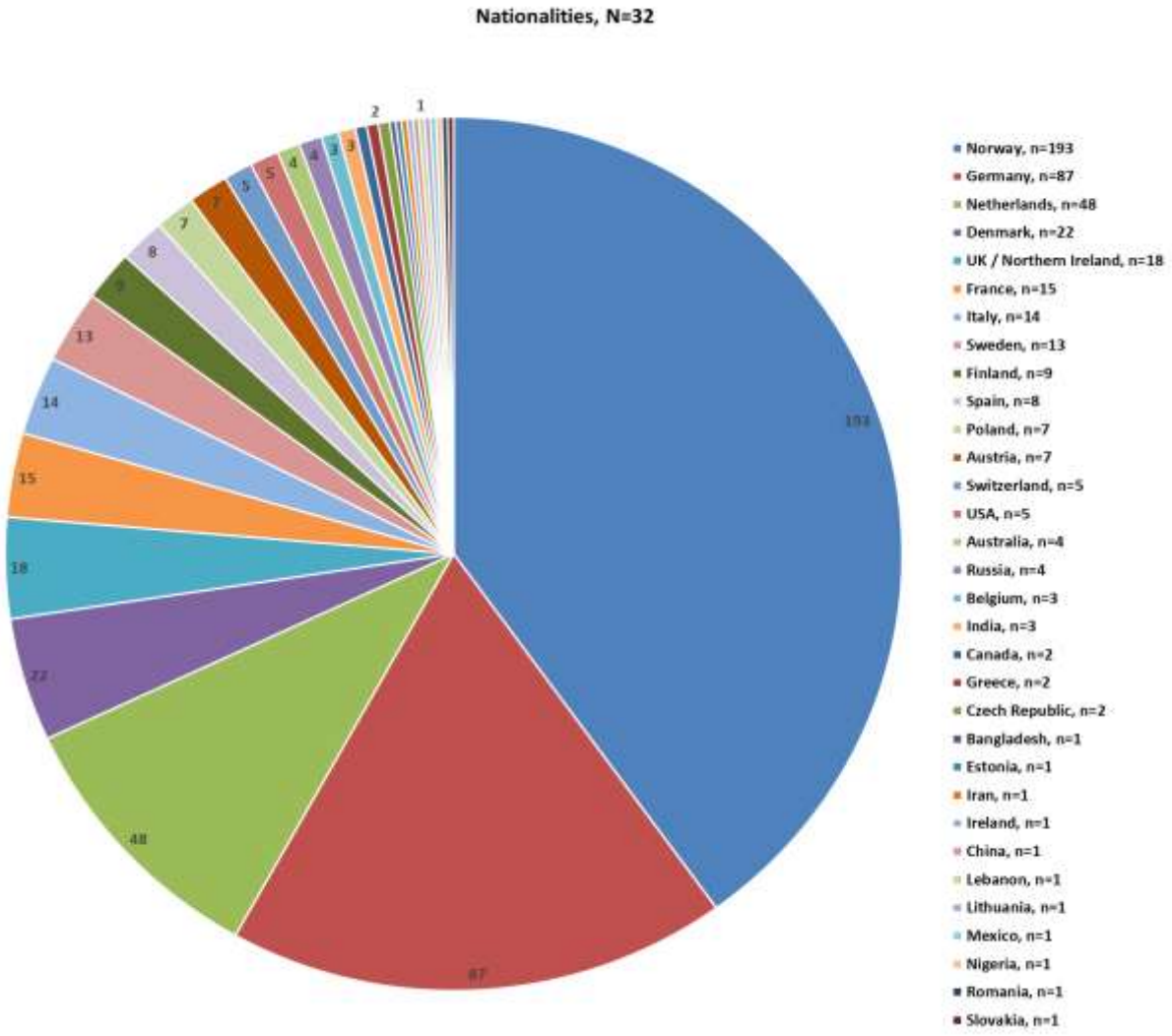


Fig. 6. Nationalities represented at UNIS 2021. N=number of nations, n=number of students from each nation.

4. Results – ECTS production

The ECTS production at UNIS is based on the number of ECTS accounted for in the courses during the year, in addition to the presence of guest students. One study year corresponds to 60 ECTS. For guest students, 5 ECTS is counted per month spent at UNIS working on their theses. If the guest students follow courses at UNIS during their stay, these ECTS are subtracted from the ECTS they receive for their stay. The number of student years is therefore based on the total ECTS production divided by 60 ECTS / year.

4.1 UNIS educational offer

UNIS' educational offer is calculated from the number of courses and the maximum number of students in each course. When reporting UNIS' educational offer, only the educational offer based on courses is reported. No educational offer is defined for guest students.

For courses without restricted admission (AGF-216 «The stormy sun and the northern lights», AS-101 «Arctic survival and safety» and SH-201 «The history of Svalbard», maximum number of students is set equal to the number of registered students.

UNIS' educational offer is shown in number of courses (fig. 7) and in student years per educational level (fig. 8). For 2020 and 2021, both planned educational offer and actual educational offer following cancellation of courses and reduction in maximum number of students due to the Covid 19-restrictions are shown.

In spring semester 2021, all master- and PhD courses except the semester-long courses AGF-301/801 «The upper polar atmosphere» and AGF-304/804 «Radar diagnostics of space plasma» were cancelled. This is clearly seen both when it comes to the number of master- / PhD courses offered, and educational offer in student years in fig. 7 and 8. The number of courses at bachelor level were offered as planned, while the number of courses at master- and PhD level was reduced when compared to the original plan. Furthermore, the number of student years was lower than planned also at bachelor level. This is due to the maximum number of students being reduced to 80 % of originally planned capacity for several courses. In addition to the reduction in educational offer due to the Covid 19-restrictions, the bachelor courses AGF-210 «The middle polar atmosphere» and AGF-223 «Upper atmospheric and space physics: observational techniques and instrumentation» were cancelled in autumn semester due to few applicants.

When considering the planned educational offer, this is more or less on the same level as previous years. UNIS had a planned educational offer of 238 student years in 2021, well within the conditions set by the Ministry of Education and Research of about 220 student years.

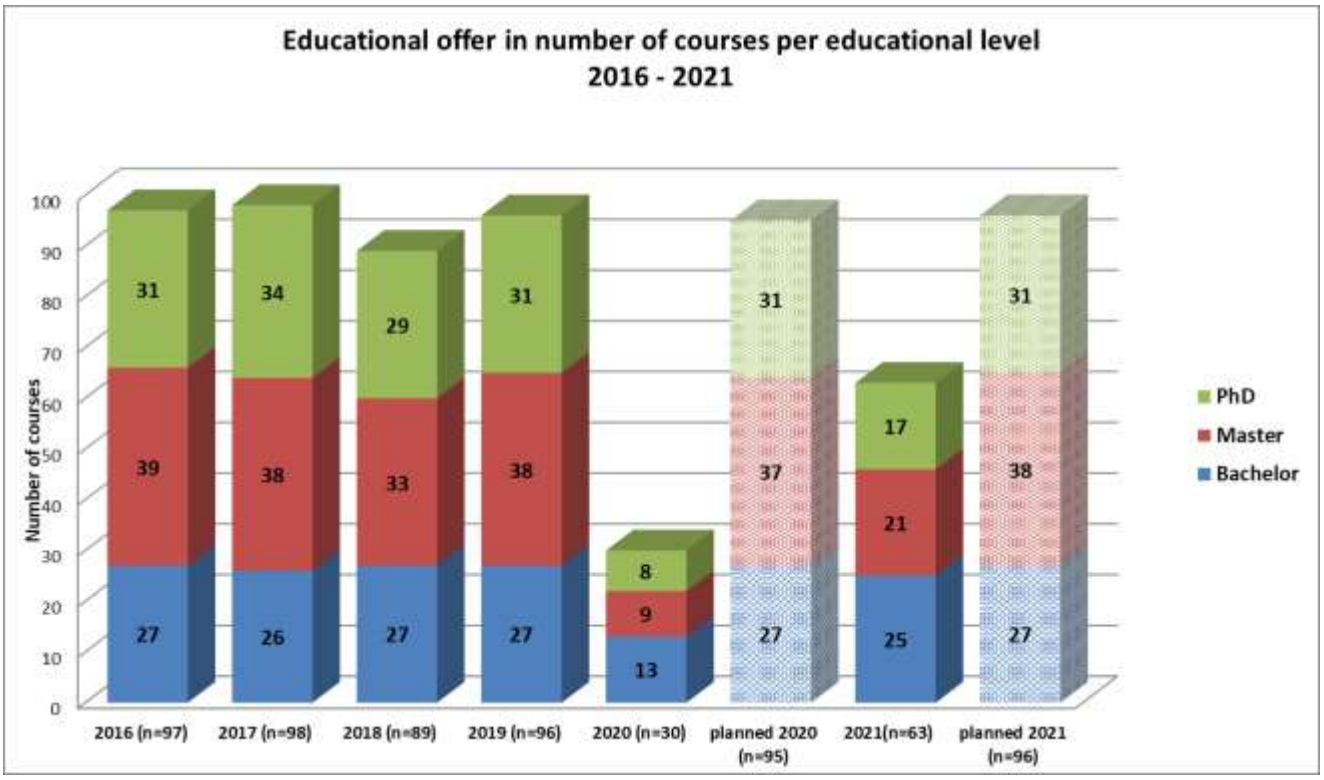


Fig. 7. Number of courses per educational level 2016-2021. n=number of courses.

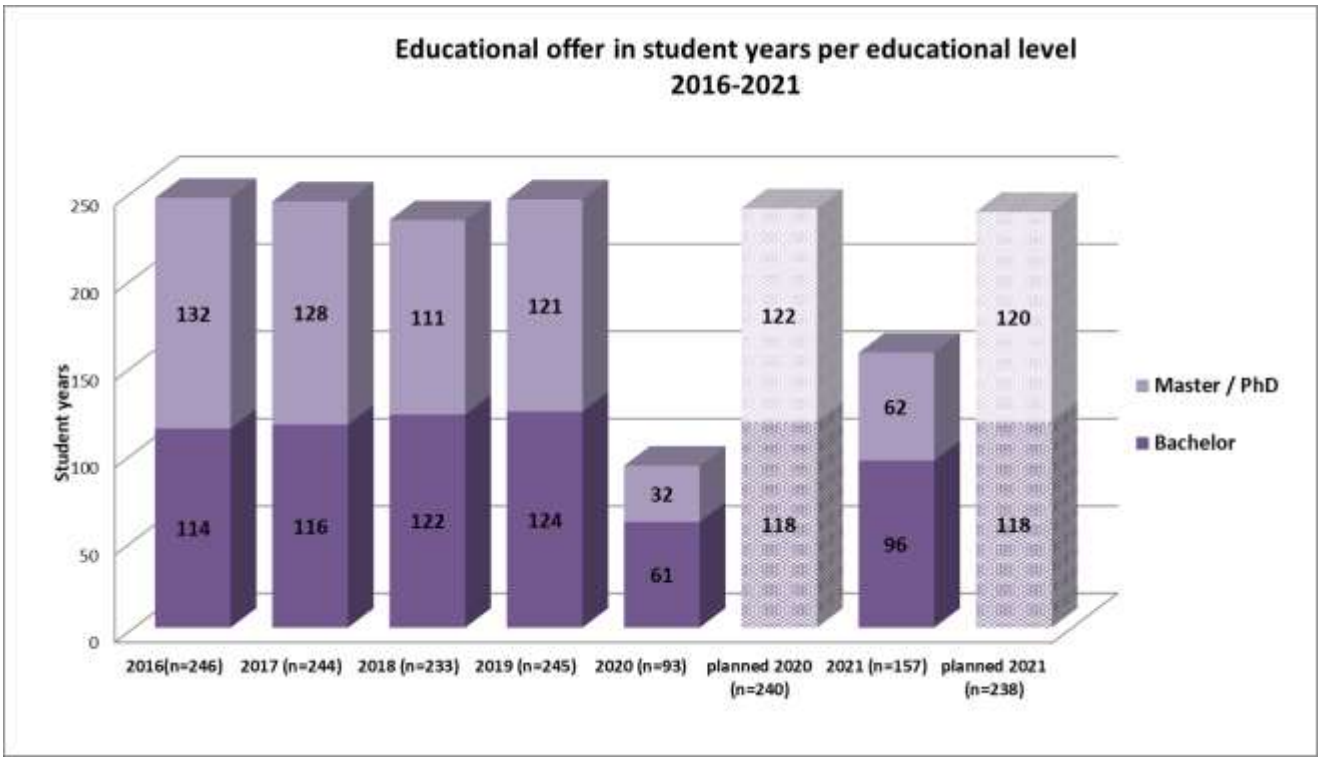


Fig. 8. Educational offer in student years per educational level 2016-2021. n=number of student years.

4.2 ECTS production at UNIS 2021

In 2021, 162 student years were produced at UNIS. This is distributed on 131 student years based on ECTS from passed courses, in addition to 31 student years based on guest students. Figure 9 shows the development of student years, target figures from the Ministry, and the educational offer (from courses) at UNIS for the period 2016 – 2021. For the years 2020 and 2021, both the planned and actual educational offer is shown, as these years suffered from a lot of cancelled courses due to the Covid 19-pandemic.

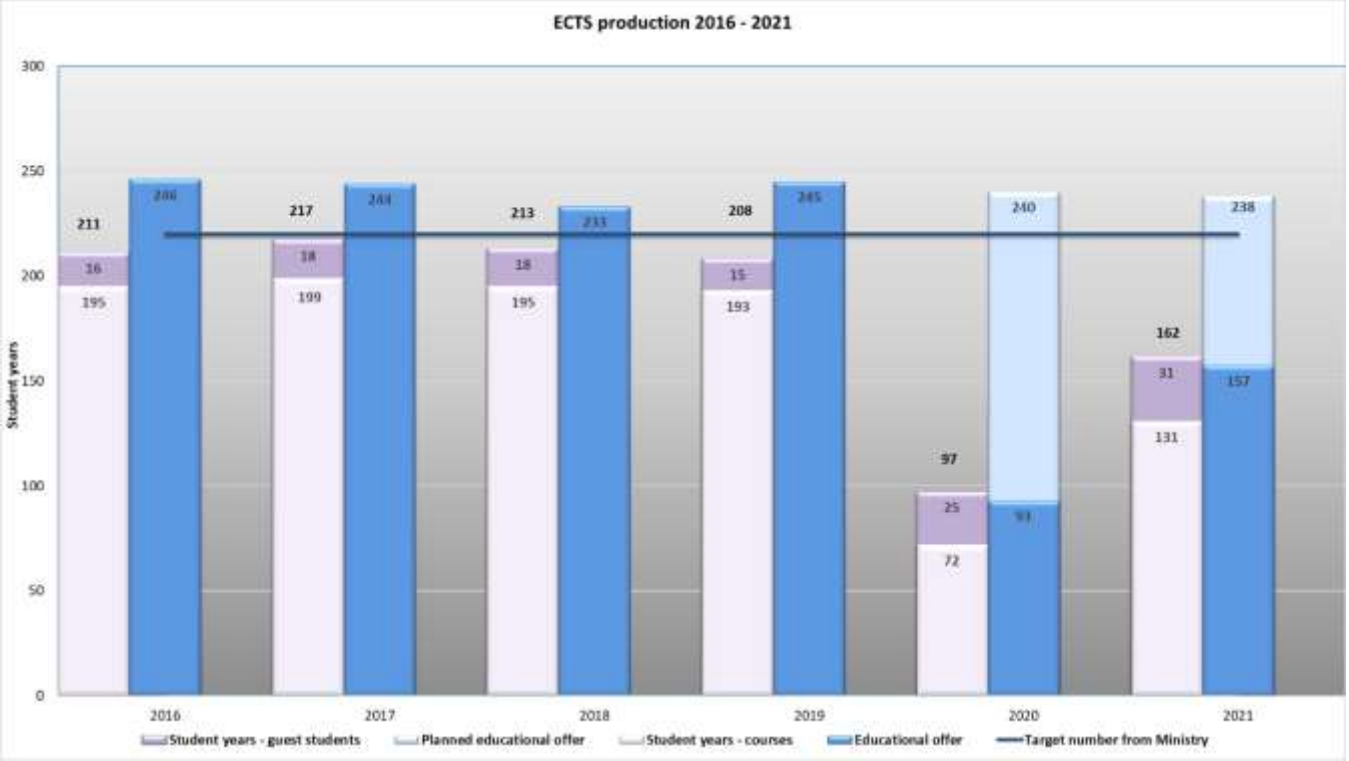


Fig. 9. Total ECTS production, target numbers from the Ministry and educational offer in student years at UNIS 2016 – 2021.

In 2020, the ECTS production at UNIS was quite low, due to cancellation of all autumn courses and some spring courses. Also in 2021, the ECTS production is lower than in previous years due to cancellation of most of the master- and PhD courses in spring semester, as well as reduction of the maximum number of course students. However, we see that the production is on its way upwards after the "bottom level" in 2020, and we can hope that the ECTS production is back on a normal level in 2022.

The production due to guest students reached an all-times-high level, with 31 student years. The production due to guest students was high also in 2020. This can partly be due to the guest students having less opportunities to follow courses during their stay at UNIS during these two years. In autumn semester 2020, economic incentives were introduced for guest master students, and the high production in 2021 can be a repercussion from this arrangement from the year before. At the same time, UNIS has worked actively to recruit guest students, e.g., by publishing available master projects online. Furthermore, one should not disregard the fact that guest students recruit new guest students themselves – that being a guest student at UNIS is popular.

