STUDENT- AND EDUCATION STATISTICS 2019

AGF-352 / 852-students on scientific cruise 2019. *Photo: Marika Marnela / UNIS*

Contents

1. Preface

UNIS' overall vision 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 which take full advantage of the high Arctic location in Svalbard, and to strengthen education that provides competences for sustainability. Furthermore, the education will be strengthened by applying and developing novel pedagogical concepts in student based research projects, and the projects should be rooted in local conditions.

UNIS shall be recognized for high educational quality, and the collaboration with the Norwegian universities should be strengthened.

In the contribution letter for the University Centre in Svalbard from the Ministry of Education and Research, dated 19 December 2018, 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."

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 some of these reporting requirements. It should also contribute to document UNIS' own goals regarding education of high quality.

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 21.02.20.

Anne Bjørndal

2. Summary

In 2019, 743 students spent shorter or longer periods of stay at UNIS. The students are divided in course students and guest master students. Additionally, 1 guest bachelor student and 12 guest PhD students were registered at the institution. In accordance with previous reporting practice only course students and guest master students are included in the further reporting. The number of students is somewhat lower than in 2018, when 772 students were registered at UNIS. 50 % of the students were registered at study programmes at the Norwegian universities, while the percentage of Norwegian citizens was 32 %. The discrepancy between Norwegian citizens and students from Norwegian universities is due to foreign students registered at ordinary study programmes at Norwegian universities. Over the last years, an increasing proportion of female students is seen. UiT – The Arctic University of Norway is the Norwegian university sending the most students to UNIS, closely followed by NTNU. Students from 43 nations were present at UNIS in 2019. As mentioned, 32 % of these were Norwegian citizens, followed by students from Germany (16%) and Netherlands (9%).

The educational offer at UNIS increased from 223 to 245 student years from 2018 to 2019. This is primarily due to the establishment of eight new courses on bachelor-, master- and PhD level, while only one bachelor course was terminated.

UNIS produced 213 student years in 2019, a decrease from 218 student years in 2018. These are divided in 193 student years from completed courses and 20 student years from the presence of guest master students. While the production on master- and PhD level has been slightly increasing, a decreased production is seen at bachelor level.

The Department of Arctic biology had the greatest increase both in production and in educational offer. The Department of Arctic geology has been relatively stable, and still has the highest production and the highest educational offer at UNIS. The Department of Arctic geophysics had a relatively stable educational offer, but had a decrease in production, which can be due to a low filling degree in some of the courses. At the Department of Arctic technology, a pronounced decrease both in educational offer and production can be seen. For the first time, courses within Arctic safety are reported as s separate group, comprising 9 % of the total production at UNIS. The production from the course “The history of Svalbard” is reported separately.

The results from final exams in the courses have been generally good, with B as average grade. The percent of failing marks has been low; 1 %. This is in accordance with previous years.

UNIS had an increase in the number of qualified applicants to the courses. The Department of Arctic geology has, like in previous years, the highest number of qualified applicants. The use of allocated quota places for the Norwegian universities was around 50 %, like previous years.

UNIS had 28 PhD candidates in 2019, and four public defenses were arranged.

All in all, the results show that despite an increased number of applicants and educational offers, the production in ECTS is lower than last year. This might be due to a higher number of applicants declining their study offer than earlier, resulting in a lower filling degree in the courses. The students receive generally high grades. UNIS has an educational offer well within the conditions stated by the Ministry of Education and Research. In accordance with the conditions from the Ministry, a balance between students from Norwegian and international universities is achieved.

3. UNIS students

3.1. Student data – 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 thesis. Some of them are also following courses at UNIS.

UNIS had **710 course students** in 2019, in addition **61 guest master students** were registered. Among these, 28 also followed courses while 33 only worked on their master theses. The total number of course students and guest master students therefore sum to **743 students in total.** These form the basis for the further reporting for 2019.

The number of students has increased over the last years, reaching a peak year in 2017 when 794 student were registered at UNIS. Following this, a small decrease has been seen, to 772 students in 2018 and further to 743 students in 2019. The reduced number of students is due to both course students and guest master students, counting 729 course students and 72 guest master students in 2018.

In addition to course- and guest master students, 18 guest PhD students and 1 guest bachelor student were registered at UNIS in 2019. Six of the guest PhD students also followed courses at UNIS, and are included in the category course students, while the remaining 12 guest PhD students and the guest bachelor student are omitted from the further reporting. This is in due with previous reporting procedures.

By combining all categories of guest students and course students, a total of 756 students have spent shorter or longer periods of time at UNIS in 2019.

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 students has been stable over the last years, and is now 50 % (fig. 1), in accordance with the conditions from the Ministry of Education and Research, stating that there shall be a balance between Norwegian and international students.

The percentage of Norwegian citizens has decreased from 36 % in 2018 to 32 % in 2019 and is now on approximately the same level as in 2017 (33 %) (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.

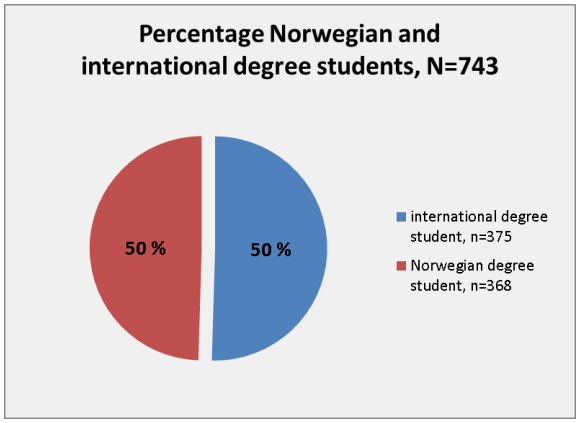


Fig. 1. Norwegian and international degree students at UNIS 2019. N=number of students.

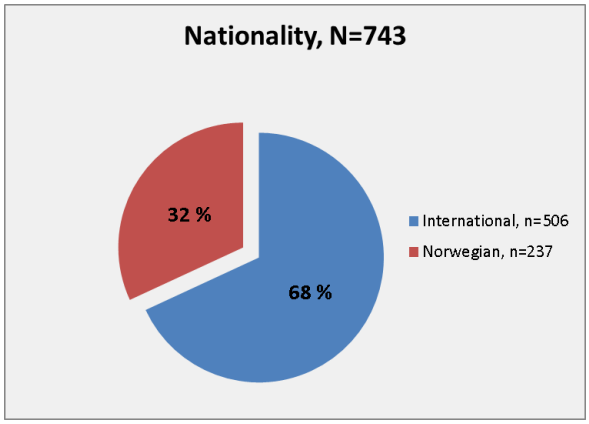


Fig. 2. Norwegian and international citizens at UNIS 2019. N=number of students.

3.3. Gender distribution

Over the years, UNIS has had a quite balanced gender distribution, with a small predominance of women. Over the last few years, the percentage of women has increased, reaching 57 % in 2019 (fig. 3). This is in accordance with the general trend in higher education; numbers from SSB Statistics Norway Central Bureau of Statistics and NIFU shows that more women than men are enrolled in higher education in Norway today.

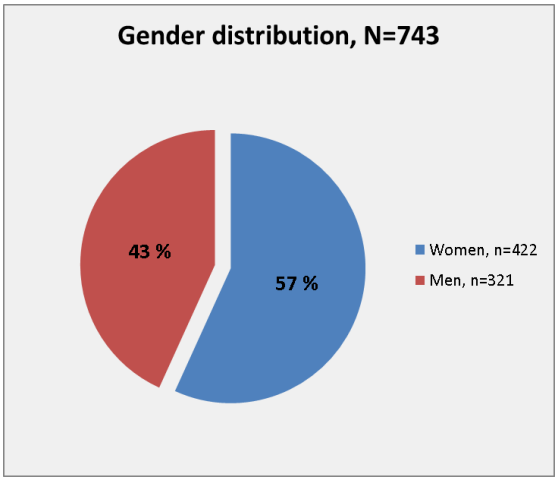


Fig. 3. Gender distribution among UNIS' students 2019. N=number of students.

3.4. University affiliation

UNIS has entered into a cooperation agreement with eight of the Norwegian universities; University of Bergen, University of Oslo, NTNU, UiT – The Arctic University of Norway, Norwegian University of Life Sciences, University of Stavanger, University of Agder and Nord University. All these universities sent students to UNIS in 2019. New this year was that students from University of South-Eastern Norway (USN) also were present at UNIS. International students on exchange agreements are registered at their host university. All international students without an exchange agreement are registered at UiT – The Arctic University of Norway. Thus, UiT receives a great portion of the student mass when international students are included (fig. 4).

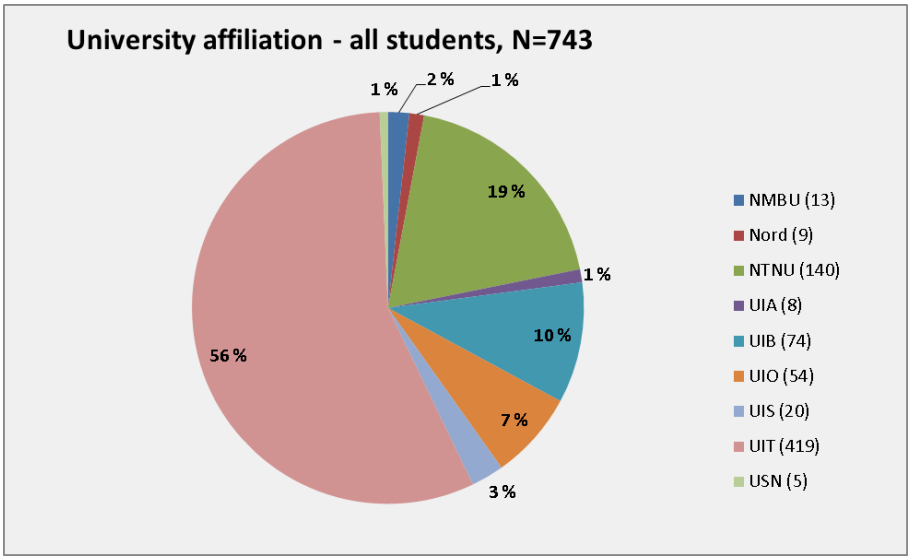


Fig. 4. University affiliation among UNIS' students 2019. All students included. N=total number of students, n=number of students from each university.