Figure 10 shows the ECTS production from courses distributed at educational levels. As expected, the production at master- and PhD levels were around half of the production in "normal years", due to the cancellation of most master- and PhD courses in spring semester. The reason why the production at

bachelor level is lower than normal is the reduction of maximum number of students to 80 % of normal capacity for several courses, as well as cancellation of the courses AGF-210 «The middle polar atmosphere» and AGF-223 «Upper atmospheric space physics: observational techniques and instrumentation» due to few applicants.

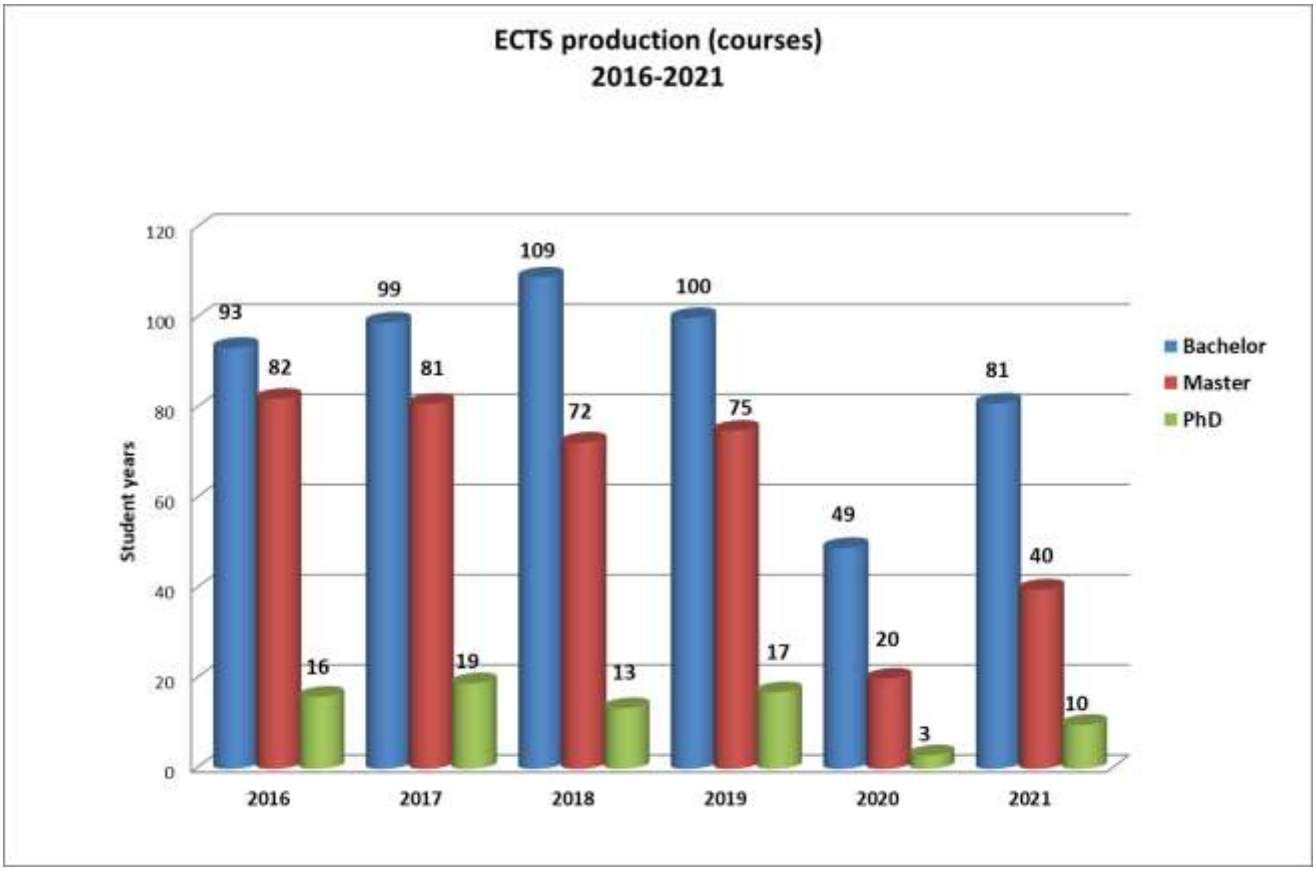


Fig. 10. ECTS production in student years from courses, distributed at the educational levels, for the period 2016-2021.

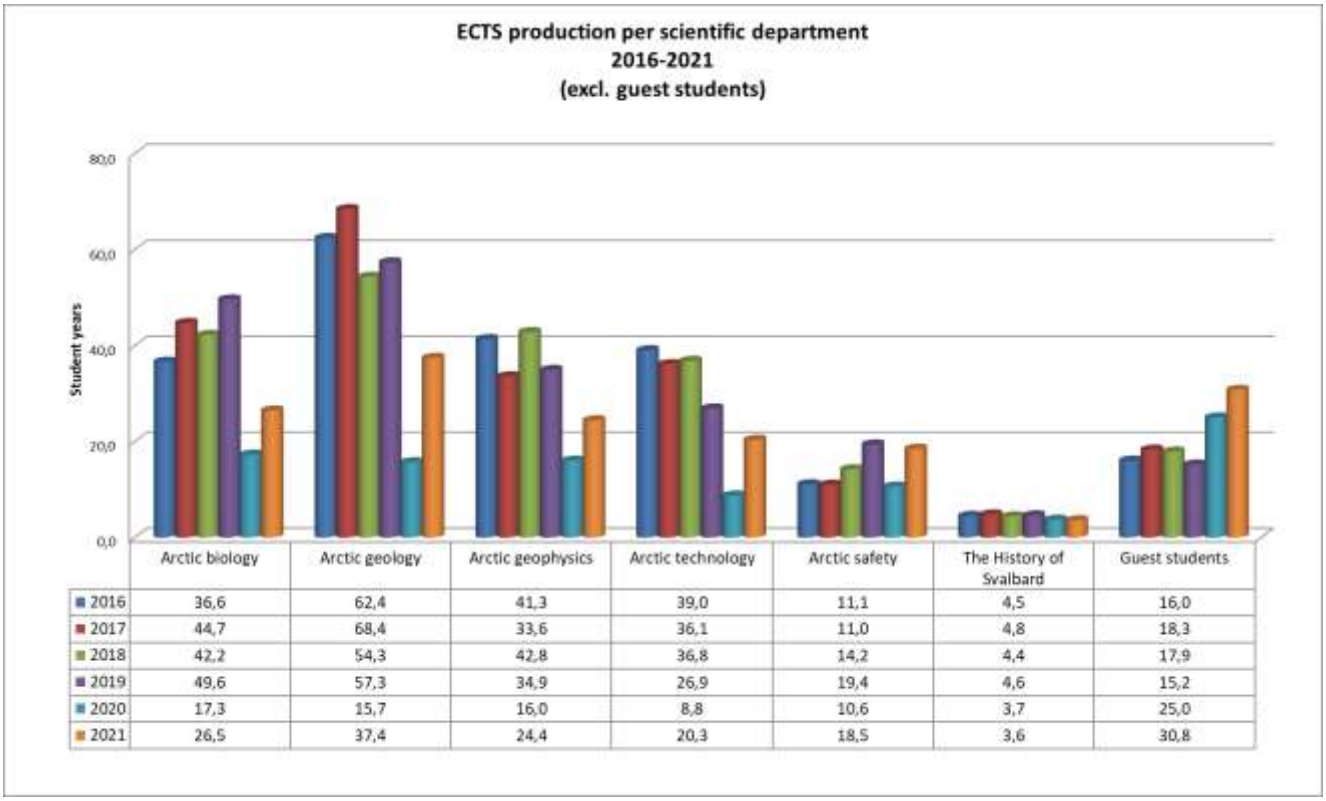
For PhD candidates employed at UNIS, 5 ECTS per month from the admission date in a PhD programme and 2 ½ years onwards is counted. Time spent on the educational component, corresponding to the last half year of the PhD programme is not counted. Neither is time spent on duty work for UNIS counted. The PhD candidates at UNIS produced 12.7 student years during 2021. This adds to the ordinary ECTS production at UNIS of 162 student years.

4.3 ECTS production in the scientific departments

Figure 11 a and b show student years per scientific department for the period 2016 – 2021. Figure a shows the production based on courses, when guest students are shown in a separate group, and fig b shows the total production per scientific department when guest students are included in the result from the departments.

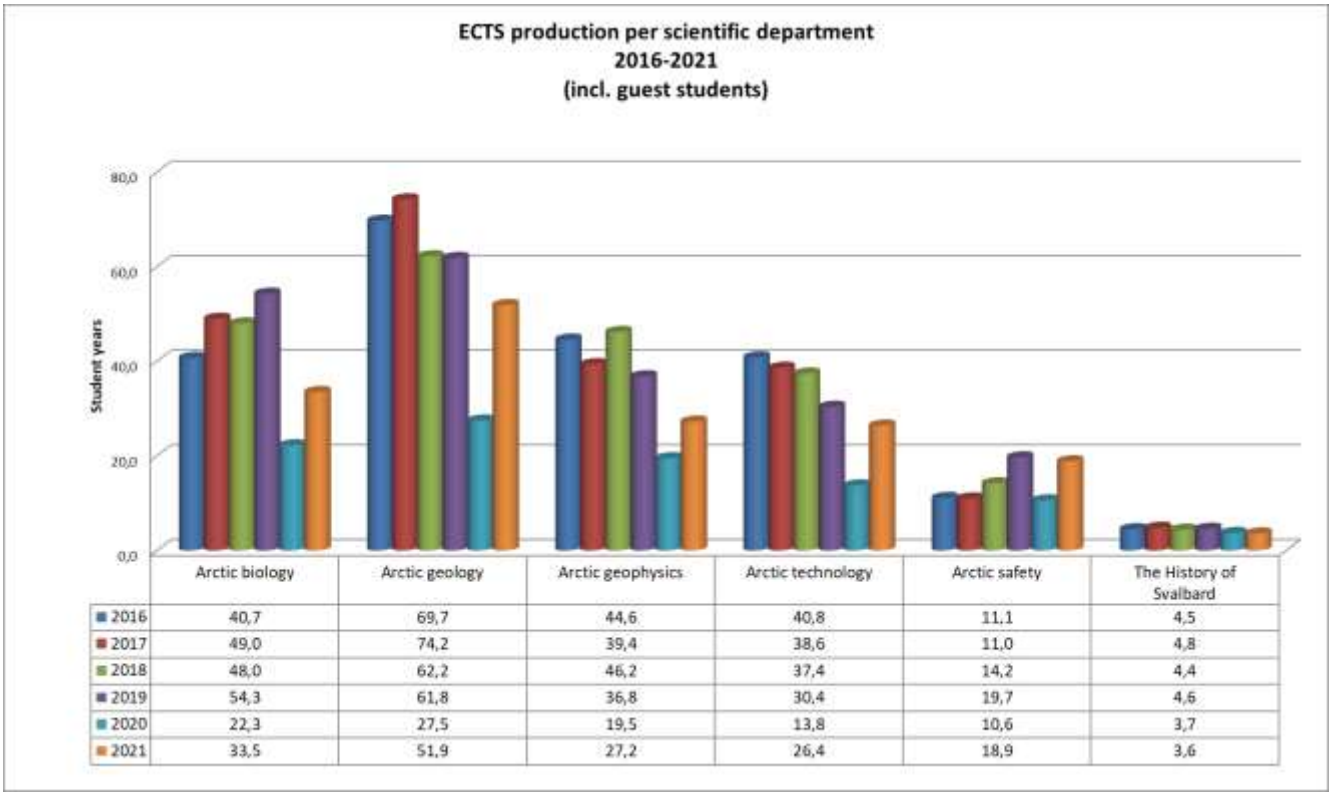
It should be considered that several of the scientific departments have an educational offer that varies between odd and even years, and conclusions from one year to another should be drawn with caution. The development in the separate scientific departments will be discussed in further chapters. Even though Arctic safety is not a scientific department at UNIS, specific courses are offered within this scientific field, and these are therefore reported as a separate group. The History of Svalbard is reported separately.

Generally, all four scientific departments have experienced a marked decrease in production in 2021 compared to "normal years", however an increase from 2020. Courses within Arctic safety have the same production as in normal years. The two courses AS-101 «Arctic survival and safety» and AS-203 «Arctic safety and field leadership» were arranged as normal in spring 2021, although with somewhat fewer students. The master courses within Arctic safety are arranged in autumn semester and were not affected by the cancellation of master courses in spring semester. SH-201 "The History of Svalbard" were also arranged as normal, with some digital teaching. The production from guest students has increased significantly, as discussed in chap. 4.2.



	Arctic biology	Arctic geology	Arctic geophysics	Arctic technology	Arctic safety	The History of Svalbard	Guest students
2016	36,6	62,4	41,3	39,0	11,1	4,5	16,0
2017	44,7	68,4	33,6	36,1	11,0	4,8	18,3
2018	42,2	54,3	42,8	36,8	14,2	4,4	17,9
2019	49,6	57,3	34,9	26,9	19,4	4,6	15,2
2020	17,3	15,7	16,0	8,8	10,6	3,7	25,0
2021	26,5	37,4	24,4	20,3	18,5	3,6	30,8

Fig. 11a. ECST production in student years per department 2016 - 2021. Guest students reported as a separate group.



	Arctic biology	Arctic geology	Arctic geophysics	Arctic technology	Arctic safety	The History of Svalbard
2016	40,7	69,7	44,6	40,8	11,1	4,5
2017	49,0	74,2	39,4	38,6	11,0	4,8
2018	48,0	62,2	46,2	37,4	14,2	4,4
2019	54,3	61,8	36,8	30,4	19,7	4,6
2020	22,3	27,5	19,5	13,8	10,6	3,7
2021	33,5	51,9	27,2	26,4	18,9	3,6

Fig. 11b. ECTS production in student years per department 2016 - 2021. Guest students included in each department.

Figure 12a shows the percentage of student years for each department. Guest students are here reported in a separate group, *i.e.* the percentage given for each department is based on courses only. Figure 12b shows the same distribution when guest students are included in the result for each department.

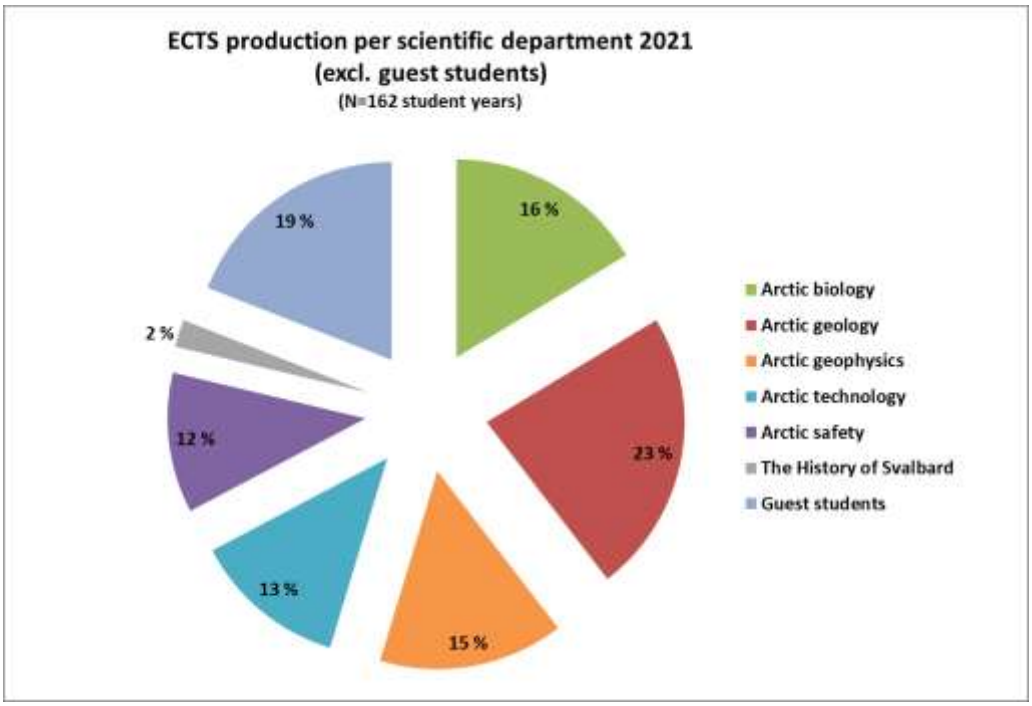


Fig. 12a. Percentage of ECTS production for each scientific department 2021.
Guest students reported as a separate group. N=total number of student years.

.

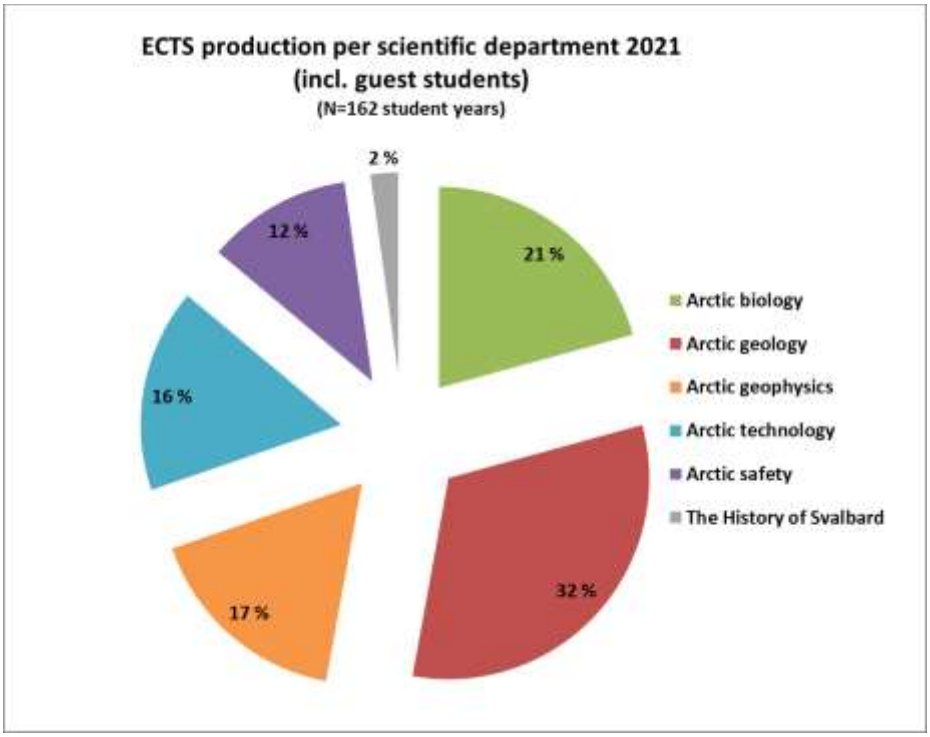


Fig. 12b. Percentage of ECTS production for each scientific department 2021.
Guest students included in the production for each department. N=total number of student years.