When considering only Norwegian degree students, UiT – The Arctic University of Norway is still the university sending most students to UNIS (30 %) (fig. 5). The high number of UiT-students is mainly due to students on the one-year Arctic Nature Guide (ANG) study programme administered by UiT. These students follow two UNIS courses comprising 20 ECTS each year. The one-year study programme starts in August and ends in June, thus two classes are registered at UNIS each calendar year. In 2019, 54 out of 111 students from UiT were ANG-students.

UiT is followed by NTNU (29%), UiB (16 %), UiO (11 %), UiS (5 %), NMBU (3 %), and UiA, Nord University and USN (all 2 %). NTNU has experienced a significant increase from 24 % in 2018, and UiB has also had a 3 % increase from 13 % in 2018. For UiO and UiS we see the greatest decrease from 2018, on 3 % and 7 % respectively, however both these universities had very high numbers in 2018. The percentage for UiO is approximately the same in 2019 as in 2017 (9 %), while UiS has experienced a decrease from 9 % in 2017 to 12 % in 2018 and is now representing 5 % of the Norwegian degree students. NMBU is approximately on the same level as in 2018, while Nord University and UiA sent more students to UNIS than in 2018.

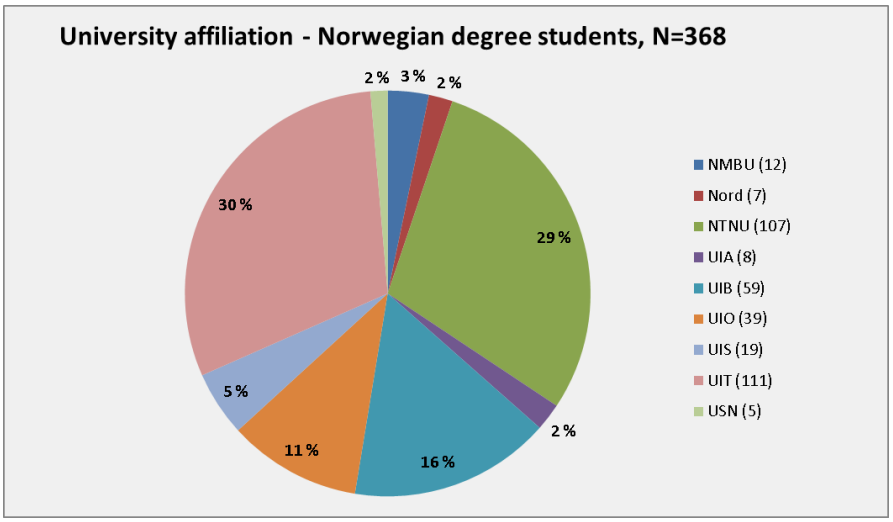


Fig. 5. University affiliation among UNIS' Norwegian degree students 2019. N=total number of students, n=number of students from each university.

3.5. Nationality

Students from 43 nations were present at UNIS in 2019 (fig. 6), exactly the same number of nations as in 2018. The three nations with most students were also the same as in 2018. Norway had the highest number of citizens, representing 32 % of the student mass, followed by Germany with 16 % and Netherlands with 9 %. These were followed by Denmark, USA and Great Britain / Northern Ireland with 6, 5 and 4 %, respectively. This was to a great extent in accordance with the distribution from last year.

UNIS recruits students from all parts of the world, leading to an international study environment. Apart from Norway the remaining Nordic countries represented 11 % of the student mass. Remaining Europe, including Russia, comprised 45 %, North- and South America 7.5 %, Asia 3 %, while Australia / Oceania comprised 1 % and Africa 0.5 %. China had the largest increase in percentage in the number of students, with an increase from 4 to 11 students from 2018 to 2019.

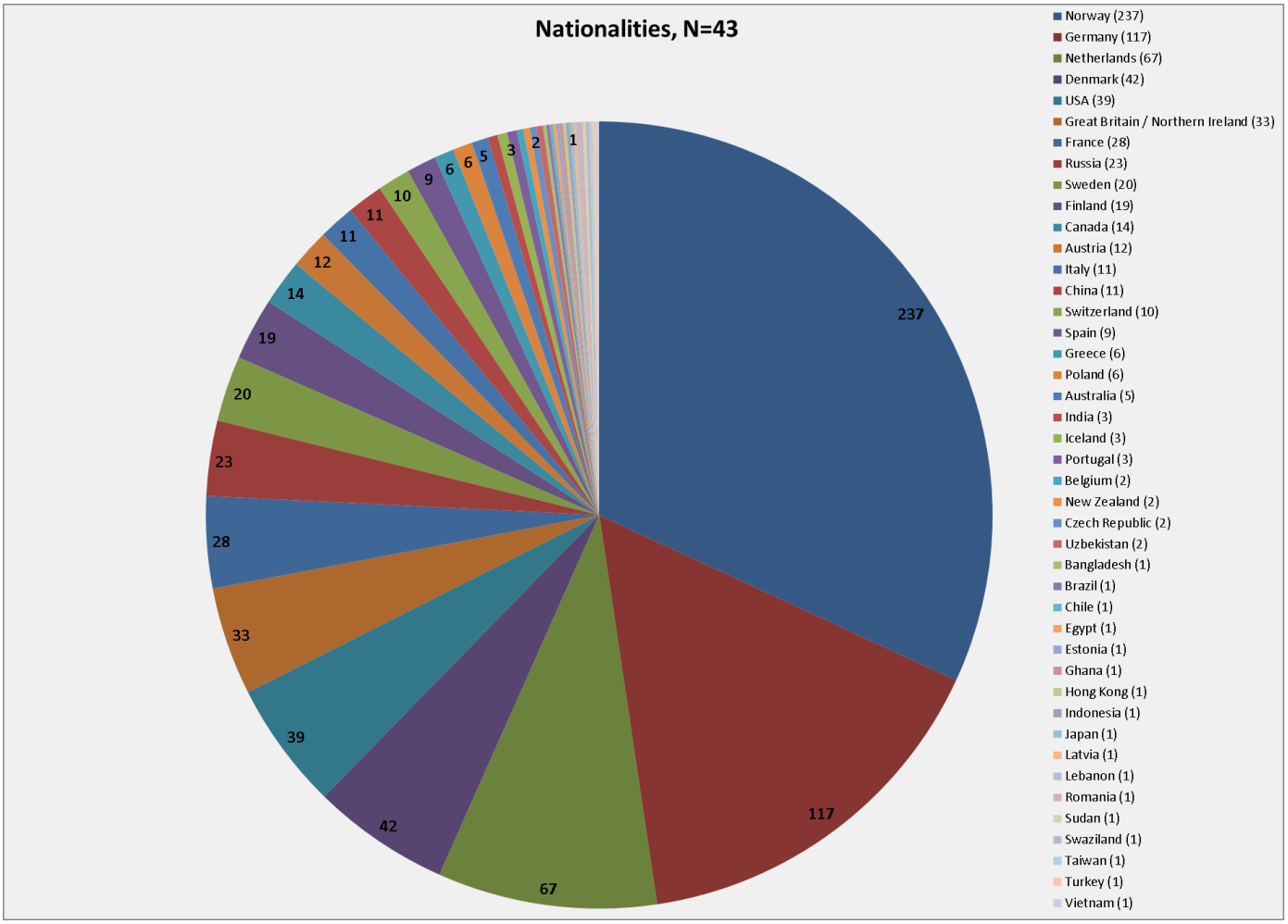


Fig. 6. Nationalities represented at UNIS 2019. N=number of nations, n=number of students from each nation.

4. Results – student years

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 master students. One study year corresponds to 60 ECTS. For guest master students, 5 ECTS is counted per month spent at UNIS. If they follow courses, these ECTS will be added as well. 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 master 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 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). Compared with previous years, 2019 shows an increase both in total number of courses and in educational offer in student years. 2018 had a lower educational offer than previous years, primarily due to a change of educational offer in the Department of Arctic geology. In 2019 the numbers are back on approximately the same level as in earlier years.

One bachelor course, AB-208 «Internship in Arctic biology» was established in 2019, while another, AGF-219 «Shipping in the Arctic» was terminated. AB-208 has a scope of 15 ECTS, while AGF-219 had a scope of only 5 ECTS, thus we see an increase in the educational offer given as number of student years even though the number of bachelor courses is unchanged.

Five new master courses and two PhD courses were offered in 2019. The Department of Arctic geology established the course AG-351 / 851 "Arctic tectonics and volcanism". As mentioned earlier, the Department of Arctic geophysics terminated the course AGF-219 "Shipping in the Arctic". This was replaced by corresponding master- and PhD courses, AGF-319 / 819. Within Arctic safety three new master courses were offered for the first time in 2019; AS-302 "Safety management in the Arctic", AS-303 «Emergency preparedness and response in the Arctic» and AS-304 «Risk, technology and human performance in Arctic operations».

The educational offer at UNIS in 2019 was 245 student years; well within the conditions set by the Ministry of Education and Research of about 220 student years.

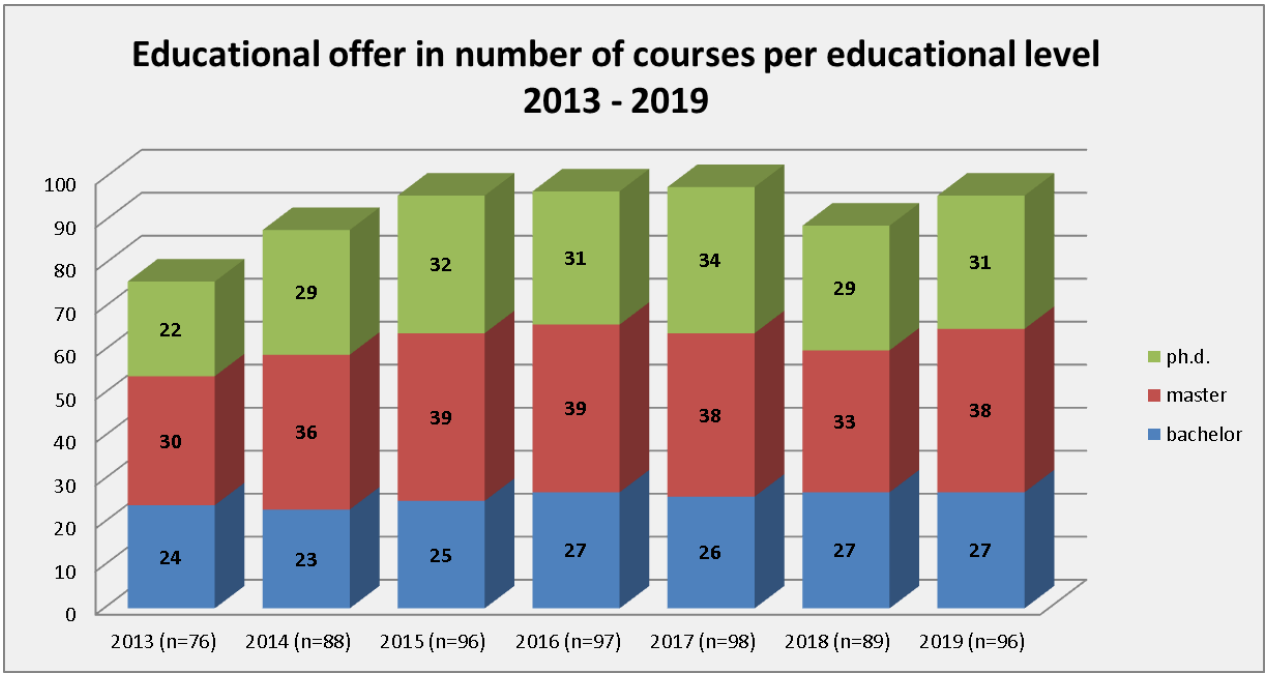


Fig. 7. Number of courses per educational level 2013 – 2019. n=number of courses.

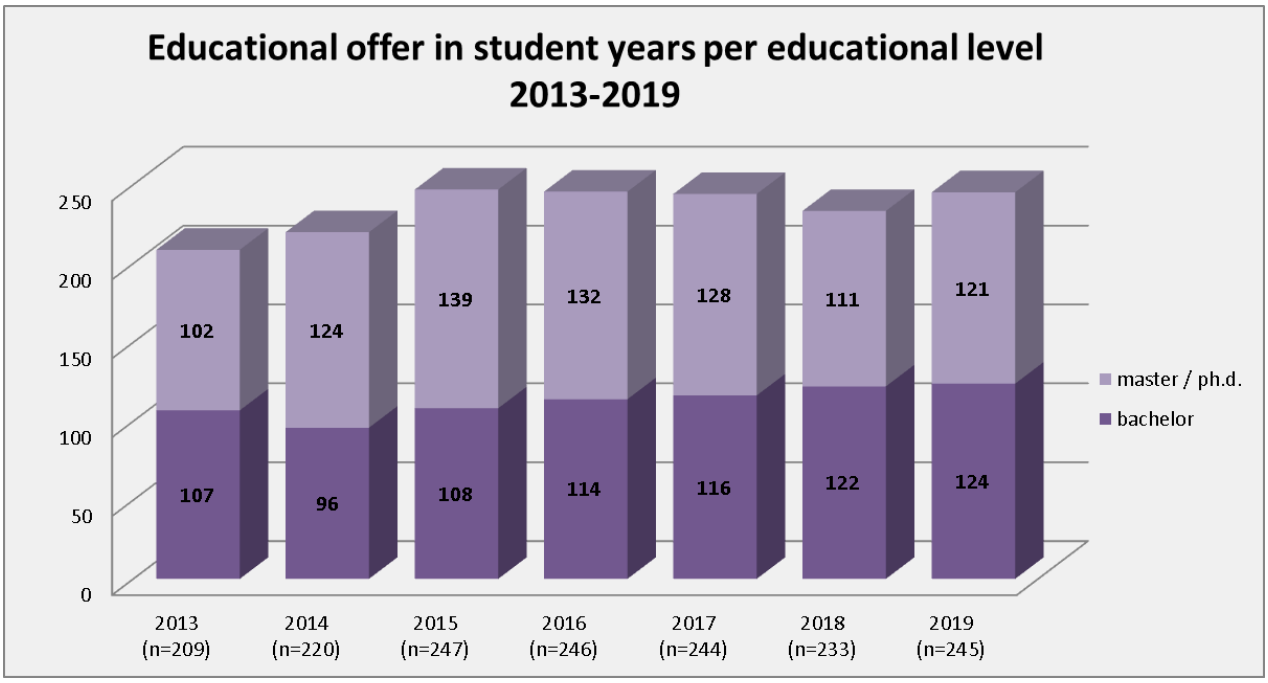


Fig. 8. Educational offer in student years per educational level 2013 – 2019. n=number of student years.

4.2. Student years at UNIS 2019

In 2019, 213 student years were produced at UNIS. This is distributed on 193 student years based on ECTS from passed courses, in addition to 20 student years based on the stay of guest master students. Figure 9 shows the development of produced student years, target figures from the Ministry, and the educational offer (from courses) at UNIS for the period 2012 – 2019. Figure 10 shows the same development when excluding guest master students, *i.e.*, produced student years based on courses only.

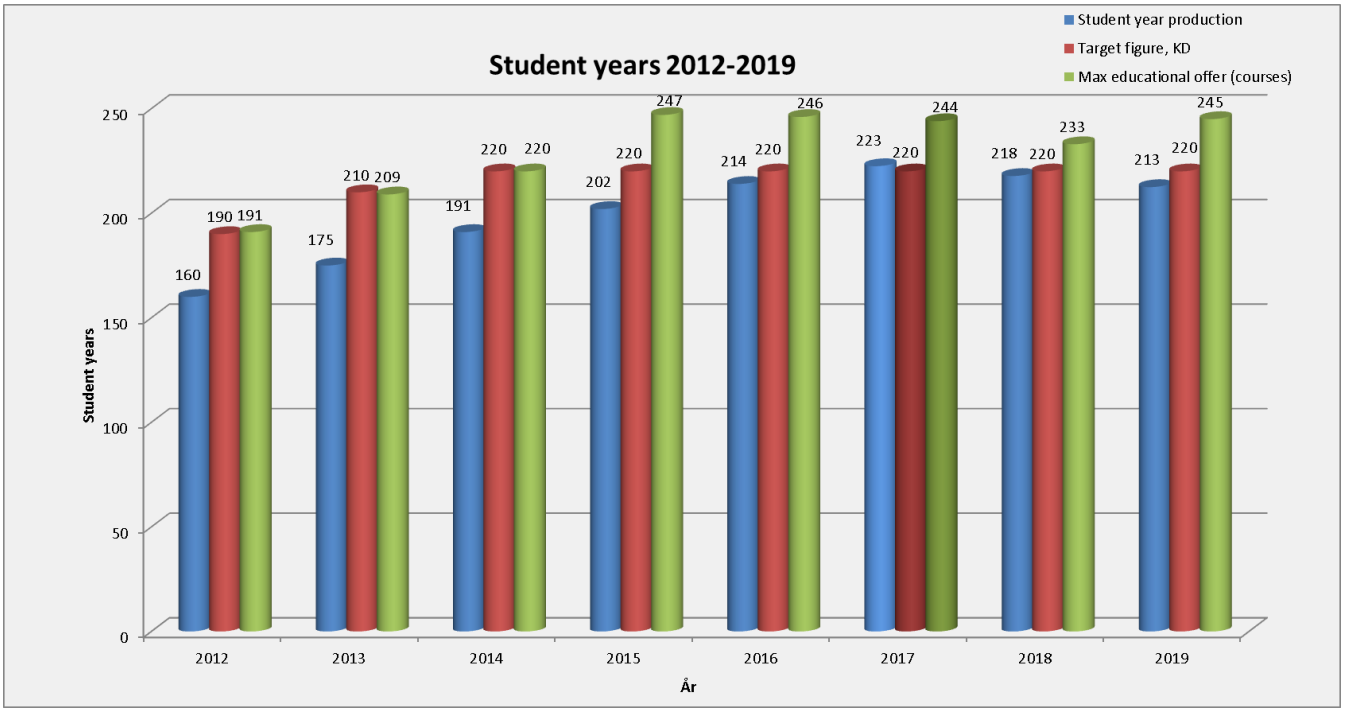


Fig. 9. Total ECTS production, target figures from the Ministry of Education and Research, and educational offer in student years at UNIS 2012 – 2019.

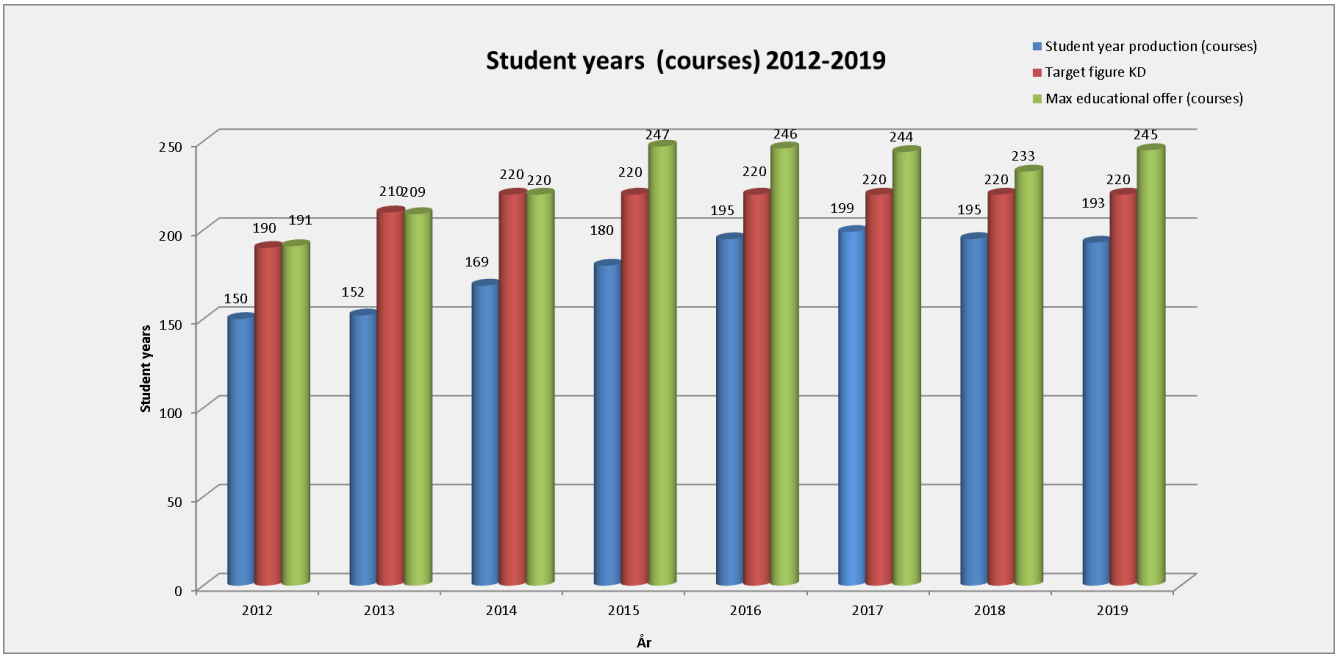


Fig. 10. ECTS production from courses, target figures from the Ministry of Education and Research, and educational offer in student years at UNIS 2012 – 2019.