Figure 12a shows that guest students accounted for 19 % of the ECTS production at UNIS in 2021. This number has normally been below 10 % of the total production. In 2020, when most courses were cancelled, guest students accounted for 26 % of the ECTS production. This illustrates once again the importance guest students have had for the production at UNIS over the last two years.

Department of Arctic geology had, in accordance with previous years, the highest ECTS production among UNIS scientific departments, with 32 % of the production (including guest students). They have also experienced the greatest increase in the relative percentage of the production, from 28 % in 2020. A significant part of the increase is due to an increase in guest students, cf. chap. 4.7. Department of Arctic geology is followed by Department of Arctic biology, accounting for 21 % of the production, a small decline of 2 % from 2020. Department of Arctic Geophysics have experienced a decrease from 20 to 17 % of the production, while Department of Arctic Technology has increased from 14 to 16 %. Courses within Arctic safety have increased by 1 %, and accounts for 12 % of the ECTS production at UNIS. The History of Svalbard is reduced from 4 to 2 % of the production, probably due to the large percentage of ANG-students in this course in 2020.

4.4 Guest students

Figure 13 and table 1 shows ECTS production from guest students at bachelor-, master- and PhD level for each scientific department, as well as for Arctic safety. As mentioned, 5 ECTS are registered per month the guest students are present at UNIS working on their theses. If they follow courses during the same period as they are registered as guest students, these ECTS are subtracted from the ECTS they earn for presence / thesis work. The number of student years from guest students have increased from 25,3 to 30,8 since 2020. Guest students at master level dominate in all scientific departments. Department of Arctic geology has the highest number of guest students and highest ECTS production. They have also experienced the greatest increase in ECTS production from guest student; an increase of almost 3 student years. Department of Arctic biology has increased the production with 2 student years since 2020, Department of Arctic technology have increased with ca. 1 student year, and Department of Arctic geophysics have experienced a slight decline of ca. 1 student year. In 2021 also guest master students within Arctic safety were registered.

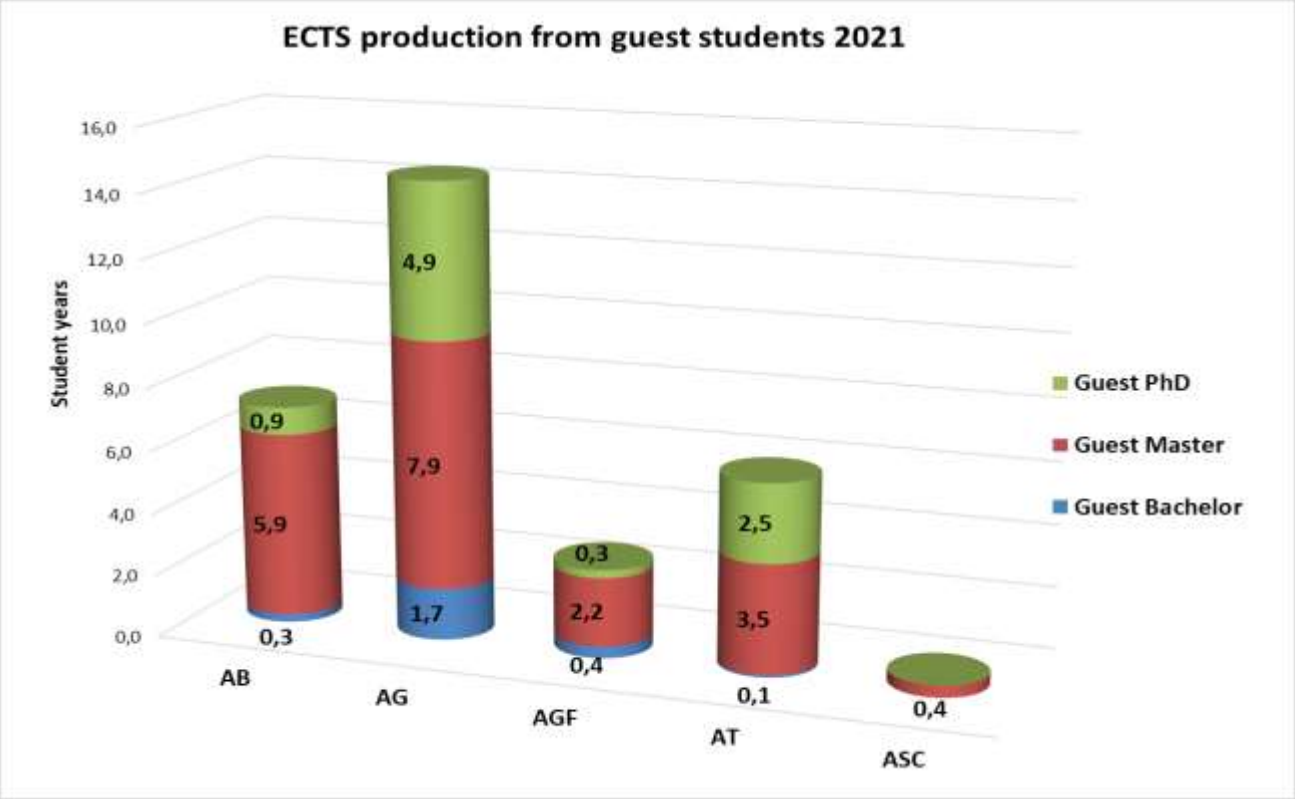


Fig. 13. ECTS production from guest students, distributed on the educational levels and scientific departments at UNIS in 2021.

Department	Guest bachelor (student years)	Guest master (student years)	Guest PhD (student years)	Total production from guest students (student years)
AB	0,3	5,9	0,9	7,0
AG	1,7	7,9	4,9	14,5
AGF	0,4	2,2	0,3	2,8
AT	0,1	3,5	2,5	6,1
ASC	0,0	0,4	0,0	0,4
SUM	2,4	19,9	8,5	30,8

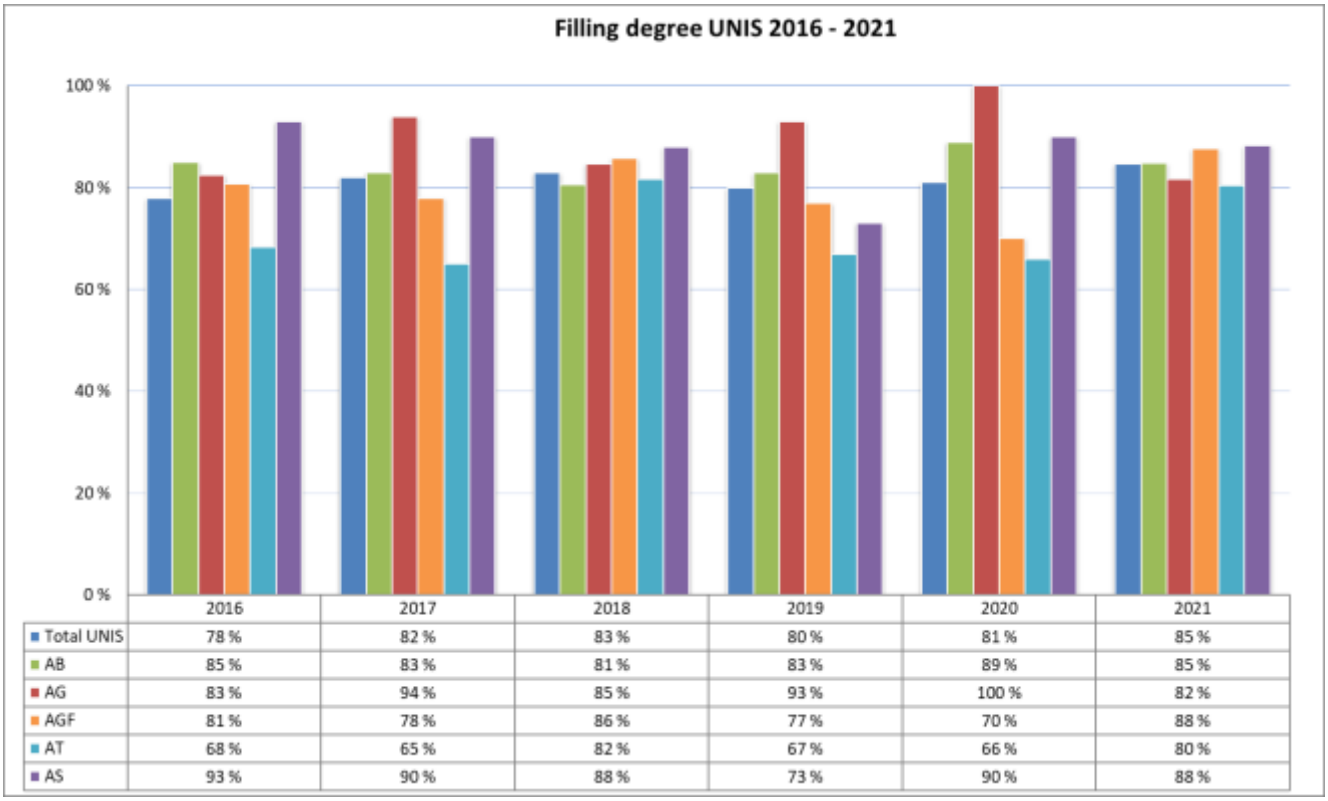
Tab. 1. ECTS production from guest students, distributed at the educational levels and scientific departments at UNIS in 2021.

4.5 Filling degree

To what extent the courses are filled with students is of course crucial for the ECTS production. The filling degree shows the percentage of the maximum educational offer being realized, *i.e.* the number of students actually showing up at course start in the different courses, divided on the maximum number of study places. For 2021 we have taken the reduced maximum number of study places in the courses (80 % of normal capacity) into account. The reduced maximum number is thus set as 100 % filling degree for this semester. Courses without restricted admission (AGF-216 «The Stormy Sun and the Northern Lights», AS-101 «Arctic Survival and Safety» and SH-201 «The History of Svalbard») are not included in the result.

The filling degree for the period 2016 – 2021 is given in fig. 14. In 2021 the filling degree for UNIS in total was 85 %. This is slightly higher than previous years.

In 2021, there were less variation between the filling degree in the different scientific departments than most earlier years. All departments had a filling degree between 80 and 90 %. Department of Arctic geology had a low filling degree (82 %), as opposed to previous years. This can mainly be explained by a single course, AG-323/823 «Sequence stratigraphy – a tool for basin analysis», that due to Covid 19-restrictions ended up with very few students and only 44 % filling degree.



	2016	2017	2018	2019	2020	2021
Total UNIS	78 %	82 %	83 %	80 %	81 %	85 %
AB	85 %	83 %	81 %	83 %	89 %	85 %
AG	83 %	94 %	85 %	93 %	100 %	82 %
AGF	81 %	78 %	86 %	77 %	70 %	88 %
AT	68 %	65 %	82 %	67 %	66 %	80 %
AS	93 %	90 %	88 %	73 %	90 %	88 %

Fig. 14. Filling degree in UNIS courses in the different scientific departments 2016-2021.

4.6 ECTS production – Department of Arctic biology

Department of Arctic biology experienced a lower ECTS production in 2021 when compared to "normal years", but still an increase from 2020. We see a slight reduction at bachleor level when compared to "normal years", due to the reduction of maximum number of course students. There is a marked reduction at master- and PhD level, due to the cancellation of all master- and PhD courses in spring semester. On the other hand, ECTS production from guest students has increased with two student years since 2020, and is now on an all-times-high level (fig. 15, tab. 2). When comparing ECTS production based on courses with the educational offer over the years, these follow each other quite well, and the courses have had a high filling degree over the last two years (fig. 16). A list of the number of students in each course, number of student sitting and passing the final exam, as well as ECTS production and filling degree for each course is found in table 3.

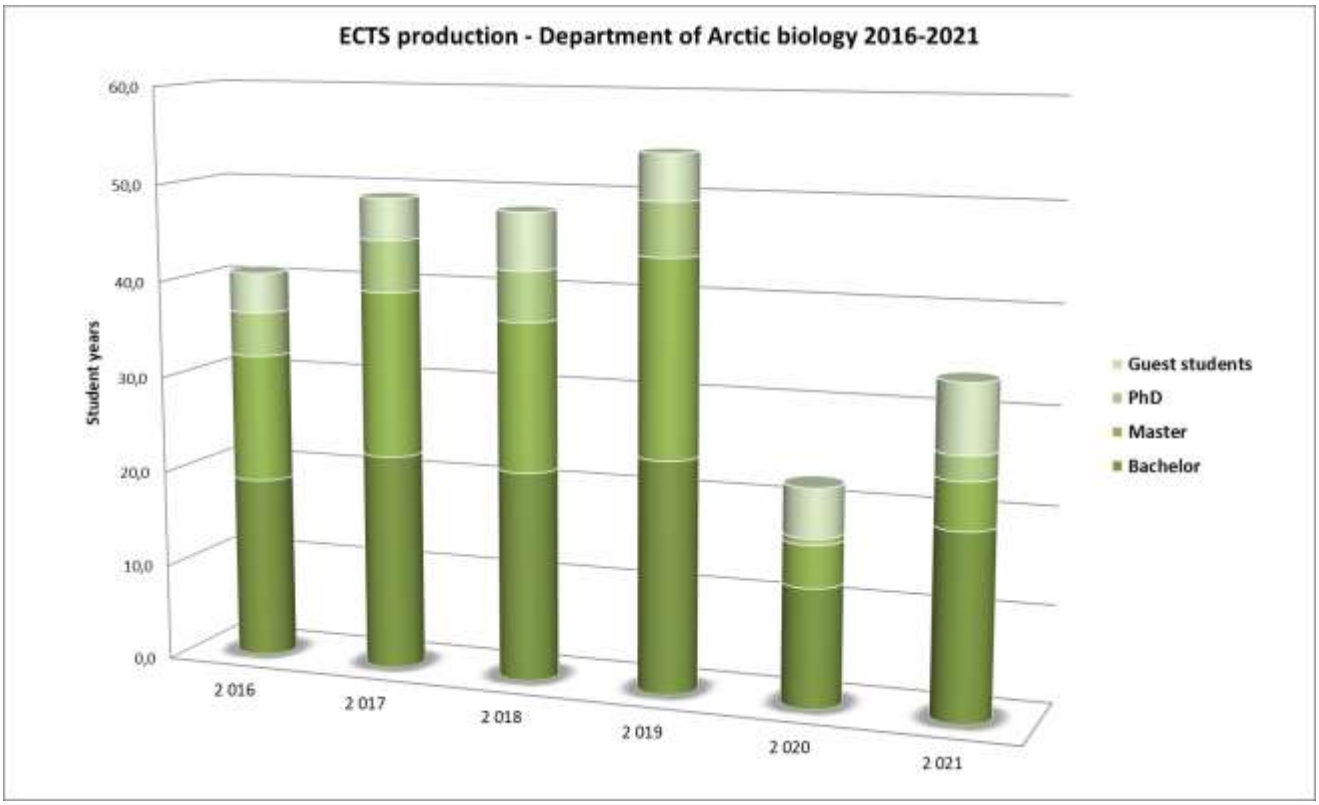


Fig. 15. ECTS production in student years, Department of Arctic biology 2016 – 2021.

AB	2016	2017	2018	2019	2020	2021
Bachelor	18,8	22,3	21,7	23,9	12,3	19,1
Master	13,2	17,0	15,3	20,2	4,3	4,9
PhD	4,6	5,3	5,2	5,5	0,7	2,5
Guest students	4,1	4,3	5,9	4,7	5,0	7,0
Total	**40,7**	**49,0**	**48,1**	**54,3**	**22,3**	**33,5**
Courses	36,6	44,7	42,2	49,6	17,3	26,5
Educational offer	45,3	49,4	51,7	57,1	20,0	28,5

Tab. 2. ECTS production in student years, Department of Arctic biology 2016-2021.

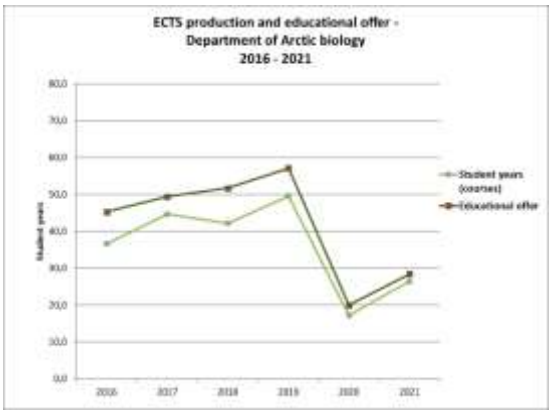


Fig. 16. Student years and educational offer, Department of Arctic biology 2016-2021.