UNIS has experienced a steady increase in the number of student years peaking in 2017 with 223 student years. Thereafter, the production has decreased by 5 student years per year in 2018 and 2019. The decrease from 2018 is mainly due to a reduction in student years from guest master students (a reduction of 3 student years), while the remaining decrease is due to a reduced ECTS production from courses.

Figure 11 shows the ECTS production from courses distributed on educational levels. An increase in production on master- and PhD level is seen. Taking the increase in educational offer of 10 student years on master- and PhD level into consideration, one could maybe expect an even larger increase in ECTS production.

On bachelor level, the ECTS production has decreased by 9 student years, despite an increase in the educational offer (cf. Fig. 8). Especially the biology courses AB-207 "Research project in Arctic biology" and AB-208 "Internship in Arctic biology", as well as the geophysics courses AGF-210 "The middle polar atmosphere" and AGF-223 «Upper atmospheric and space physics: observational techniques and instrumentation" had low student numbers. This will be further discussed under the respective scientific departments (chap. 4.5 and 4.7), and in chap. 4.4 about filling degree.

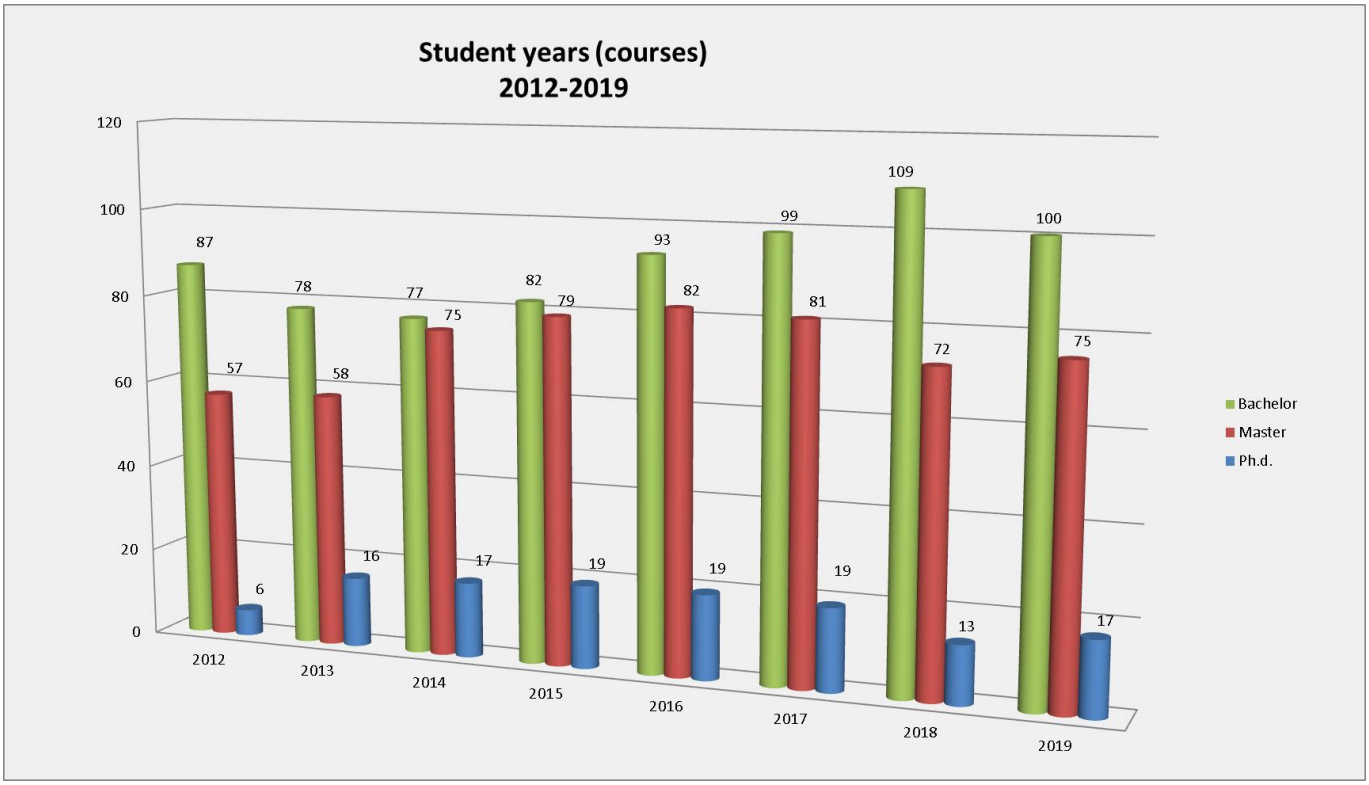
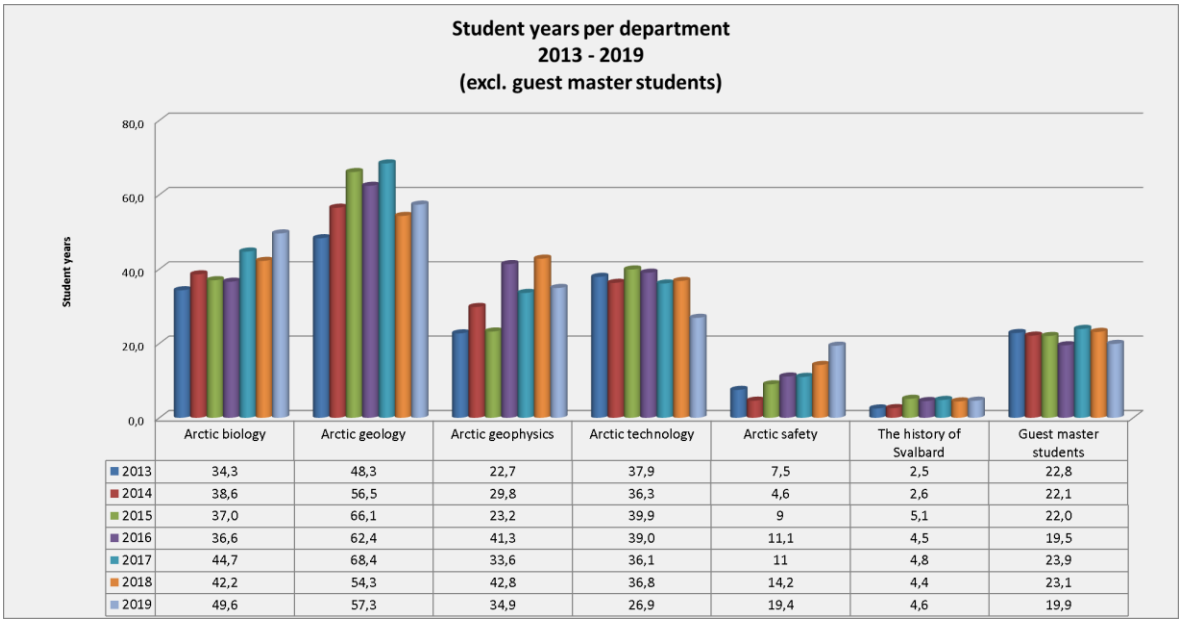


Fig. 11. ECTS production in student years from passed courses, distributed on the educational levels, for the period 2012 – 2019.

4.3. Student years produced at the different scientific departments

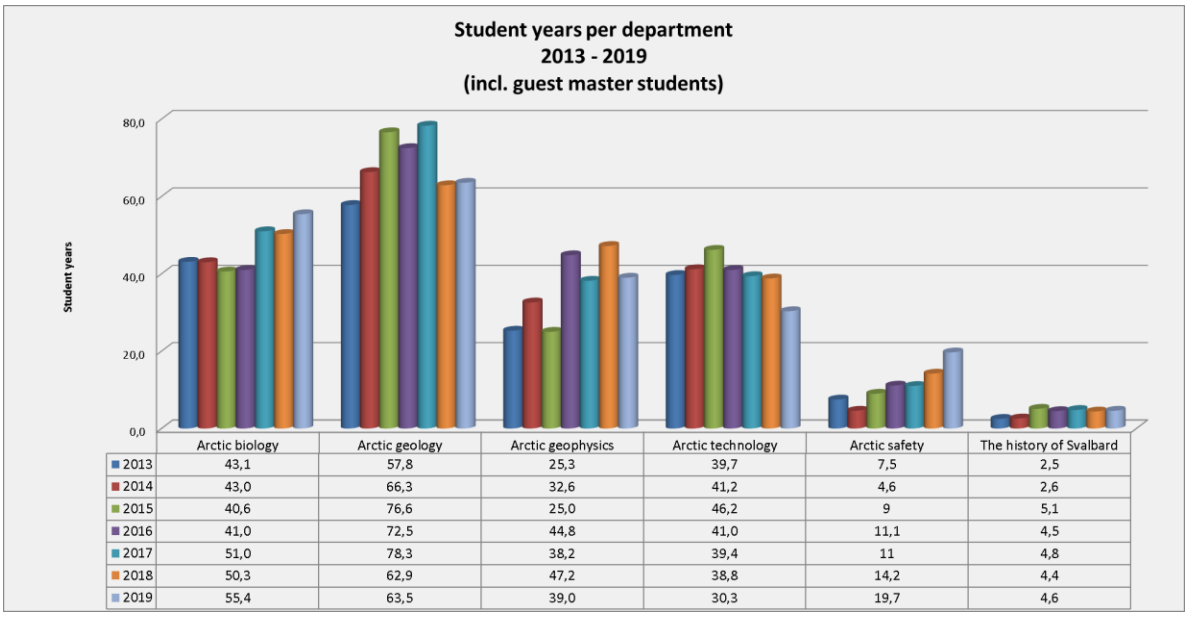
Figure 12 a) and b) shows student years per scientific department for the period 2013 – 2019. Figure a) shows the production based on courses, when guest master students are shown in a separate group, and fig b) shows the total production per scientific department when guest master students are included in the result from the departments.

Even though Arctic safety is not a scientific department at UNIS, a significant number of courses are being offered within this scientific field. Therefore, these courses are reported as a separate group. The History of Svalbard is reported separately. Furthermore, it should be taken into account that several of the scientific departments have an educational offer that varies between odd and even years, and conclusions from one year to the other should be drawn with caution. The development in the separate scientific departments will be discussed in further chapters.