Arctic biology													
Course code	**ECTS**	**Max number**	**Autumn / spring**	**No. Candidates**	**Showed up**	**Passed**	**ECTS showed up**	**ECTS passed**	**Fail in ECTS**	**No show in ECTS**	**Level**	**Student years**	**Filling degree***
AB-201	15	16	12	15	14	14	210	210	0	15	bachelor	3,5	94 %
AB-202	15	16	6	16	16	16	240	240	0	0	bachelor	4,0	100 %
AB-203	15	16	6	16	16	16	240	240	0	0	bachelor	4,0	100 %
AB-204	15	16	12	14	14	14	210	210	0	0	bachelor	3,5	88 %
AB-206	10	16	12	10	10	10	50	50	0	0	bachelor	0,8	63 %
AB-207	15	5	6	5	5	5	75	75	0	0	bachelor	1,3	100 %
AB-207	15	6	12	3	3	3	45	45	0	0	bachelor	0,8	50 %
AB-208	15	5	6	5	5	5	75	75	0	0	bachelor	1,3	100 %
AB-321	10	16	12	10	10	10	100	100	0	0	master	1,7	88 %
AB-327	10	16	12	10	9	9	90	90	0	10	master	1,5	94 %
AB-332	10	16	12	10	10	10	100	100	0	0	master	1,7	94 %
AB-337	2	12	6	1	1	1	2	2	0	0	master	0,0	50 %
AB-821	10	-	12	4	4	4	40	40	0	0	PhD	0,7	-
AB-827	10	-	12	5	5	5	50	50	0	0	PhD	0,8	-
AB-832	10	-	12	5	5	5	50	50	0	0	PhD	0,8	-
AB-837	2	-	6	5	5	5	10	10	0	0	PhD	0,2	-
Total				**134**	**132**	**132**	**1587**	**1587**	**0**	**25**		**26,45**	**85 %**
Guest students								422,5				7,0	
Total production AB department								**2009,5**				**33,5**	

* For master- / PhD courses with common teaching, the filling degree is given for both courses together.

Tab. 3. List of the number of students in each course, the number of students sitting and passing the exam, as well as ECTS production and filling degree for each course at the Department of Arctic biology 2021.

4.7 ECTS production – Department of Arctic geology

Like the other scientific departments, also Department of Arctic geology experienced a marked reduction in ECTS production when compared to "normal years", but still an increase since 2020. We see a slight reduction at bachleor level when compared to "normal years", due to the reduction of maximum number of course students. There is a marked reduction at master- and PhD level, due to the cancellation of all master- and PhD courses in spring semester. It is worth noting that the department has increased their production from guest student with almost 3 student years from 2020. This is the highest ECTS production from guest students among the scientific departments at UNIS, and also the highest production through the time series within the department (fig. 17, tab. 4). Figure 18 shows that the educational offer and the ECTS production follow each other quite well. A list of the number of students in each course, number of student sitting and passing the final exam, as well as ECTS production and filling degree for each course is found in table 5.

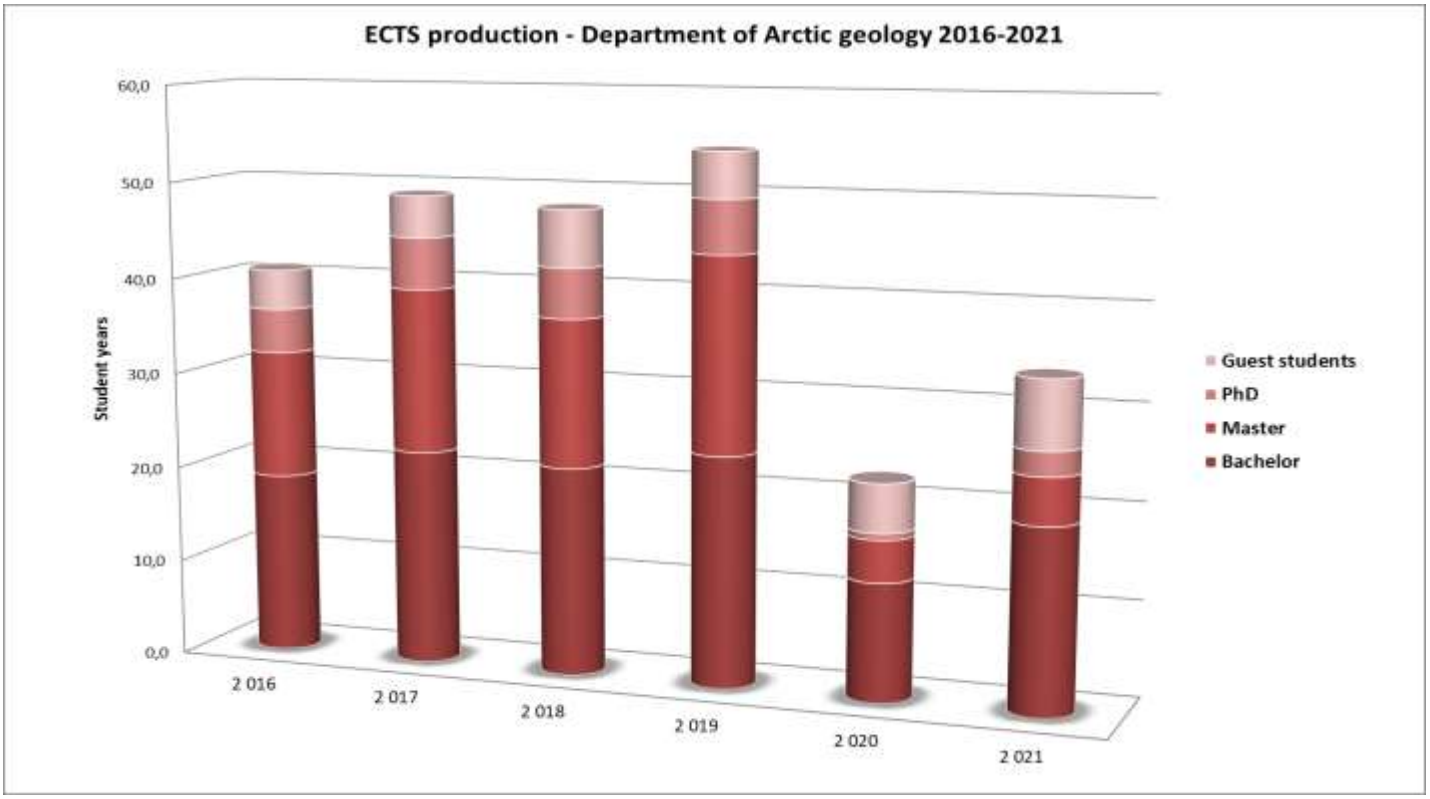


Fig. 17. ECTS production in student years, Department of Arctic geology 2016 –2021.

AG	2016	2017	2018	2019	2020	2021
Bachelor	24,3	28,3	35,5	32,6	8,5	25,8
Master	28,6	30,4	14,7	16,7	6,0	7,8
PhD	9,6	9,8	4,1	8,1	1,2	3,8
Guest students	7,2	5,8	8,0	4,5	11,8	14,5
Total	**69,7**	**74,2**	**62,3**	**61,8**	**27,5**	**51,9**
Courses	62,4	68,4	54,3	57,3	15,7	37,4
Educational offer	75,0	73,3	65,8	66,7	16,7	45,7

Tab. 4. ECTS production in student years, Department of Arctic geology 2016-2021.

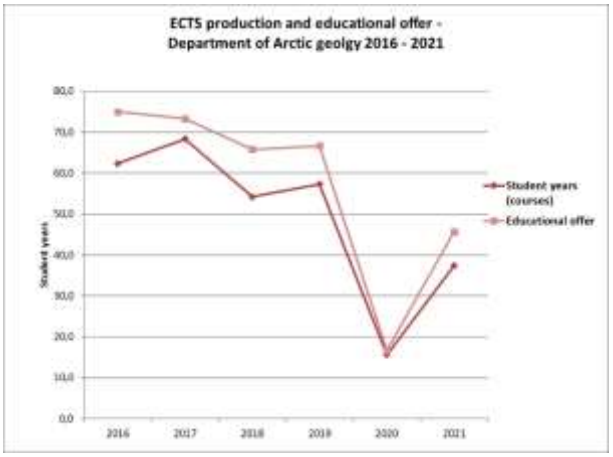


Fig. 18. Student years and educational offer, Department of Arctic geology 2016-2021.

Arctic geology													
Course code	**ECTS**	**Max number**	**Autumn / spring**	**No. Candidates**	**Showed up**	**Passed**	**ECTS showed up**	**ECTS passed**	**Fail in ECTS**	**No show in ECTS**	**Level**	**Student years**	**Filling degree***
AG-204	15	20	12	17	17	17	255	255	0	0	bachelor	4,3	85 %
AG-209	15	14	6	12	12	11	180	165	15	0	bachelor	2,8	86 %
AG-210	15	16	12	16	15	15	225	225	0	15	bachelor	3,8	100 %
AG-211	15	16	12	15	15	15	225	225	0	0	bachelor	3,8	94 %
AG-218	10	16	12	11	11	11	110	110	0	0	bachelor	1,8	69 %
AG-220	10	20	12	13	13	13	130	130	0	0	bachelor	2,2	65 %
AG-221	15	20	12	17	17	17	255	255	0	0	bachelor	4,3	85 %
AG-222	15	14	6	12	12	12	180	180	0	0	bachelor	3,0	86 %
AG-323	10	16	12	3	3	3	30	30	0	0	master	0,5	44 %
AG-326	10	20	12	12	12	12	120	120	0	0	master	2,0	80 %
AG-338	10	16	12	4	4	4	40	40	0	0	master	0,7	75 %
AG-340	10	20	12	19	19	19	190	190	0	0	master	3,2	95 %
AG-348	10	16	12	9	9	9	90	90	0	0	master	1,5	100 %
AG-823	10	-	12	4	4	4	40	40	0	0	PhD	0,7	-
AG-826	10	-	12	4	4	4	40	40	0	0	PhD	0,7	-
AG-838	10	-	12	8	8	8	80	80	0	0	PhD	1,3	-
AG-848	10	-	12	7	7	7	70	70	0	0	PhD	1,2	-
Total				**183**	**182**	**181**	**2260**	**2245**	**15**	**15**		**37,42**	**82 %**
Guest students								867				14,5	
Total production AG department								**3112**				**51,9**	

* For master- / PhD courses with common teaching, the filling degree is given for both courses together.

Tab. 5. List of the number of students in each course, the number of students sitting and passing the exam, as well as ECTS production and filling degree for each course at the Department of Arctic geology 2021.

4.8 ECTS production – Department of Arctic geophysics

Department of Arctic geophysics shows much of the same picture as Department of Arctic biology and Department of Arctic geology, with a general reduction when compared to "normal years", but an increase since 2020. The reduction at master- and PhD level has not been as marked for this department, since the two master- / PhD courses AGF-301 / 801 «The upper polar atmosphere» and AGF-304 / 804 «Radar diagnostics of space plasma» were anyway arranged in spring 2021. The ECTS production from guest students has been stable when compared to previous years. Figure 20 shows that the educational offer and the ECTS production follow each other to a great extent. A list of the number of students in each course, number of student sitting and passing the final exam, as well as ECTS production and filling degree for each course is found in table 7.

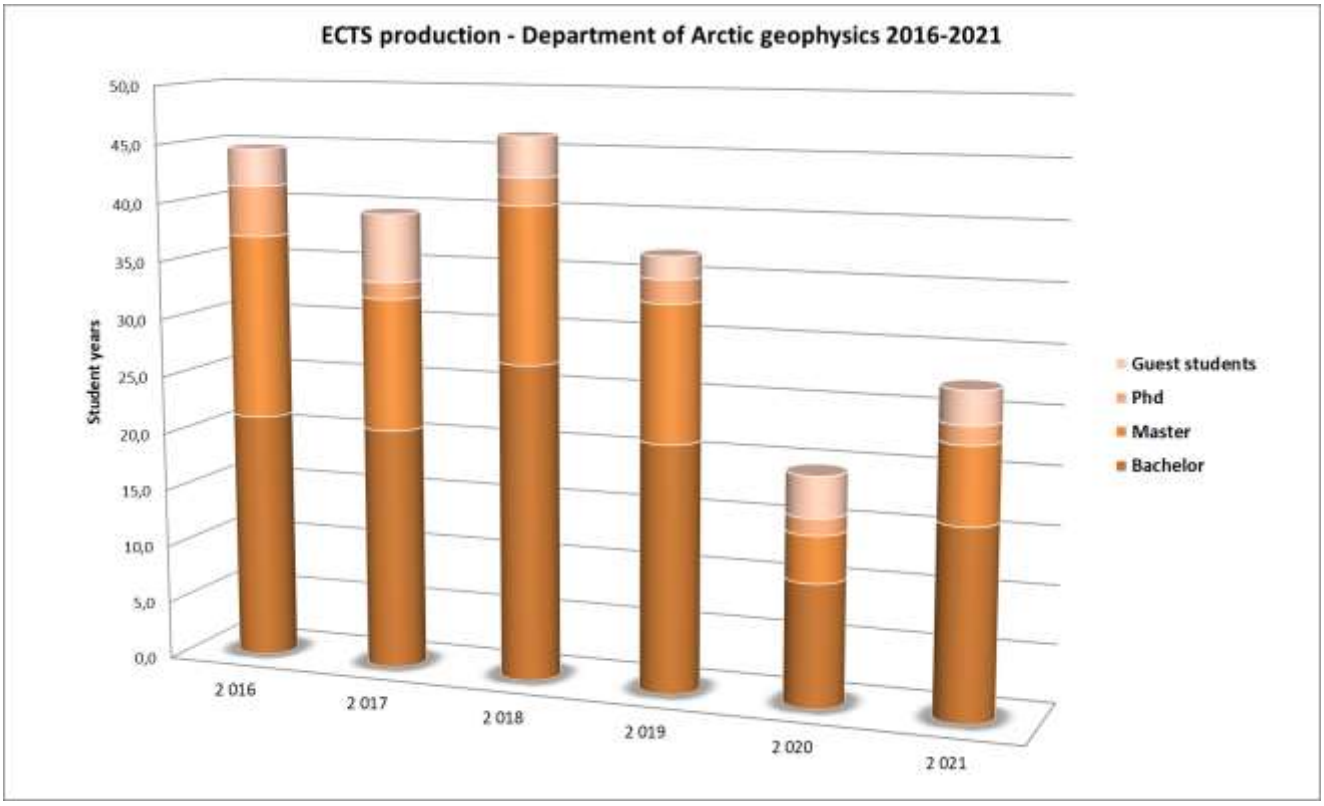


Fig. 19. ECTS production in student years, Department of Arctic geophysics 2016-2021.

AGF	2016	2017	2018	2019	2020	2021
Bachelor	21,3	20,8	27,2	21,3	10,6	16,3
Master	15,8	11,3	13,3	11,7	4,0	6,6
PhD	4,3	1,4	2,3	2,0	1,4	1,6
Guest students	3,2	5,8	3,4	1,9	3,5	2,8
Total	**44,6**	**39,4**	**46,2**	**36,8**	**19,5**	**27,2**
Courses	41,3	33,6	42,8	34,9	16,0	24,4
Educational offer	49,3	46,5	48,8	48,4	24,7	29,8

Tab. 6. ECTS production in student years, Department of Arctic geophysics 2016-2021.

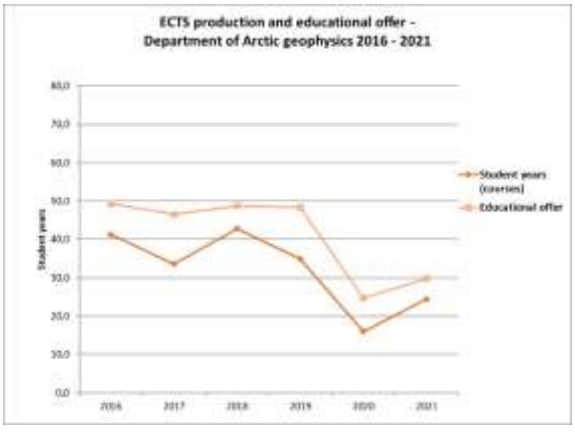


Fig. 20. Student years and educational offer, Department of Arctic geophysics 2016-2021.

Arctic geophysics													
Course code	**ECTS**	**Max number**	**Autumn / spring**	**No. Candidates**	**Showed up**	**Passed**	**ECTS showed up**	**ECTS passed**	**Fail in ECTS**	**No show in ECTS**	**Level**	**Student years**	**Filling degree***
AGF-211	15	16	6	16	16	16	240	240	0	0	bachelor	4,0	100 %
AGF-212	15	16	6	16	16	16	240	240	0	0	bachelor	4,0	100 %
AGF-213	15	16	12	15	15	15	225	225	0	0	bachelor	3,8	94 %
AGF-214	15	16	12	15	15	15	225	225	0	0	bachelor	3,8	94 %
AGF-216	5	-	6	40	9	9	45	45	0	155	bachelor	0,8	-
AGF-301	15	12	6	12	12	12	180	180	0	0	master	3,0	100 %
AGF-304	15	12	6	11	10	10	150	150	0	15	master	2,5	92 %
AGF-345	10	16	12	3	3	3	30	30	0	0	master	0,5	63 %
AGF-353	5	20	12	7	7	7	35	35	0	0	master	0,6	60 %
AGF-801	15	-	6	0	0	0	0	0	0	0	PhD	0,0	-
AGF-804	15	-	6	0	0	0	0	0	0	0	PhD	0,0	-
AGF-845	10	-	12	7	7	7	70	70	0	0	PhD	1,2	-
AGF-853	5	-	12	5	5	5	25	25	0	0	PhD	0,4	-
Total				**147**	**115**	**115**	**1465**	**1465**	**0**	**170**		**24,42**	**88 %**
Guest students								169,5				2,8	
Total production AGF department								**1634,5**				**27,2**	

* For master- / PhD courses with common teaching, the filling degree is given for both courses together.
** AGF-216 «The stormy sun and the northern lights» » is omitted when calculating the filling degree, as this course does not have restricted admission.

Tab. 7. List of the number of students in each course, the number of students sitting and passing the exam, as well as ECTS production and filling degree for each course at the Department of Arctic geophysics 2021.

4.9 ECTS production – Department of Arctic technology

At Department of Arctic technology, no reduction in ECTS production at bachelor level when compared to "normal years" is seen. The course package AT-205 «Frozen groud engineering for Arctic infrastructures» / AT-211 «Ice mechanics, loads on structures and instrumentation» was arranged with a high filling degree. The department did not show the same significant reduction in ECTS production at master- / PhD level when compared to "normal years" as the other departments; they have to a greater extent recovered from 2020. Three master / PhD courses were cancelled in spring semester, but four courses were arranged in autumn semester. We see an increase in ECTS production of just above one student year from guest students since 2020. Figure 22 shows that the educational offer and the ECTS production follow each other to a great extent. The department has experienced a reduction in both educational offer and ECTS production since 2016, to a great extent due to the termination of bachelor courses in spring semester, and reduction of maximum number of students in AT-327 / 827 "Arctic offshore engineering" from 60 to 30 students. A list of the number of students in each course, number of student sitting and passing the final exam, as well as ECTS production and filling degree for each course is found in table 9.

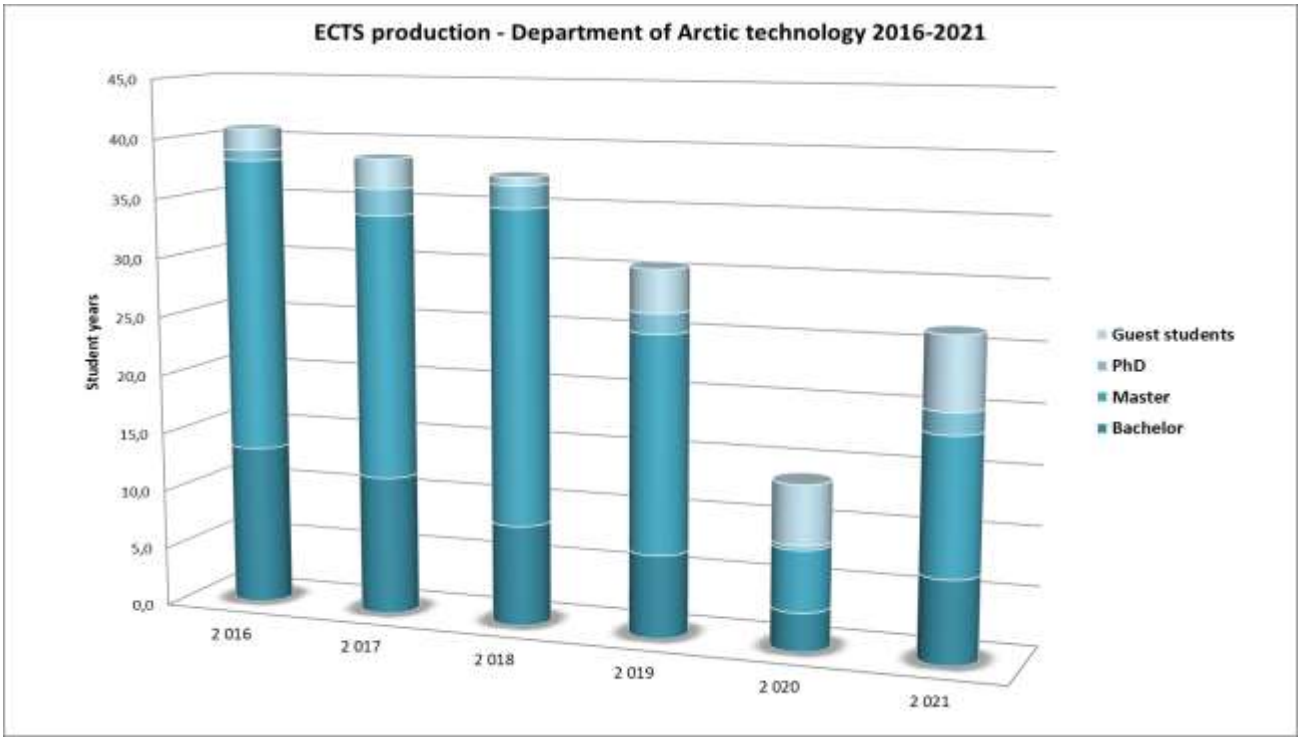


Fig. 21. ECTS production in student years, Department of Arctic technology 2016-2021.

AT	2016	2017	2018	2019	2020	2021
Bachelor	13,5	11,8	8,5	7,0	3,3	7,0
Master	24,6	22,2	26,4	18,2	5,2	11,5
PhD	0,9	2,2	1,9	1,7	0,3	1,8
Guest students	1,8	2,5	0,7	3,6	5,0	6,1
Total	**40,8**	**38,6**	**37,5**	**30,5**	**13,8**	**26,4**
Courses	39,0	36,1	36,8	26,9	8,8	20,3
Educational offer	62,7	57,7	47,7	41,0	16,7	26,3

Tab. 8. ECTS production in student years, Department of Arctic technology 2016 – 2021.

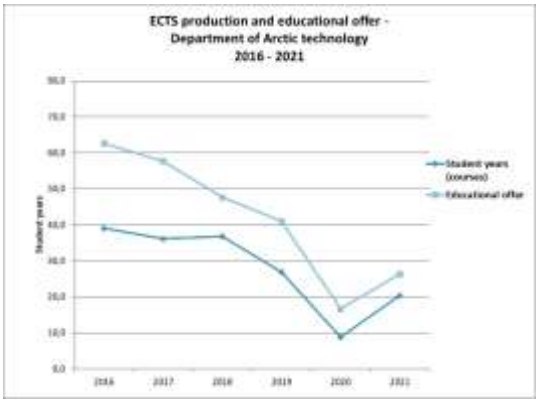


Fig. 22. Student years and educational offer, Department of Arctic technology 2016 – 2021.

Arctic technology													
Course code	**ECTS**	**Max number**	**Autumn / spring**	**No. Candidates**	**Showed up**	**Passed**	**ECTS showed up**	**ECTS passed**	**Fail in ECTS**	**No show in ECTS**	**Level**	**Student years**	**Filling degree***
AT-205	15	16	6	15	13	13	195	195	0	30	bachelor	3,3	94 %
AT-211	15	16	6	17	15	15	225	225	0	30	bachelor	3,8	106 %
AT-301	10	20	12	11	11	11	110	110	0	0	master	1,8	65 %
AT-327	10	30	12	28	27	26	270	260	10	10	master	4,3	103 %
AT-332	10	20	12	11	11	11	110	110	0	0	master	1,8	55 %
AT-333	10	20	12	8	8	8	80	80	0	0	master	1,3	45 %
AT-334	10	20	12	13	13	13	130	130	0	0	master	2,2	95 %
AT-801	10	-	12	2	2	2	20	20	0	0	PhD	0,3	-
AT-827	10	-	12	3	3	3	30	30	0	0	PhD	0,5	-
AT-832	10	-	12	0	0	0	0	0	0	0	PhD	0,0	-
AT-833	10	-	12	1	1	1	10	10	0	0	PhD	0,2	-
AT-834	10	-	12U	1	1	1	10	10	0	0	PhD	0,2	-
AT-834	10	-	12	6	4	4	40	40	0	20	PhD	0,7	-
Total				**116**	**109**	**108**	**1230**	**1220**	**10**	**90**		**20,33**	**80 %**
Guest students								364				6,1	
Total production AT department								**1584**				**26,4**	

* For master- / PhD courses with common teaching, the filling degree is given for both courses together.

Tab. 9. List of the number of students in each course, the number of students sitting and passing the exam, as well as ECTS production and filling degree for each course at the Department of Arctic technology 2021.

4.10 ECTS production – Arctic safety

Even though Arctic safety is not a scientific department at UNIS, courses within this group are still of such a magnitude that it is appropriate to report these as a separate group. As opposed to the scientific departments at UNIS, Arctic safety has not experienced any significant reduction in ECTS production in 2021 due to the Covid 19-restrictions. We see a slight decline at bachelor level, since both AS-101 «Arctic survival and safety» and AS-203 «Arctic safety and field leadership» had somewhat fewer students than usual, but the changes are small. All the master courses within Arctic safety are run in autumn semester, and were therefore not affected by the Covid 19-restrictions. There are quite few guest students within Arctic safety, probably due to no permanent scientific staff with full-time positions within Arctic safety at UNIS. Figure 24 shows that the educational offer and ECTS production follow each other. A list of the number of students in each course, number of student sitting and passing the final exam, as well as ECTS production and filling degree for each course is found in table 11.

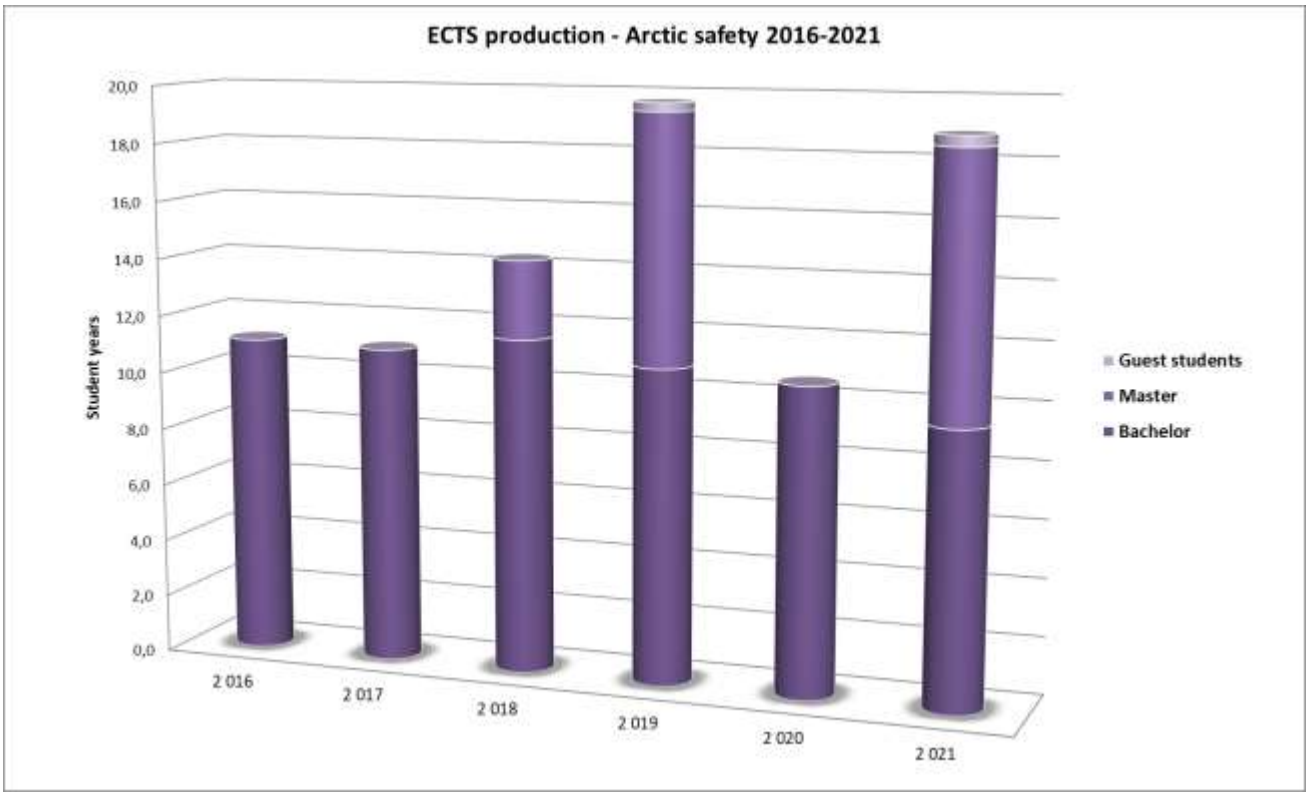


Fig. 23. ECTS production in student years, Arctic safety 2016-2021.

Arctic safety	2016	2017	2018	2019	2020	2021
Bachelor	11,1	11,0	11,6	10,9	10,6	9,5
Master	0,0	0,0	2,7	8,5	0,0	9,0
Guest students	0,0	0,0	0,0	0,3	0,0	0,4
Total	11,1	11,0	14,3	19,7	10,6	18,9
Courses	**11,1**	**11,0**	**14,3**	**19,4**	**10,6**	**18,5**
Educational offer	10,3	11,0	14,9	24,8	11,6	21,5

Tab. 10. ECTS production in student years, Arctic safety 2016-2021.

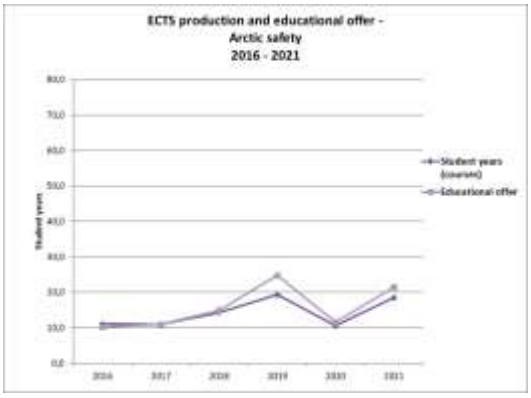


Fig. 24. Student years and educational offer, Arctic safety 2016-2021.

Arctic safety													
Course code	**ECTS**	**Max number**	**Autumn / spring**	**No. Candidates**	**Showed up**	**Passed**	**ECTS showed up**	**ECTS passed**	**Fail in ECTS**	**No show in ECTS**	**Level**	**Student years**	**Filling degree***
AS-101	3	-	6	88	87	87	261	261	0	3	bachelor	4,4	-
AS-203	14	30	6	22	22	22	308	308	0	0	bachelor	5,1	73 %
AS-302	10	20	12	16	16	16	160	160	0	0	master	2,7	80 %
AS-303	10	20	12	21	21	20	210	200	10	0	master	3,3	105 %
AS-304	10	20	12	19	18	18	180	180	0	10	master	3,0	95 %
Total				**166**	**164**	**163**	**1119**	**1109**	**10**	**13**		**18,48**	**88 %**
Guest students								22,5				0,4	
Total production Arctic safety								**1131,5**				**18,9**	

* AS-101 «Arctic survival and safety» is omitted when calculating the filling degree. AS-101 does not have restricted admission, and is open for all new semester students at UNIS in spring semester.

Tab. 11. List of the number of students in each course, the number of students sitting and passing the exam, as well as ECTS production and filling degree for each course within Arctic safety 2021.

4.11 ECTS production – The History of Svalbard

The course SH-201 «The history of Svalbard» is mandatory for the Arctic Nature Guide students, and open for all other UNIS students. The ECTS production has been relatively stable over the years. The course had both in 2020 and in 2021 a slightly lower production that previous years, but we don't see a fall in production corresponding to the other departments. In 2020, the course was arranged before the Covid 19-restrictions were implemented and was arranged as normal in 2021 (fig. 25). A slightly lower production can be due to a higher percentage of failing grades in 2020, as well as fewer students in total at UNIS in 2021. As there is no restricted admission in this course, it is not meaningful to report filling degree. A list of the number of students in the course, number of student sitting and passing the final exam, as well as ECTS production is found in table 12.