	Arctic biology	Arctic geology	Arctic geophysics	Arctic technology	Arctic safety	The history of Svalbard	Guest master students
2013	34,3	48,3	22,7	37,9	7,5	2,5	22,8
2014	38,6	56,5	29,8	36,3	4,6	2,6	22,1
2015	37,0	66,1	23,2	39,9	9	5,1	22,0
2016	36,6	62,4	41,3	39,0	11,1	4,5	19,5
2017	44,7	68,4	33,6	36,1	11	4,8	23,9
2018	42,2	54,3	42,8	36,8	14,2	4,4	23,1
2019	49,6	57,3	34,9	26,9	19,4	4,6	19,9

Fig. 12a. Production in student years per department 2013 – 2019. Guest master students reported as a separate group.



	Arctic biology	Arctic geology	Arctic geophysics	Arctic technology	Arctic safety	The history of Svalbard
2013	43,1	57,8	25,3	39,7	7,5	2,5
2014	43,0	66,3	32,6	41,2	4,6	2,6
2015	40,6	76,6	25,0	46,2	9	5,1
2016	41,0	72,5	44,8	41,0	11,1	4,5
2017	51,0	78,3	38,2	39,4	11	4,8
2018	50,3	62,9	47,2	38,8	14,2	4,4
2019	55,4	63,5	39,0	30,3	19,7	4,6

Fig. 12b. Production in student years per department 2013 – 2019. Guest master students included in each department.

Figure 13a) shows the percentage of student years for each department. Guest master students are here reported in a separate group, *i.e.* the percentage given for each department is based on courses only. Figure 13b) shows the same distribution when guest master students are included in the result for each department.

The Department of Arctic geology had, like in previous years, the highest ECTS production among UNIS' departments, accounting for 27 % of the production (guest master students excluded). The department had an increase of 2 % from 2018. These are followed by the Department of Arctic biology, accounting for 23 % of the production. The biologists had the greatest increase in percentage (4 %) since 2018. The Department of Arctic geophysics accounted for 17 % of the production, a reduction of 3 % from the previous year. The Department of Arctic technology has experienced the greatest decrease from the previous year (4 %) and accounted for 13 % of the production. Courses within Arctic safety accounted for 9 % of the ECTS production. Among these, courses affiliated with the Arctic Safety Center (AS-301, AS-302, AS-303 and AS-304) accounted for 4 % of UNIS' total production (cf. tab. 10). The history of Svalbard accounted for 2 % of the ECTS production. Guest master students accounted for 9 % of the production, a reduction of 2 % since 2018.

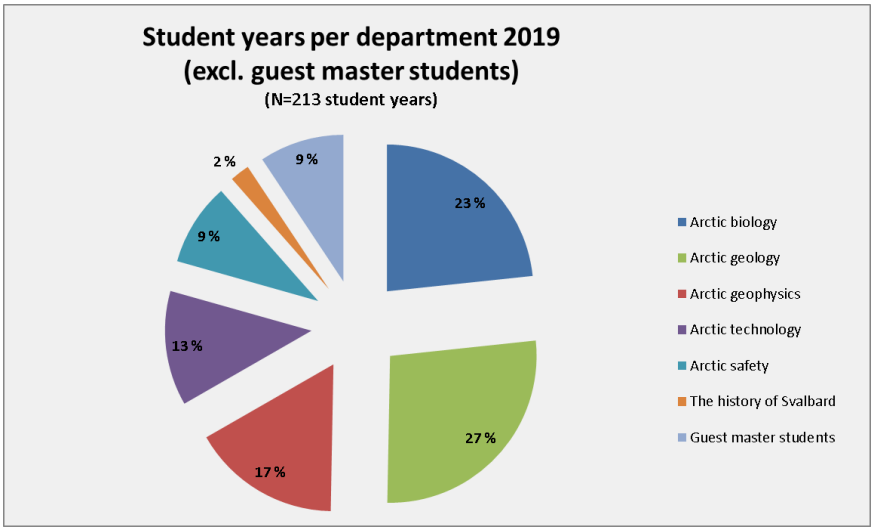


Fig. 13a. Percentage of student years produced per department 2019. Guest master students reported as a separate group. N=total number of student years.

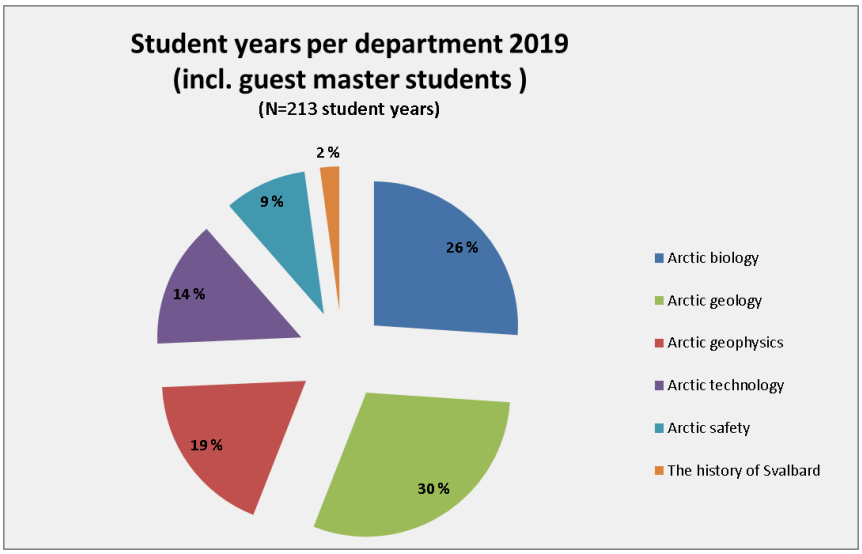


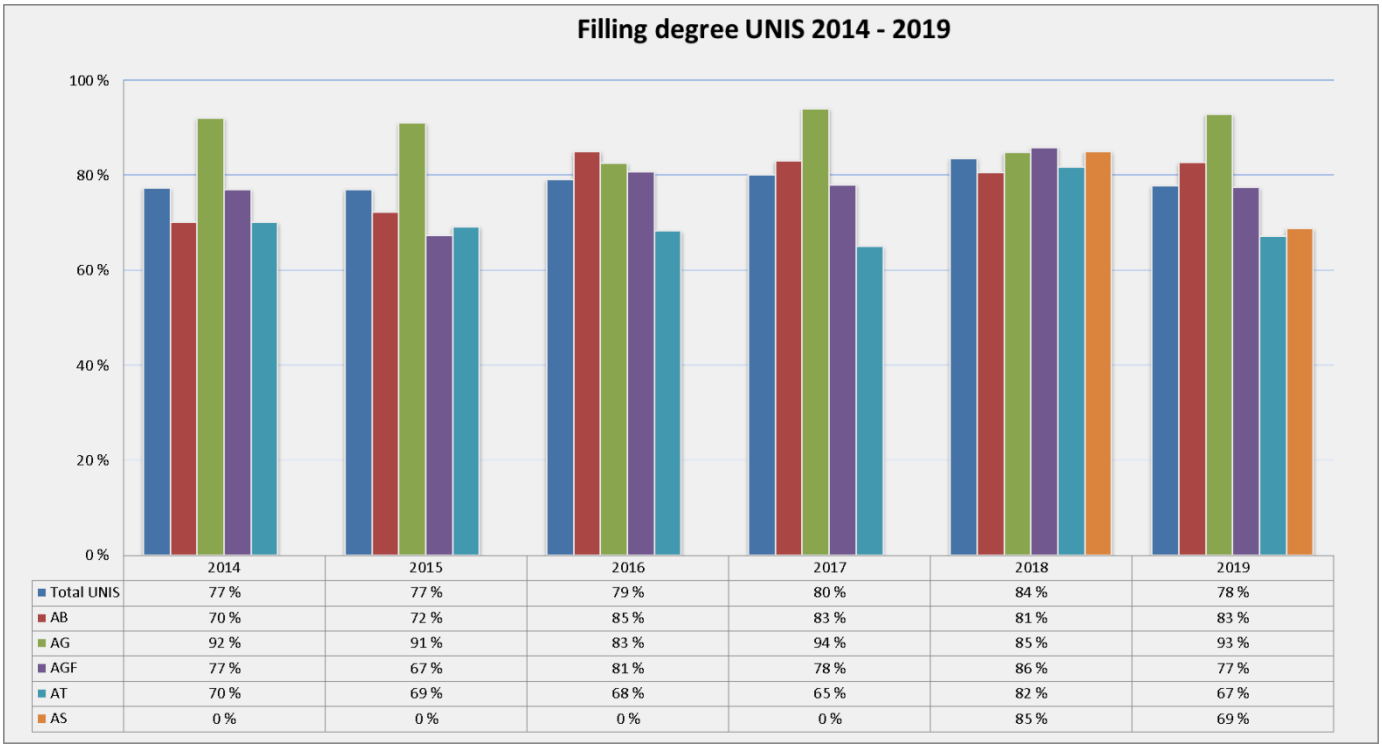
Fig. 13b. Percentage of student years produced per department 2019. Guest master students included in the production for each department. N=total number of student years.

4.4. 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. In situations where more students are admitted than the given maximum number of places in the course, the filling degree is reported as > 100 %. Courses without restricted admission (AGF-216, AS-101, AS-203 and SH-201) are not included in the result.

The filling degree for the period 2014 – 2019 is given in fig. 14. For UNIS in total, the filling degree for the courses was 78 % in 2019. This is a reduction from previous years, and a significant reduction from 2018 when the filling degree was 84 %. A lower filling degree can explain some of the reduction in produced student years despite a higher educational offer.

The scientific departments had somewhat different filling degrees in their courses. The Department of Arctic geology had the highest filling degree and has also experienced the greatest percentual increase in filling degree since the previous year. The geologists also had a lot of applicants to their courses (cf. chap. 6.1), but the high filling degree can also partly be explained by some courses admitting more students than the maximum number given in the course descriptions. The Department of Arctic biology also had a filling degree well above UNIS as a whole, while The Department of Arctic technology and courses within Arctic safety had a filling degree below 70 %. The filling degree at The Department of Arctic geophysics was approximately on the same level as UNIS as a whole.



	2014	2015	2016	2017	2018	2019
Total UNIS	77 %	77 %	79 %	80 %	84 %	78 %
AB	70 %	72 %	85 %	83 %	81 %	83 %
AG	92 %	91 %	83 %	94 %	85 %	93 %
AGF	77 %	67 %	81 %	78 %	86 %	77 %
AT	70 %	69 %	68 %	65 %	82 %	67 %
AS	0 %	0 %	0 %	0 %	85 %	69 %

Fig. 14. Filling degree in UNIS' courses in the different departments 2014 – 2019.

4.5. ECTS production – Department of Arctic biology

The Department of Arctic biology had an increase in ECTS production (55,4 student years), and experienced the highest production ever in the department. There is an increase both at bachelor- and master level, while the production at PhD level has been stable. The production due to guest master students is somewhat reduced in 2019 (fig. 15, tab. 1). Most courses had a quite high filling degree, except AB-207 "Research project in Arctic biology" and AB-333 / 833 "Freshwater ecology of Arctic lakes and ponds". The course AB-340 / 840 "Climate change biology" admitted more students than the given maximum number, resulting in a filling degree above 100 %. When comparing ECTS production based on courses with the educational offer over the years, it shows that these follow each other quite well (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 2.

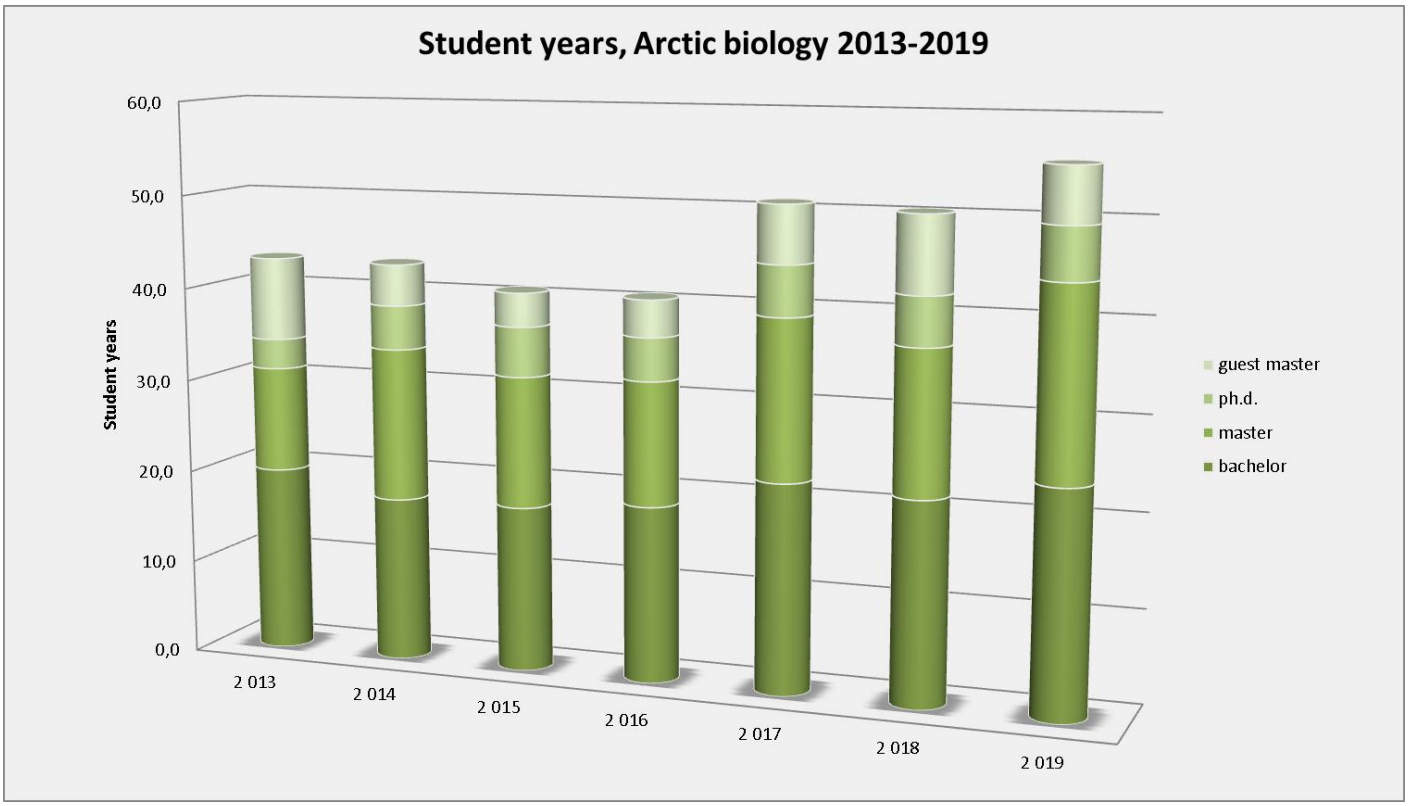


Fig. 15. ECTS production in student years at Department of Arctic biology 2013 – 2019.

AB	2013	2014	2015	2016	2017	2018	2019
Bachelor	19,9	17,6	17,7	18,8	22,3	21,7	23,9
Master	11,2	16,3	14,0	13,2	17,0	15,3	20,2
Ph.d.	3,2	4,7	5,3	4,6	5,3	5,2	5,5
Guest master	8,8	4,4	3,6	3,9	6,1	8,1	5,8
Total	**43,1**	**43,0**	**40,6**	**40,5**	**50,8**	**50,3**	**55,4**
Courses	34,3	38,6	37,0	36,6	44,7	42,2	49,6
Educational offer	**38,6**	**51,2**	**50,1**	**45,3**	**49,4**	**51,7**	**57,1**

Tab. 1. ECTS production in student years, Department of Arctic biology 2013 – 2019.

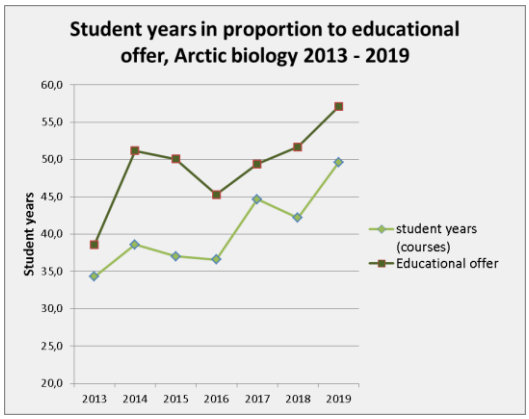


Fig. 16. Student years related to educational offer, Department of Arctic biology 2013 – 2019.

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	20	06E	1	1	1	15	15	0	0	bachelor	0,3	extraordinary exam
AB-201	15	20	06U	1	1	1	15	15	0	0	bachelor	0,3	re-scheduled exam
AB-201	15	20	12	19	19	19	285	285	0	0	bachelor	4,8	95 %
AB-202	15	20	6	16	16	16	240	240	0	0	bachelor	4,0	80 %
AB-203	15	25	6	23	23	23	345	345	0	0	bachelor	5,8	92 %
AB-204	15	20	06K	1	1	1	15	15	0	0	bachelor	0,3	re-sit exam
AB-204	15	20	12	18	18	18	270	270	0	0	bachelor	4,5	90 %
AB-206	5	20	12	17	17	17	85	85	0	0	bachelor	1,4	85 %
AB-207	15	12	6	7	4	4	60	60	0	45	bachelor	1,0	58 %
AB-207	15	12	12	2	2	2	30	30	0	0	bachelor	0,5	17 %
AB-208	15	6	6	5	5	5	75	75	0	0	bachelor	1,3	83 %
AB-321	10	18	12	10	9	9	90	90	0	10	master	1,5	100 %
AB-325	10	20	12K	1	1	1	10	10	0	0	master	0,2	re-sit exam
AB-325	10	20	12	12	12	11	120	110	10	0	master	1,8	95 %
AB-326	10	20	12	14	14	14	140	140	0	0	master	2,3	85 %
AB-327	10	20	12	15	14	14	140	140	0	10	master	2,3	100 %
AB-329	10	20	6	15	14	14	140	140	0	10	master	2,3	75 %
AB-330	10	20	6	16	16	16	160	160	0	0	master	2,7	90 %
AB-332	10	20	12	14	13	13	130	130	0	10	master	2,2	90 %
AB-333	10	20	6	10	10	10	100	100	0	0	master	1,7	55 %
AB-340	10	20	6	19	19	19	190	190	0	0	master	3,2	115 %
AB-821	10	-	12	8	8	8	80	80	0	0	PhD	1,3	-
AB-825	10	-	12	7	7	7	70	70	0	0	PhD	1,2	-
AB-826	10	-	12	3	3	3	30	30	0	0	PhD	0,5	-
AB-827	10	-	12	5	5	5	50	50	0	0	PhD	0,8	-
AB-830	10	-	6	2	2	2	20	20	0	0	PhD	0,3	-
AB-832	10	-	12	4	4	4	40	40	0	0	PhD	0,7	-
AB-833	10	-	6	1	1	1	10	10	0	0	PhD	0,2	-
AB-840	10	-	6	4	3	3	30	30	0	10	PhD	0,5	-
Total				**270**	**262**	**261**	**2985**	**2975**	**10**	**95**		**49,6**	**83 %**
Master students	*70 master student months*							350				5,8	
Total production AB-department								**3325**				**55,4**	

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

Tab. 2. 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 2019.

4.6. ECTS production - Department of Arctic geology

The ECTS production at the Department of Arctic geology was approximately on the same level as in 2018 (fig. 17, tab. 3). Also, in 2019 the department had the highest ECTS production at UNIS. There is a reduction at bachelor level from 2018. However, 2018 had a very high production at bachelor level. The ECTS production at master- and PhD level has increased, but there is a slight reduction when it comes to guest master students. All courses had a quite high filling degree, except the new course AG-351 / 851 "Arctic tectonics and volcanism", with a filling degree of 65 % (tab. 4). Figure 18 shows that educational offer and 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 4.