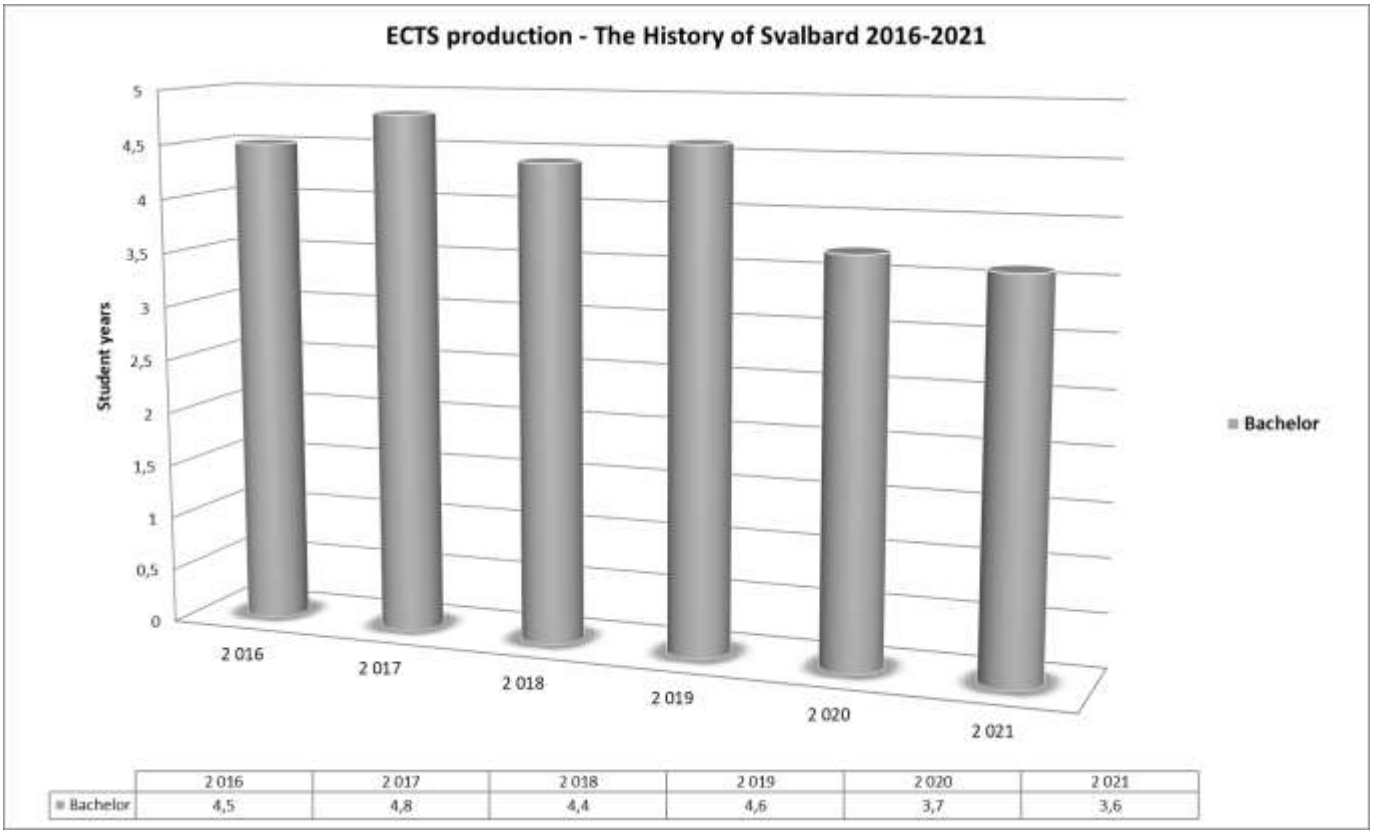


Fig. 25. ECTS production in student years, SH-201 «The history of Svalbard» 2016-2021.

The History of Svalbard												
Course code	ECTS	Max number	Autumn / spring	No. Candidates	Showed up	Passed	ECTS showed up	ECTS passed	Fail in ECTS	No show in ECTS	Level	Student years
SH-201	6	-	06K	1	1	1	6	6	200	0	bachelor	0,1
SH-201	6	-	6	60	41	35	246	210	200	114	bachelor	3,5
Total				**61**	**42**	**36**	**252**	**216**	**400**	**114**		**3,60**
Total production The History of Svalbard								**216**				**3,6**

Tab. 12. List of the number of students in the course SH-201 "The History of Svalbard", the number of students sitting and passing the exam, as well as ECTS production 2021.

5. Grade statistics – results from final assessment

Several assessment forms exist when assessing a course at UNIS. Examples are written or oral exams, practical exercises, reports, presentations, posters, take-home exams, or a combination of these. In courses with several assessment forms both the part grades and the final grade are given to the students. In the following, only final results are reported, *i.e.*one grade per candidate per course.

The results are reported either by the grading scale A-F, or as «pass / fail». The grade «fail» is in the following combined with the grade F, while the grade «pass» is reported separately.

Guest students finishing their degree will have the result registered at their home university. These results are not registered at UNIS and are therefore not included in this report.

5.1 Assessment results for UNIS in total

In 2021, 807 final assessments were arranged at UNIS. This is a lower number than in previous years, where just above 1100 final assessments normally are arranged. However, there is an increase when comparing with 2020, when 440 final assessments were arranged. This should be seen in elucidation of the reduced educational offer and lower number of students in 2020 and 2021. A summary of the results for 2021 is found in fig. 26.

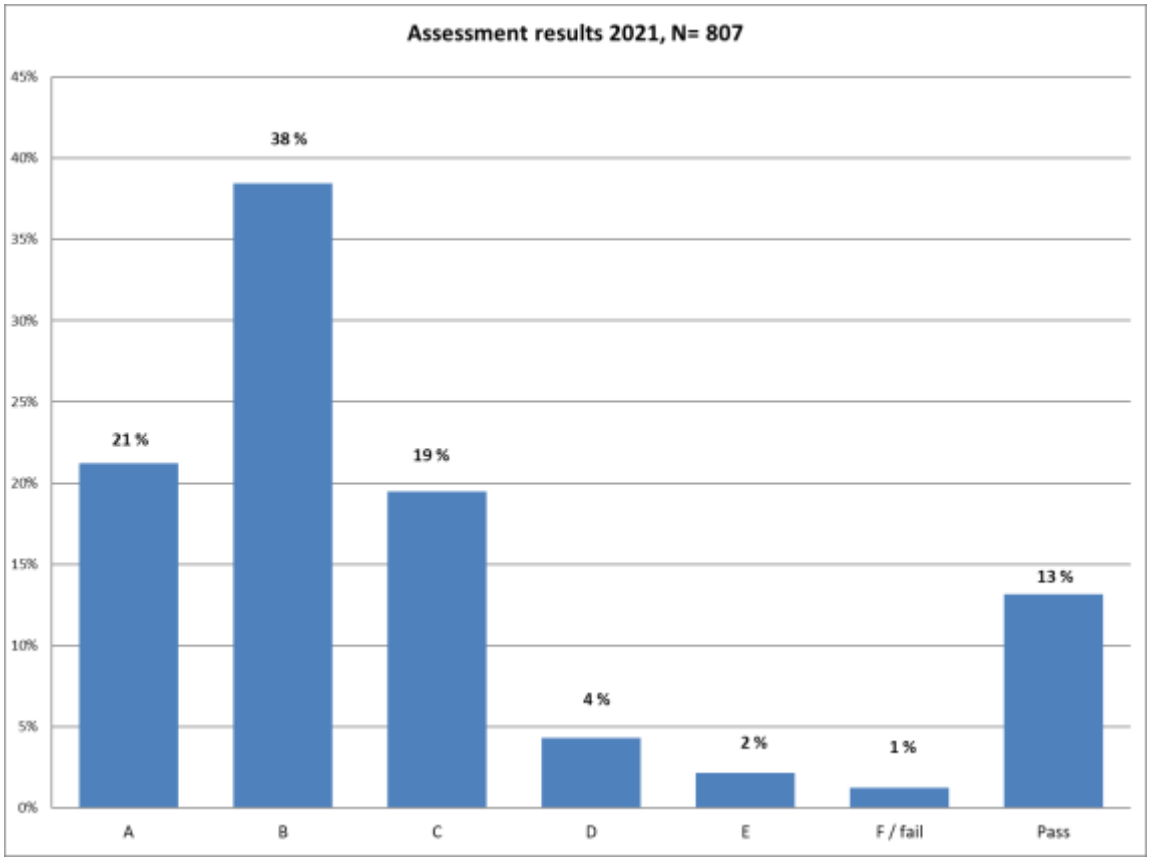


Fig. 26. Assessment results for UNIS 2021. N= number of final assessments.

For courses assessed with letter grades, the grading scale is skewed towards high grades, with a mean value around the grade B. This is in accordance with the results from previous years.

The percentage of failing grades at UNIS in 2021 was 1 %. This is lower than in 2020, when the overall failing percentage was 3 %, but still in accordance with previous years. The percentage of failing grades is low compared to the Norwegian universities.

In spring 2021, the national failing percentage was 5,3 %, according to the Database for Higher Education (DBH). The failing percentage has decreased during the corona-years 2020 and 2021. According to NIFU-researcher Elisabeth Hovdhaugen, this is due to the transition to digital exam during the corona pandemic (Forskerforum oktober 2021). UNIS has also had a transition to digital exam, but here the failing percentage has generally been low all the time.

Seen over several years with such a high number of grades, a normal distribution with mean value around the grade C should be expected. There might be several reasons behind UNIS' students receiving quite good grades, but the following can be mentioned:

- When applying for admission to UNIS courses, the students compete for admission based on their GPA from previous university education. Thus, primarily students with a high GPA will be admitted.
- UNIS has an expressed strategy to include students in field based authentic research. Several studies show that student-active research led to increased motivation and better understanding of scientific processes. This is also confirmed in the students' own course evaluations.
- UNIS is partner in two centers for excellent education, BioCeed and iEarth. These are working actively with developing new teaching- and assessment methods, to improve the students' learning outcomes.
- Students are taught in small groups, with close follow-up from course responsibles and lecturers, again possibly contributing to a better psychosocial learning environment.

5.2 Dropout rate

Nine percent of the students starting at UNIS' courses finished without a passed result. As mentioned, 1 % of these were students failing the final assessment. UNIS had a dropout rate of 7,8 %. These consisted of 2,6 % not showing up for the final assessment, 0,1 % due to illness at the exam date, and 5,1 % who had their exam registration cancelled during the course (tab. 13a).

Students registered with «no show» as final result are either students not showing up for their final assessment, or students failing to submit their report, take-home exam etc. within the given deadline. Students who have their exam registration cancelled are either students who withdraw from the course, or students who do not fulfil the mandatory learning activities necessary to be registered for the final assessment.

By omitting AGF-216 «The Stormy Sun and the Northern Lights» and SH-201 «The History of Svalbard», the dropout rate decreases to 2 % (tab. 13b). AGF-216 is voluntary for all students and is followed in addition to normal study progression. SH-201 is mandatory for ANG-students, but voluntary for the other students. In both courses, an attendance of at least 80 % is required to be registered for the final assessment. The results show that a large part of the students who finished without a passed result were students in AGF-216 and SH-201 who either did not show up for the exam, withdrew their exam registration, or failed to fulfil the attendance requirements. Both these courses take place early in spring semester. It is easy to imagine that new students are ambitious and want to register for "everything" at the start of the semester, but after experiencing increased workload rather prioritize their primary courses.

Students without passed result	% of students	Student years
Fail	1,2 %	1,2
No show	2,6 %	2,1
Illness	0,1 %	0,2
Cancelled exam registration	5,1 %	4,9
Total	9,0 %	8,3

Tab. 13a. Students without passed result for final assessment, divided in «fail» and dropout categories.

Students without passed result, excl. AGF-216 and SH-201	% of students	Student years
Fail	0,4 %	0,6
No show	0,5 %	0,7
Illness	0,1 %	0,2
Cancelled exam registration	1,0 %	1,8
Total	2,0 %	3,2

Tab. 13b. Students without passed result for final assessment, divided in «fail» and dropout categories, excl. the courses AGF-216 and SH-201.

The dropout rate is now more or less on the same level as in 2019, when 9,8 % of the students finished without a passed result in a course. By excluding AGF-216 and SH-201 the dropout rate in 2019 was 3,5 %. In 2020 the dropout rate was higher; 16,1 % when including all courses, and 4.4 % without AGF-216 and SH-201. The high dropout rate in 2020 was primarily due to dropouts in AGF-216 and SH-201, and especially students withdrawing from the courses prior to the exam.

Data from Statistics Norway shows that the dropout rate at UNIS is well below the national average. One can imagine that students who choose to apply for admission at UNIS are dedicated, and eager to fulfil their studies. At the same time, they are part of a small study environment, with the possibility for closer follow-up than in a larger student group.

5.3 Assessment results – Department of Arctic biology

Assessment results for the Department of Arctic biology are given in fig. 27.

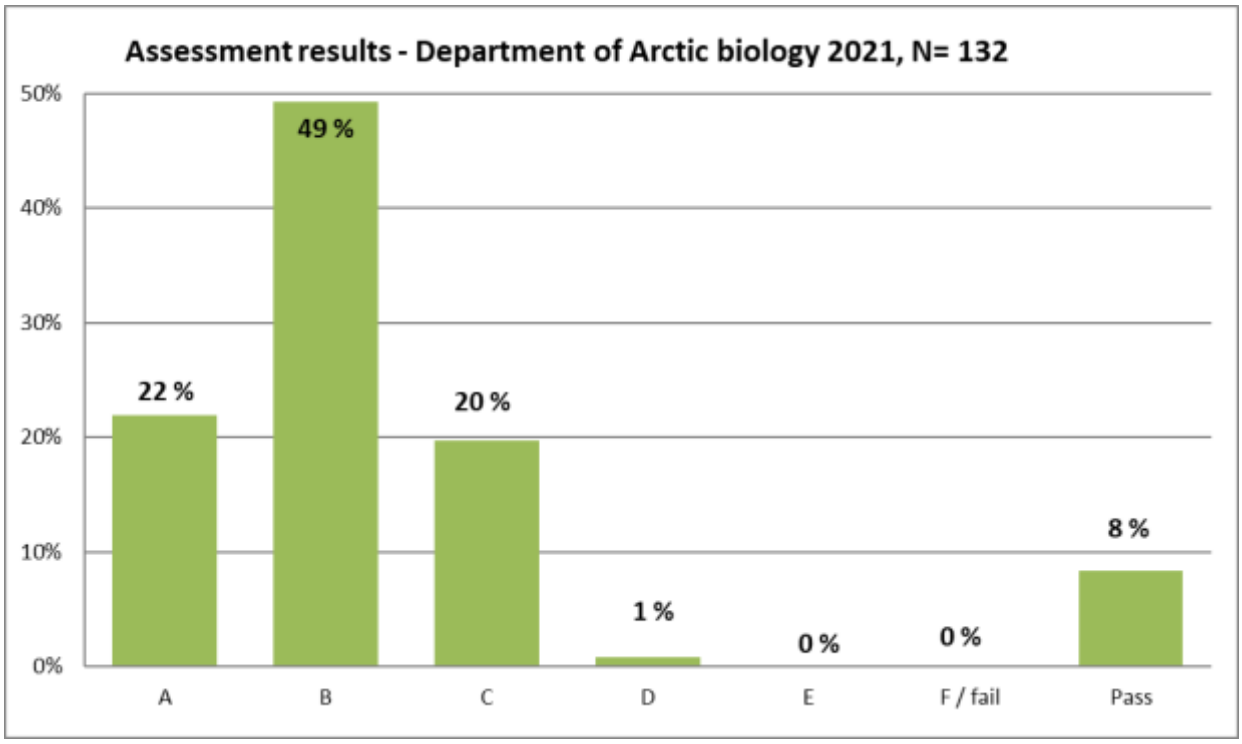


Fig. 27. Assessment results, Department of Arctic biology 2021. N= number of final assessments.

Students at the Department of Arctic biology generally received high grades. The grade distribution is approximately like previous years, but with somewhat more A's and B's than last year, and correspondingly fewer C's. No students failed the final assessment in 2021. The courses assessed with pass / fail are AB-208 «Internship in Arctic biology» and AB-337/837 «Seminars in Arctic biology».

An overview of students finishing without passed result is given in table 14. An explanation of the different dropout categories is found in chap. 5.2. See also table 3 for course details.

Student without passed result	% of students	Student years
Fail	0,0 %	0,0
No show	0,7 %	0,2
Illness	0,0 %	0,0
Cancelled exam registration	0,7 %	0,3
Total	1,5 %	0,4

Tab. 14. Students finishing without passed result, Department of Arctic biology, divided in «fail» and dropout categories.

5.4 Assessment results – Department of Arctic geology

Assessment results for the Department of Arctic geology are given in fig. 28.

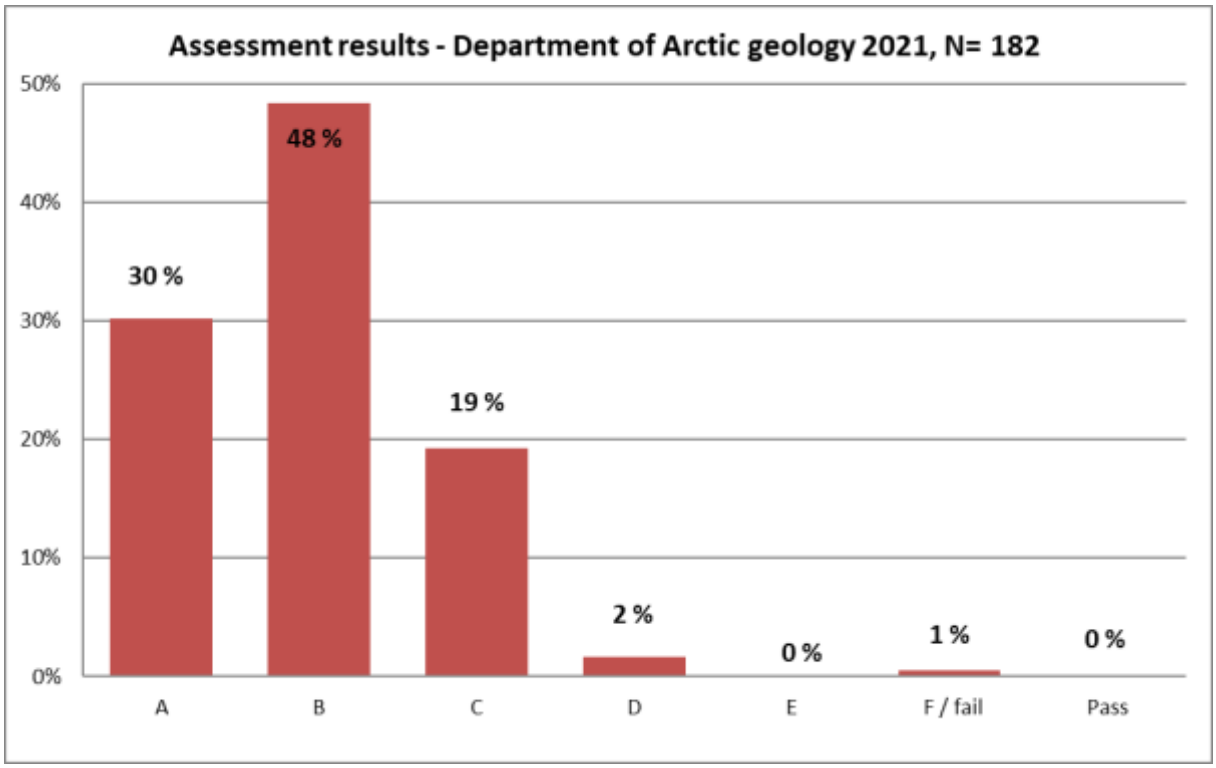


Fig. 28. Assessment results, Department of Arctic geology 2021. N= number of final assessments.

Also at the Department of Arctic geology, students received high grades. B is the most frequent grade, but we also see a lot of A's. This is in accordance with previous years, except for 2020 when the grades were distributed around the middle of the grading scale, with C as the most common grade. Only one student failed an exam at the department this year, and one student withdrew from a course before the exam.

An overview of students finishing without passed result is given in table 15. An explanation of the different dropout categories is found in chap. 5.2. See also table 5 for course details.

Student without passed result	% of students	Student years
Fail	0,5 %	0,3
No show	0,0 %	0,0
Illness	0,0 %	0,0
Cancelled exam registration	0,5 %	0,3
Total	1,1 %	0,5

Tab. 15. Students finishing without passed result, Department of Arctic geology, divided in «fail» and dropout categories.

5.5 Assessment results – Department of Arctic geophysics

Assessment results for the Department of Arctic geophysics are given in fig. 29.

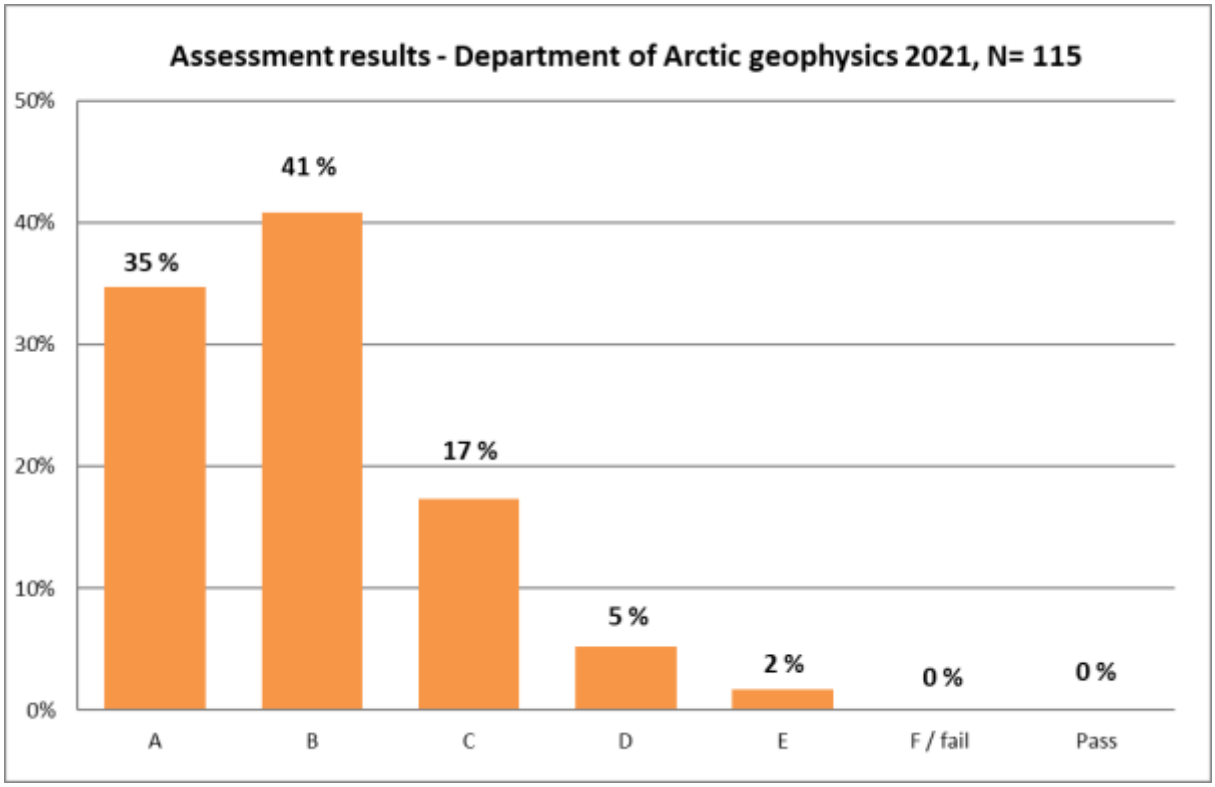


Fig. 29. Assessment results Department of Arctic geophysics 2021. N= number of final assessments.

Department of Arctic geophysics also has a grade distribution skewed towards higher grades, with a lot of B's, and also quite a lot of A's. No students failed the final assessment in 2021.

An overview of students finishing without passed result is given in table 16a. An explanation of the different dropout categories is found in chap. 5.2. The department had a high percentage of students not showing up for exam or withdrawing their exam registration. This was mainly students in AGF-216 "The stormy sun and the northern lights", which is voluntary for all UNIS students, and can be followed in addition to normal study progression. Table 16b shows students finishing without passed result, but where this course is omitted. When omitting this course, the Department of Arctic geophysics had the lowest dropout rate at UNIS. See also table 7 for course details.

Student without passed result	% of students	Student years
Fail	0,0 %	0,0
No show	10,9 %	1,3
Illness	0,0 %	0,0
Cancelled exam registration	10,9 %	1,5
Total	21,8 %	2,8

Tab. 16a. Students finishing without passed result, Department of Arctic geophysics; divided in "fail" and dropout categories.

Students without passed result (excl. AGF-216)	% of students	Student years
Fail	0,0 %	0,0
No show	0,0 %	0,0
Illness	0,0 %	0,0
Cancelled exam registration	0,7 %	0,3
Total	0,7 %	0,3

Tab. 16b. Students finishing without passed result, excl. AGF-216, Department of Arctic geophysics; divided in «fail» and dropout categories.

5.6 Assessment results – Department of Arctic technology

Assessment results for the Department of Arctic technology are given in fig. 30.

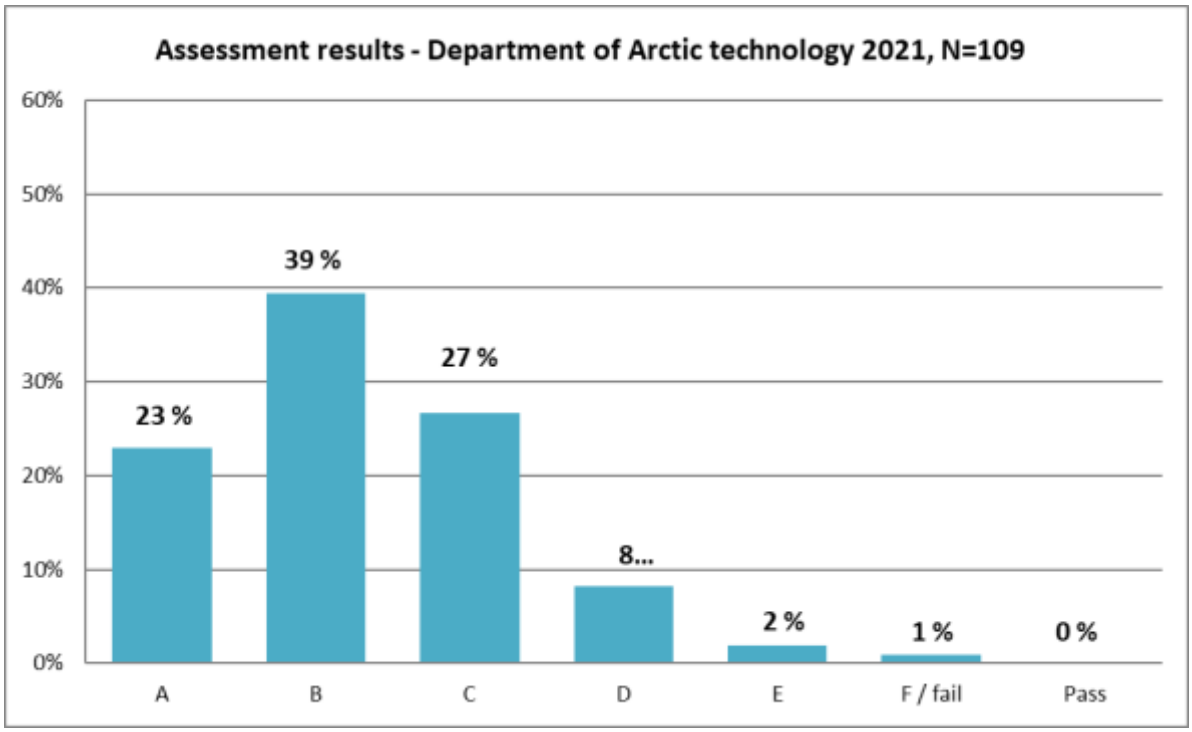


Fig. 30. Assessment results Department of Arctic technology 2021. N= number of final assessments.

Department of Arctic technology had a somewhat lower grade level than the other scientific departments. Also here, B is the most frequent grade, but we have more C's than at the other departments. One student failed the final assessment.

An overview of students finishing without passed result is given in table 17. An explanation of the different dropout categories is found in chap. 5.2. The department had a relatively high percentage of students without a passed grade. This was primarily due to two students withdrawing from two bachelor courses each, as well as two students who did not show up for the final assessment. See also table 9 for course details.

Student without passed result	% of students	Student years
Fail	0,9 %	0,2
No show	1,7 %	0,3
Illness	0,9 %	0,2
Cancelled exam registration	3,4 %	1,0
Total	7,0 %	1,7

Tab. 17. Students finishing without passed result, Department of Arctic technology, divided in «fail» and dropout categories.

5.7 Assessment results – Arctic safety

Assessment results for the courses within Arctic safety are given fig. 31.

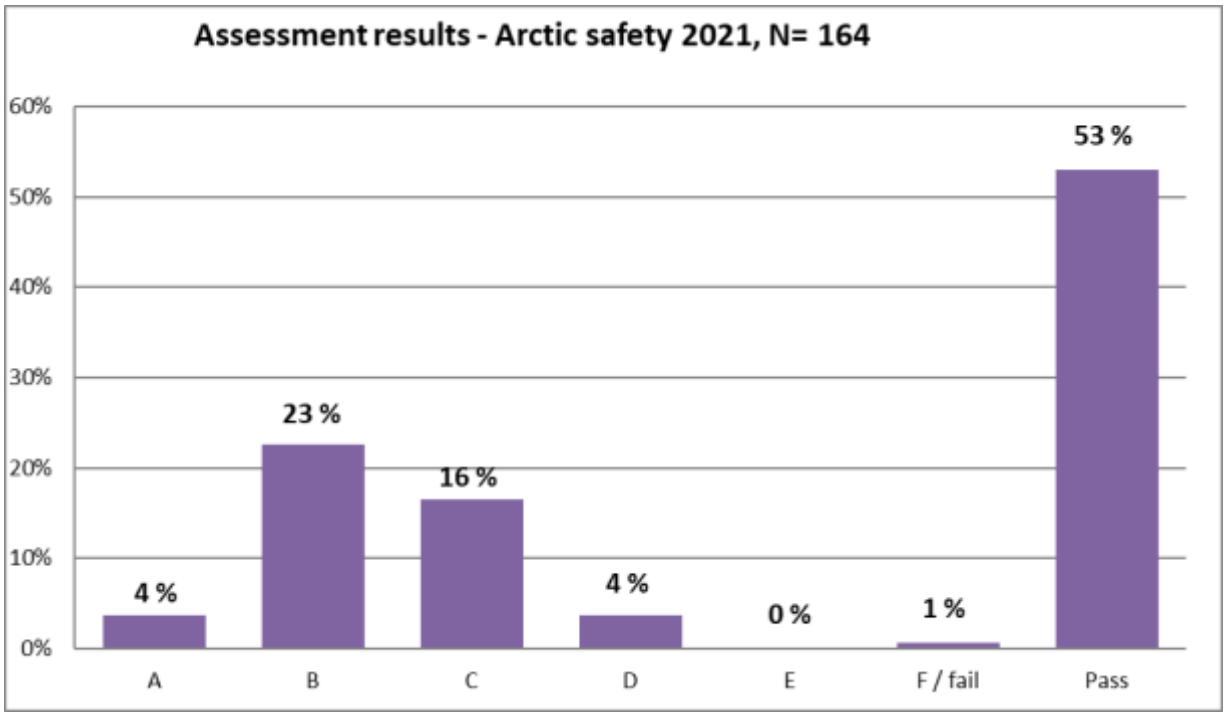


Fig. 31. Assessment results, courses in Arctic safety 2021. N= number of final assessments.

The courses within Arctic safety have a somewhat different grade distribution than the four scientific departments. Also here, B is the most frequent grade, but there are more C's and fewer A's than at the other scientific departments. One student failed the final assessment. The course AS-101 «Arctic survival and safety» with 87 candidates is assessed as "pass / fail".

An overview of students finishing without passed result is given in table 18. An explanation of the different dropout categories is found in chap. 5.2. See also table 11 for course details.

Student without passed result	% of students	Student years
Fail	0,6 %	0,2
No show	0,6 %	0,2
Illness	0,0 %	0,0
Cancelled exam registration	0,6 %	0,1
Total	1,8 %	0,4

Tab. 18. Students finishing without passed result, Arctic safety, divided in «fail» and dropout categories.

5.8 Assessment results – The History of Svalbard

Assessment results for the course SH-201 «The history of Svalbard» are given in fig. 32.

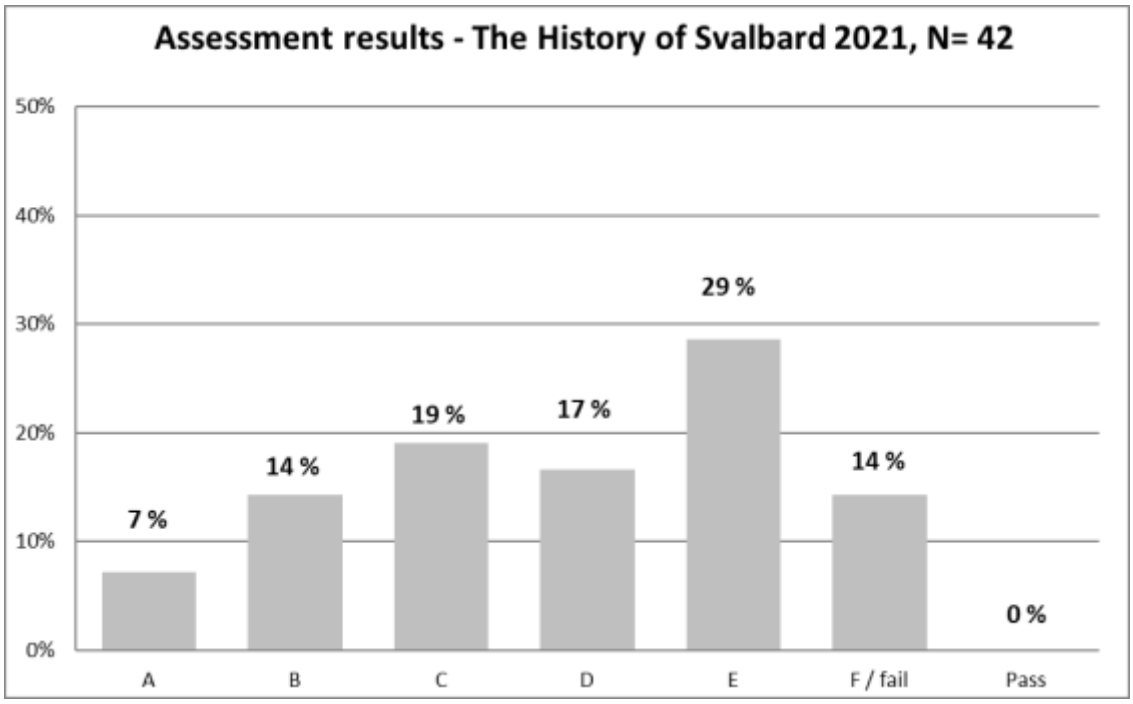


Fig. 32. Assessment results SH-201 «The history of Svalbard» 2021. N= number of final assessments.

The course SH-201 «The history of Svalbard» is mandatory for students at the Arctic Nature Guide-study, and voluntary for the other students at UNIS. Around half of the students sitting the exam in SH-201 were ANG-students. The grade distribution for this course is different than for UNIS in total. The most frequent grade was E, and the grades are generally lower than for the other courses. 14 % of the students failed the final assessment. This is way higher than for UNIS in total, but still better than 2020 when 20 % of the students failed the final assessment. This is probably due to the course being followed in addition to ordinary study progression for approximately half of the students. Furthermore, our students normally have limited or no scientific background in history.

An overview of students finishing without passed result is given in table 19. An explanation of the different dropout categories is found in chap. 5.2. Quite a few students withdrew from the course or did not fulfil the attendance requirements for sitting the exam. See also table 12 for course details.