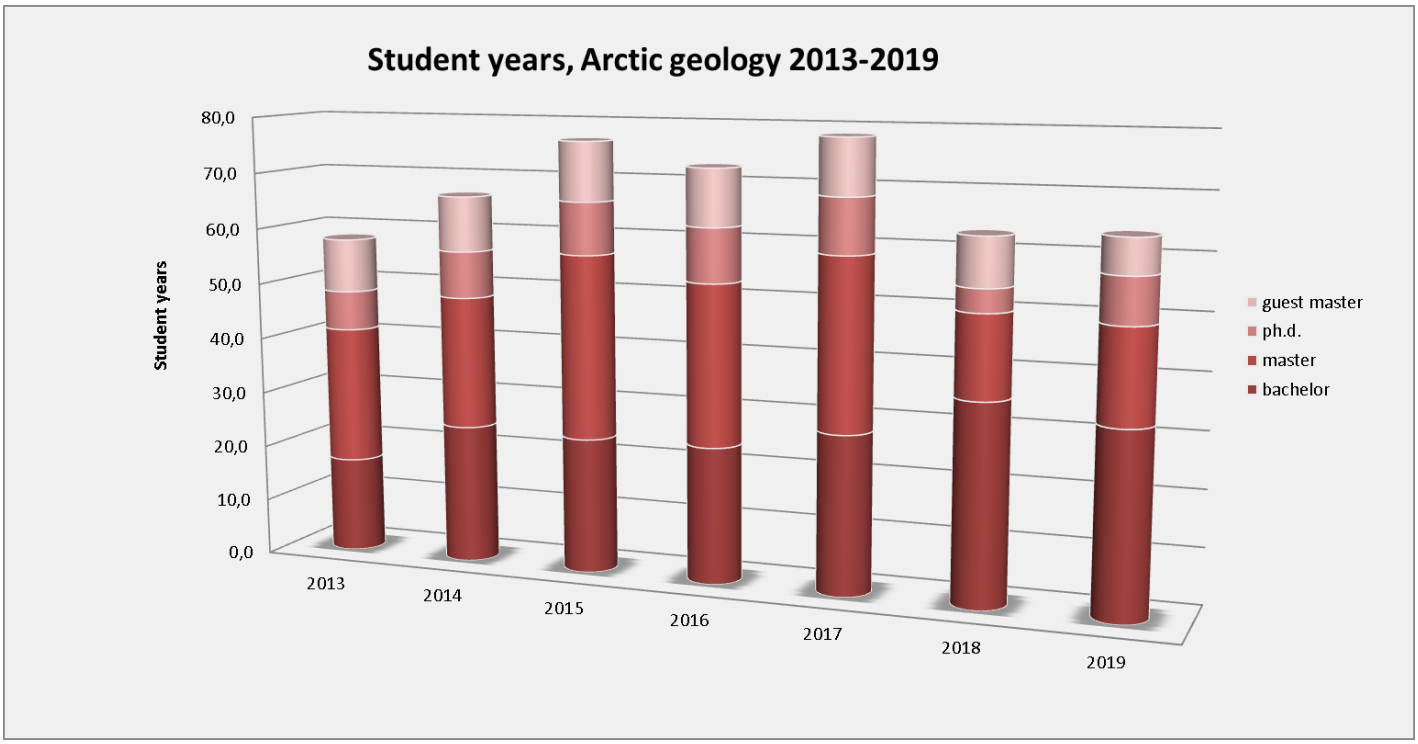


Fig. 17. ECTS production in student years at Department of Arctic geology 2013 – 2019.

AG	2013	2014	2015	2016	2017	2018	2019
Bachelor	17,0	24,7	24,1	24,3	28,3	35,5	32,6
Master	24,3	23,5	32,7	28,6	30,4	14,7	16,7
Ph.d.	7,0	8,3	9,3	9,6	9,8	4,1	8,1
Guest master	9,5	9,8	10,5	10,1	9,9	8,6	6,2
Total	**57,8**	**66,3**	**76,6**	**72,5**	**78,3**	**62,9**	**63,5**
Courses	48,3	56,5	66,1	62,4	68,4	54,3	57,3
Educational offer	**62,3**	**60,3**	**72,9**	**75,0**	**73,3**	**65,8**	**66,7**

Tab. 3. ECTS production in student years, Department of Arctic geology 2013 – 2019.

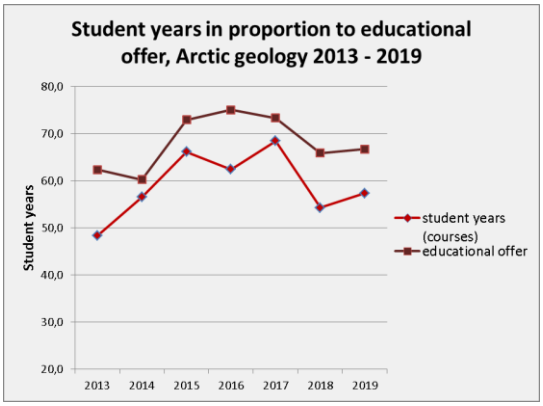


Fig. 18. Student years related to educational offer, Department of Arctic geology 2013 – 2019.

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	20	6	20	20	20	300	300	0	0	bachelor	5,0	100 %
AG-210	15	20	12	16	16	16	240	240	0	0	bachelor	4,0	80 %
AG-211	15	20	12	16	16	16	240	240	0	0	bachelor	4,0	80 %
AG-218	10	20	12	19	19	19	190	190	0	0	bachelor	3,2	95 %
AG-220	10	20	12	19	19	19	190	190	0	0	bachelor	3,2	95 %
AG-221	15	20	12	16	16	16	240	240	0	0	bachelor	4,0	80 %
AG-222	15	20	6	20	20	20	300	300	0	0	bachelor	5,0	100 %
AG-323	10	20	12	7	7	7	70	70	0	0	master	1,2	85 %
AG-325	10	20	6	14	14	14	140	140	0	0	master	2,3	130 %
AG-330	10	20	6	13	12	12	120	120	0	10	master	2,0	110 %
AG-335	10	20	6	15	15	15	150	150	0	0	master	2,5	100 %
AG-336	10	20	12	10	10	10	100	100	0	0	master	1,7	90 %
AG-340	10	20	12	18	16	15	160	150	10	20	master	2,5	90 %
AG-346	10	20	06U	1	1	1	10	10	0	0	master	0,2	re-scheduled exam
AG-346	10	20	6	20	18	18	180	180	0	20	master	3,0	100 %
AG-351	10	20	12	8	8	8	80	80	0	0	master	1,3	65 %
AG-823	10	-	12	10	10	10	100	100	0	0	PhD	1,7	-
AG-825	10	-	6	12	11	11	110	105	5	10	PhD	1,8	-
AG-830	10	-	6	9	9	9	90	90	0	0	PhD	1,5	-
AG-835	10	-	6	5	5	5	50	50	0	0	PhD	0,8	-
AG-836	10	-	12	8	8	8	80	80	0	0	PhD	1,3	-
AG-838	10	-	06E	1	1	1	10	10	0	0	PhD	0,2	extraordinary exam
AG-851	10	-	12	5	5	5	50	50	0	0	PhD	0,8	-
Total				**299**	**293**	**292**	**3455**	**3440**	**15**	**60**		**57,3**	**93 %**
Master students	*74,5 master student months*							372,5				6,2	
Total production AG-department								**3812,5**				**63,5**	

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

Tab. 4. 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 2019.

4.7. ECTS production – Department of Arctic geophysics

The Department of Arctic geophysics has experienced a marked reduction in ECTS production from 2018 (fig. 19, tab. 5). However, the production was at an all time high in 2018. The reduction has been greatest at bachelor level. This is primarily due to a low filling degree in the courses AGF-210 «The middle polar atmosphere» and AGF-223 «Upper atmospheric and space physics: Observational techniques and instrumentation». AGF-210 has also reduced the maximum number of students in the course due to logistical reasons. Additionally, the course AGF-219 "Shipping in the Arctic" was terminated, and replaced by corresponding coures at master- and PhD level (AGF-319 / 819). A small decrease at master- and PhD level is also seen. ECTS production based on guest master students has been relatively stable. The department has some courses at master- / PhD level that are only offered every second year, and thus there is a higher educational offer in even number years than in odd number years. However, figure 20 shows a larger variation in ECTS production than in educational offer over the years. The filling degree for the department as a whole is approximately on the same level as for UNIS in total (78 %, fig. 14). 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 6.

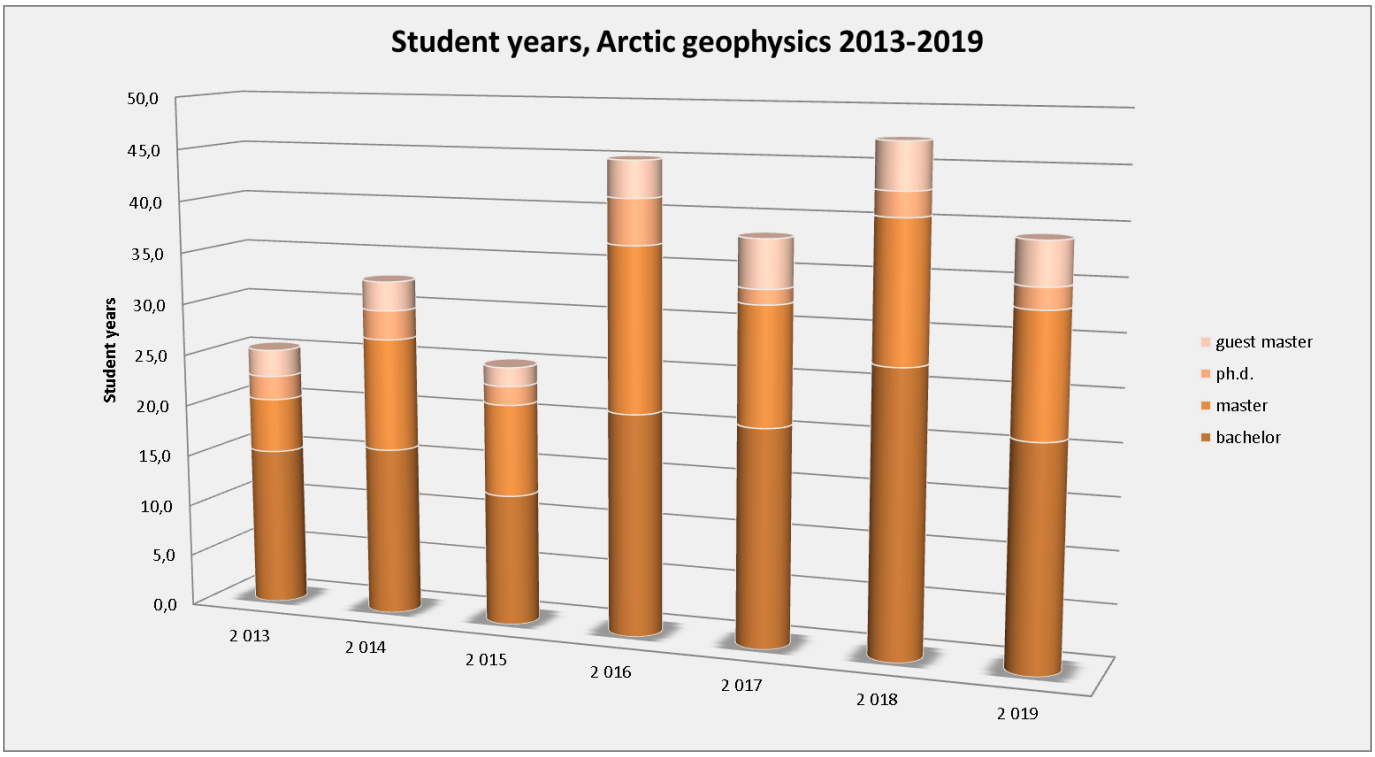


Fig. 19. ECTS production in student years at Department of Arctic geophysics 2013 – 2019.