Student without passed result	% of students	Student years
Fail	14,3 %	0,6
No show	1,6 %	0,1
Illness	0,0 %	0,0
Cancelled exam registration	29,5 %	1,8
Total	45,4 %	2,5

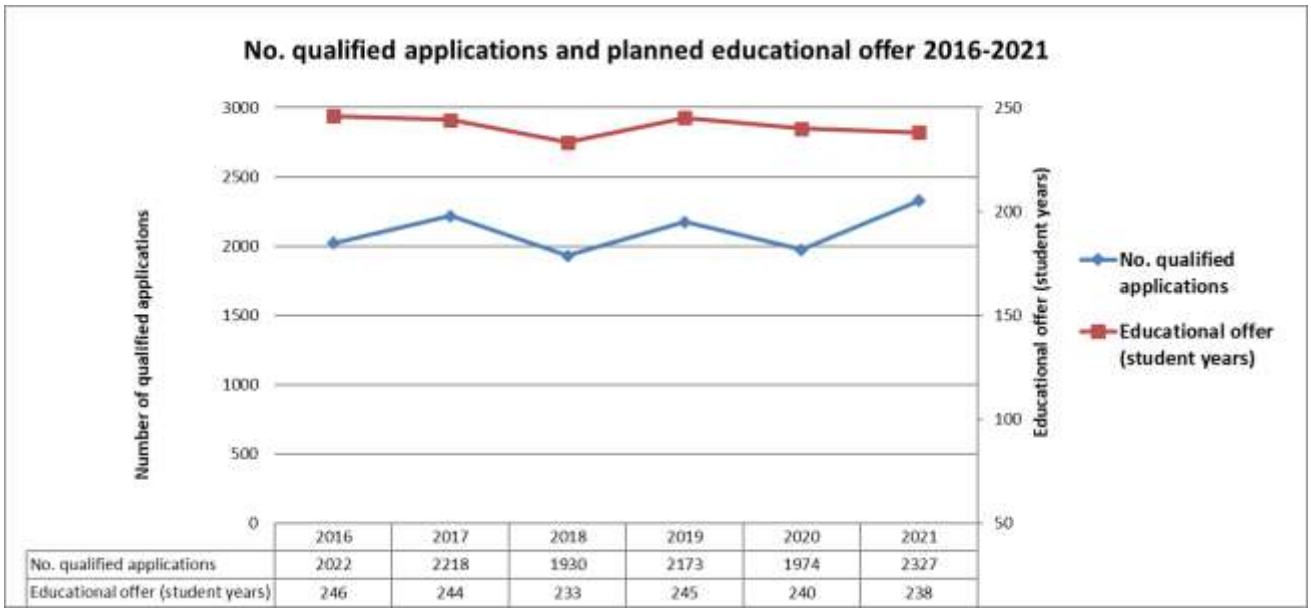
Tab. 19. Students finishing without passed result, SH-201 «The history of Svalbard», divided in «fail» and dropout categories.

6. Admission statistics

6.1 Applicants

In 2021, UNIS received 3428 course applications, whereof 2327 were found qualified for admission to the courses applied for. This is the highest number of applications ever. The number of applicants has increased even though the educational offer has been constant (fig. 33). The reason for this can be that in 2021 we also received several applications from student that also applied in 2020, but who could not come to UNIS as the courses were cancelled. In 2021 all courses were open for application initially. Cancellation of master- and PhD courses were done after the application process was finished. When reporting application numbers, the courses AS-101 "Arctic survival and safety", AGF-216 "The stormy sun and the northern lights" and SH-201 "The history of Svalbard" are omitted, as students register for these courses after arrival at UNIS. The application number for AS-203 is set equal to the admission number, as these students apply for admission to the ANG-study at UiT – The Arctic university of Norway, and the applications are processed there.

In fig. 33 the planned educational offer is reported – i.e., the educational offer that was open for application – but with reduced maximum number of students in the courses, as described in chap. 4.1.



	2016	2017	2018	2019	2020	2021
No. qualified applications	2022	2218	1930	2173	1974	2327
Educational offer (student years)	246	244	233	245	240	238

Fig. 33. Number of qualified applicants for courses, and educational offer in student years, 2016 – 2021.

Figure 34 shows the number of qualified and non-qualified applications for each department based on the admission criteria for each course. The proportion of qualified and non-qualified applicants has been quite unchanged over the last years. The application numbers should be viewed in light of the total educational offer in each department (chap. 4.6 – 4.10).

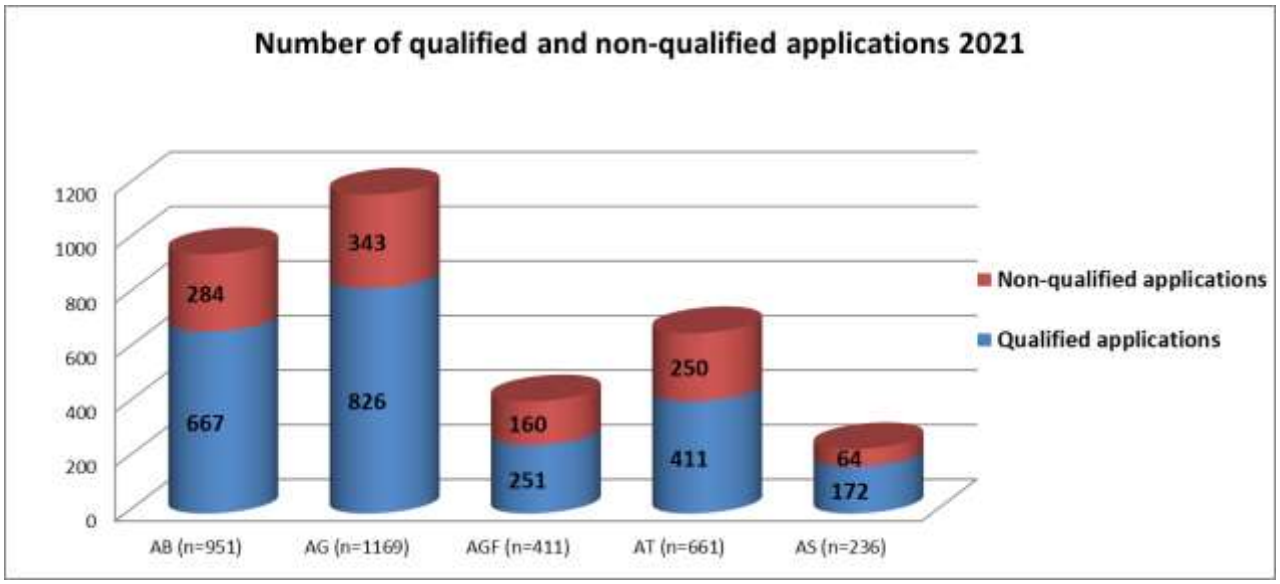


Fig. 34. Number of qualified and non-qualified applications for each department 2021. n= number of applications.

Figure 35 shows the percentage of qualified applications per department. The percentage of applications for each department is in line with previous years. The percentage of applications at the Department of Arctic technology was reduced from 22 to 16 % from 2018 to 2019, and further to 14 % in 2020. In 2021, the percentage has again increased to 18 % of the applications. Department of Arctic geology had the highest percentage of applications, equal to the percentage in 2020. Like last year, Department of Arctic geology are followed by Department of Arctic biology, who reduced their share of the applications with 1 %. The percentage of application at the Department of Arctic geophysics has been reduced from 13 to 11 %. Arctic safety accounted for 7 % of the qualified applications to UNIS, a reduction of 1 %. For AS-203, the application number is set equal to the admission number (27 students), as this admission process is done by UiT.

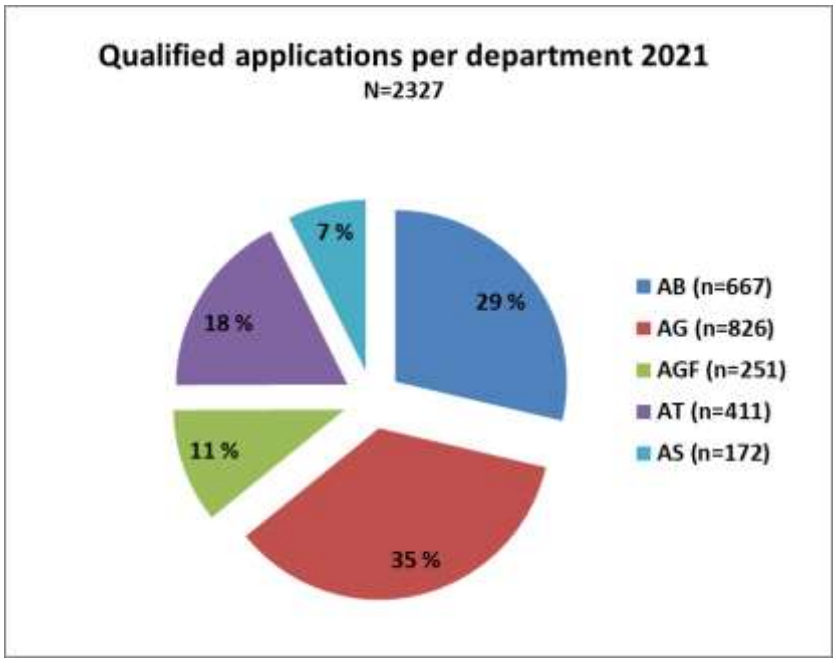


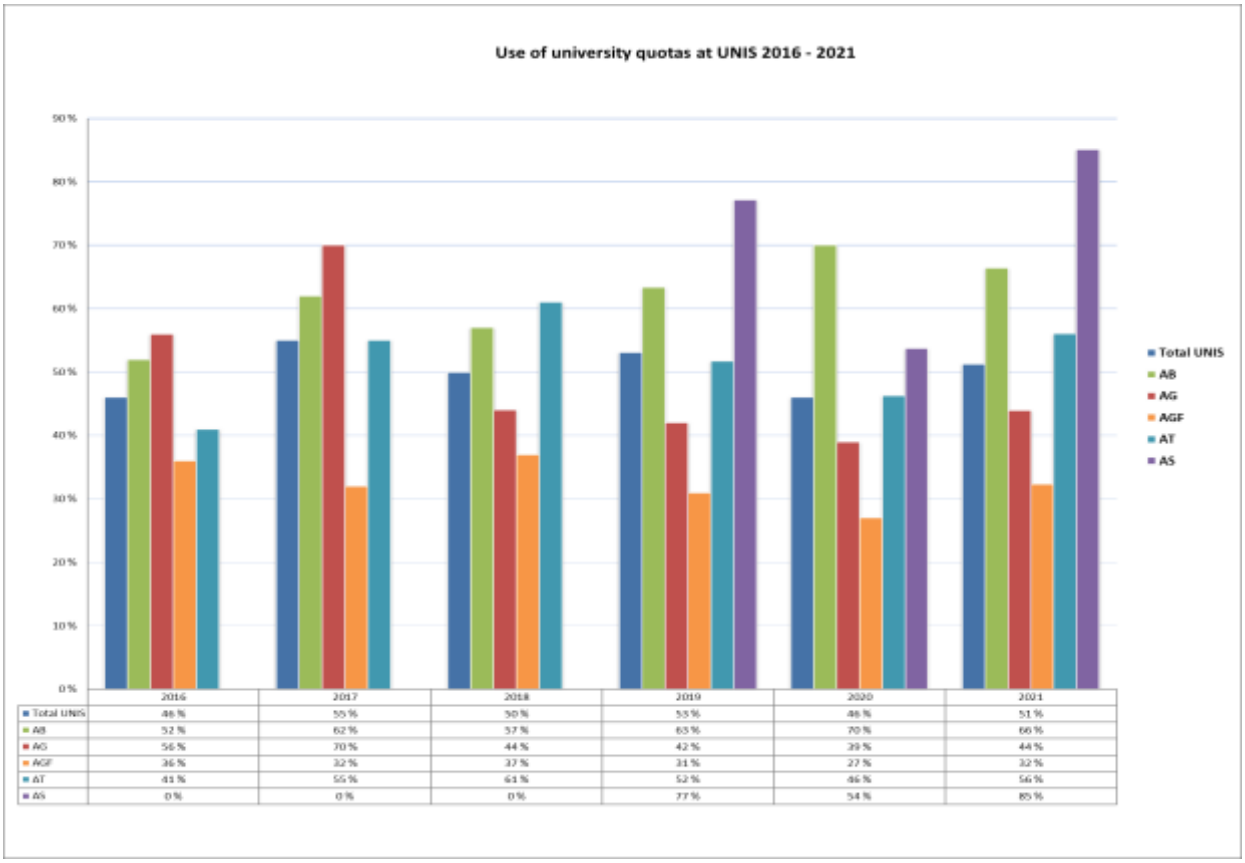
Fig. 35. Percentage of qualified applications for each department 2021. N= total number of qualified applications. n= qualified applications at each department.

6.2 Quotas

From 2015 onwards, the Norwegian universities were given the opportunity to have allocated quota places in UNIS' courses. The quota places were renegotiated in 2016 and 2019. Figure 36 shows that 51 % of the universities' quota places were used in 2021.The percentage of allocated quota places has been relatively stable around 50 % throughout the latest years. The numbers are based on allocated study places, irrespective of whether the courses have been cancelled subsequently or not.

The use of quotas has always been around 50 %, but it will of course be advantageous to increase the use of quota places. Despite renegotiations of quota places both in 2016 and 2019, there is still a discrepancy between the universities' wishes for quota places in the specific courses, and the actual number of applicants. Sometimes, the universities have asked for a lot of quota places in a course, but the actual number of applicants is low. In other cases, there might be a lot of applicants, but few or no quota places. It can be difficult for the universities to predict the number of applicants from year to year, and a continuous effort to further calibrate these numbers should be done. Still, allocating quota places to the universities enhances the predictability in terms of incorporating the courses in the universities' study programmes.

There is great variation between the UNIS departments when it comes to the use of quota places. In all departments except Department or Arctic biology, there is a slight increase in the use of quota places since 2020. Courses within Arctic safety had the highest percentage, with 85 % of the quotas allocated, this is an increase from 54 % in 2020. Use of quotas is not reported for Arctic safety prior to 2019, as the first course with quotas was established in 2018.



	2016	2017	2018	2019	2020	2021
Total UNIS	46 %	55 %	50 %	53 %	46 %	51 %
AB	52 %	62 %	57 %	63 %	70 %	66 %
AG	56 %	70 %	44 %	42 %	39 %	44 %
AGF	36 %	32 %	37 %	31 %	27 %	32 %
AT	41 %	55 %	61 %	52 %	46 %	56 %
AS	0 %	0 %	0 %	77 %	54 %	85 %

Fig. 36. Percentage of quota places used, 2016-2021.

7. Public defenses and PhD candidates 2021

29 PhD candidates were affiliated with UNIS in 2021. 22 of these were doctoral research fellows financed fully or partly by the Ministry of education and research, the others were financed by other sources – through the Research Council of Norway or external projects.

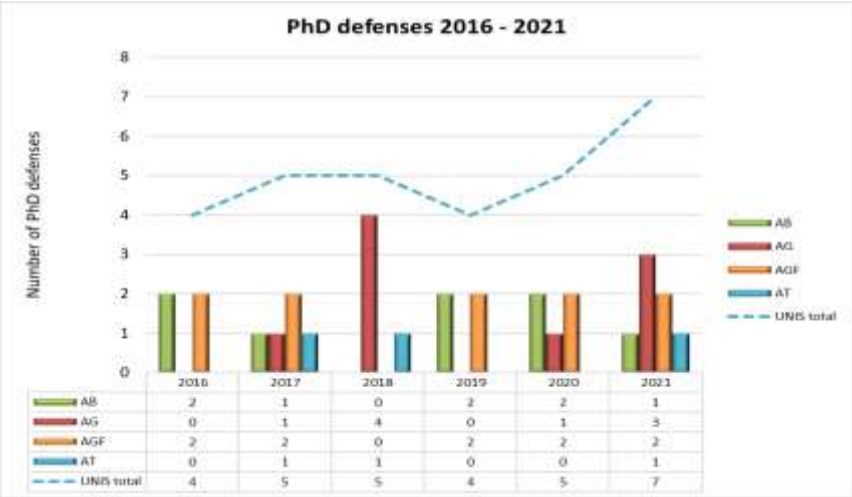
Ten doctoral research fellows were employed and started their PhD period at UNIS in 2021 – a high number when compared with previous years. Two of these were employed at the Department of Arctic biology. Three research fellows were employed at the Department of Arctic geology, two of them in cooperation with Department of Arctic geophysics and Department of Arctic technology, respectively. Two research fellows were employed at the Department of Arctic geophysics, and three at the Department of Arctic technology.

For PhD candidates, 5 ECTS per month from the admission date in a PhD programme and 2 ½ years onwards is counted. Time spent on the educational component, corresponding to the last half year of the PhD programme is not counted. Neither is time spent on duty work for UNIS counted. The PhD students at UNIS produced 12.7 student years during 2021. This adds to the ordinary ECTS production at UNIS of 162 student years (cf. chap. 4.2).

Seven public defenses were arranged at UNIS in 2021. This is the highest number since 2011, when also seven defenses were arranged. The PhD degrees are awarded by the candidates' Norwegian university, but the public defense is normally arranged at UNIS. Due to the Covid 19-restrictions, six of the defenses were arranged both physically and digitally, where the entire or parts of the committee attended digitally, while the candidate and a limited audience were present in the auditorium. One defense was arranged fully digitally, where both the candidate, the committee, and the audience participated through Zoom.

Of the seven defenses in 2021, one was at the Department of Arctic biology, three at the Department of Arctic geology, two at the Department of Arctic geophysics, and the last one at the Department of Arctic technology (fig. 37). Three of the candidates were affiliated with UiB, three at UiO, and the last one was affiliated with NMBU.

Two of UNIS' PhD candidates were at the end of 2021 delayed beyond their PhD period. One candidate had her PhD period terminated without completed degree, after having finished her employment period at UNIS several years ago.



	2016	2017	2018	2019	2020	2021
AB	2	1	0	2	2	1
AG	0	1	4	0	1	3
AGF	2	2	0	2	2	2
AT	0	1	1	0	0	1
UNIS total	4	5	5	4	5	7

Fig. 37. PhD defenses at UNIS 2016 – 2021, for each scientific department.