AGF	2013	2014	2015	2016	2017	2018	2019
Bachelor	15,2	16,2	12,6	21,3	20,8	27,2	21,3
Master	5,2	10,8	8,8	15,8	11,3	13,3	11,7
Ph.d.	2,3	2,8	1,8	4,3	1,4	2,3	2,0
Guest master	2,6	2,8	1,8	3,5	4,6	4,4	4,1
Total	**25,3**	**32,6**	**25,0**	**44,8**	**38,2**	**47,2**	**39,0**
Courses	22,7	29,8	23,2	41,3	33,6	42,8	34,9
Educational offer	**38,5**	**41,5**	**44,5**	**49,3**	**46,5**	**48,8**	**48,4**

Tab. 5. ECTS production in student years, Department of Arctic geophysics 2013 – 2019.

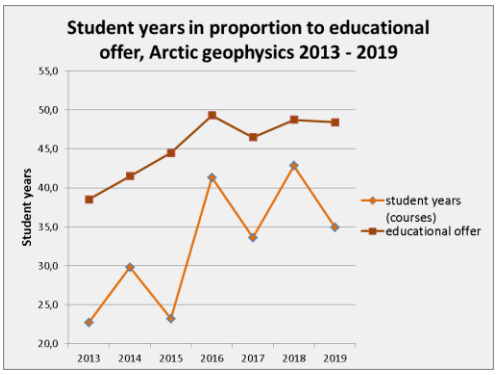


Fig. 20. Student years related to educational offer, Department of Arctic geophysics 2013 – 2019.

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-210	15	13	12	6	6	6	90	90	0	0	bachelor	1,5	46 %
AGF-211	15	20	6	18	17	17	255	255	0	15	bachelor	4,3	90 %
AGF-212	15	20	6	18	18	18	270	270	0	0	bachelor	4,5	90 %
AGF-213	15	16	12	16	16	16	240	240	0	0	bachelor	4,0	100 %
AGF-214	15	16	12	16	16	16	240	240	0	0	bachelor	4,0	100 %
AGF-216	5	69	6	69	18	18	90	90	0	255	bachelor	1,5	**
AGF-223	15	16	12	6	6	6	90	90	0	0	bachelor	1,5	38 %
AGF-301	15	16	6	12	12	12	180	180	0	0	master	3,0	88 %
AGF-304	15	16	6	12	12	12	180	180	0	0	master	3,0	88 %
AGF-319	5	20	12	6	6	5	30	25	5	0	master	0,4	55 %
AGF-345	10	16	12	14	14	14	140	140	0	0	master	2,3	100 %
AGF-352	10	20	6	12	11	11	110	110	0	10	master	1,8	65 %
AGF-353	5	20	12	13	13	13	65	65	0	0	master	1,1	70 %
AGF-801	15	-	6	2	2	2	30	30	0	0	PhD	0,5	-
AGF-804	15	-	6	2	2	2	30	30	0	0	PhD	0,5	-
AGF-819	5	-	12	5	5	5	25	25	0	0	PhD	0,4	-
AGF-845	10	-	12	2	2	2	20	20	0	0	PhD	0,3	-
AGF-852	10	-	6	1	1	1	10	10	0	0	PhD	0,2	-
AGF-853	5	-	12	1	1	1	5	5	0	0	PhD	0,1	-
Total				**231**	**178**	**177**	**2100**	**2095**	**5**	**280**		**34,9**	**77 %**
Master students	*49 master student months*							245				4,1	
Total production AGF-department								**2340**				**39,0**	

* 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. 6. 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 2019.

4.8. ECTS production – Department of Arctic technology

The Department of Arctic technology has experienced a marked decrease both in educational offer and ECTS production the last year (fig. 21 and 22, tab. 7). The reduction in ECTS production is greatest at master level, while the production at bachelor- and PhD level has been relatively stable. The production from guest master students has increased slightly since 2018. Still, the department had few guest master students, which is a consequence of few scientific staff in the department. Department of Arctic technology offered the same number of courses as in 2019. The reduction in educational offer can be due to the maximum number of students in AT-327 / 827 "Arctic offshore engineering" being reduced from 60 to 20 students in 2019. The department had generally a low filling degree in the courses. This was especially true for AT-332 / 832 "Physical environmental loads on Arctic coastal and offshore structures" with a filling degree of only 20 %. 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 8.

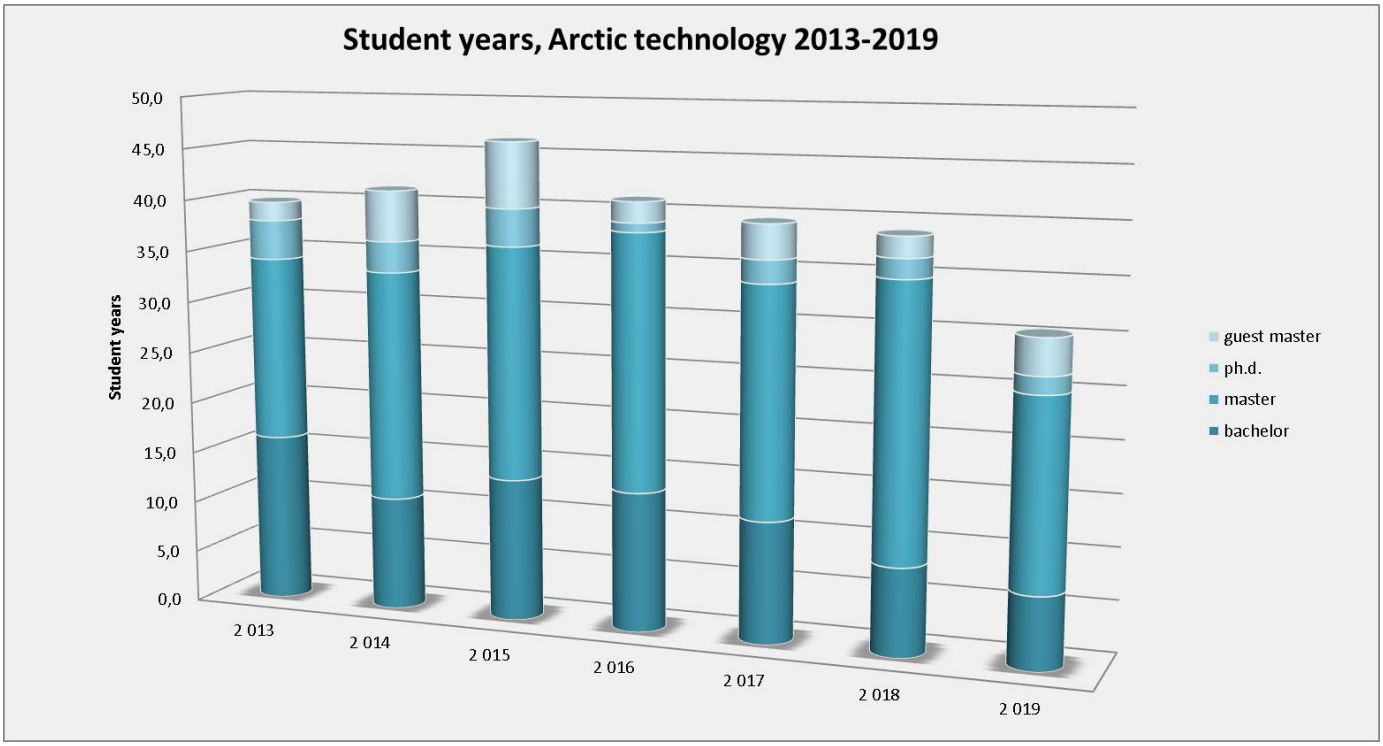


Fig. 21. ECTS production in student years at Department of Arctic technology 2013 – 2019.

AT	2013	2014	2015	2016	2017	2018	2019
Bachelor	16,3	11,0	13,8	13,5	11,8	8,5	7,0
Master	17,8	22,3	22,5	24,6	22,2	26,4	18,2
Ph.d.	3,8	3,0	3,6	0,9	2,2	1,9	1,7
Guest master	1,8	4,9	6,3	2,0	3,3	2,0	3,5
Total	**39,7**	**41,2**	**46,2**	**41,0**	**39,4**	**38,8**	**30,3**
Courses	37,9	36,3	39,9	39,0	36,1	36,8	26,9
Educational offer	**55,8**	**59,3**	**66,0**	**62,7**	**57,7**	**47,7**	**41,0**

Tab. 7. ECTS production in student years, Department of Arctic technology 2013 – 2019.

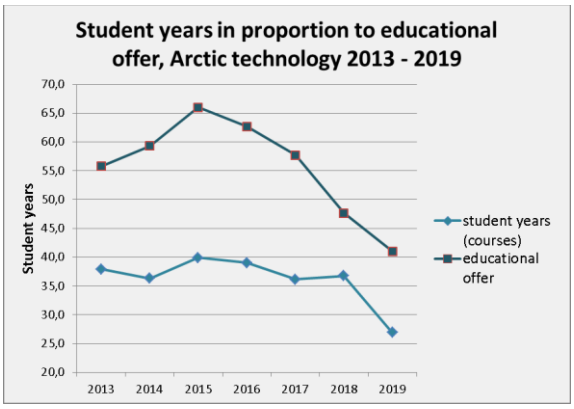


Fig. 22. Student years related to educational offer, Department of Arctic technology 2013 – 2019.

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	20	6	13	12	12	180	180	0	15	bachelor	3,0	65 %
AT-205	15	20	06K	1	1	1	15	15	0	0	bachelor	0,3	re-sit exam
AT-205	15	20	12U	1	1	1	15	15	0	0	bachelor	0,3	re-scheduled exam
AT-211	15	20	6	14	14	14	210	210	0	0	bachelor	3,5	70 %
AT-301	10	20	12	15	15	15	150	150	0	0	master	2,5	85 %
AT-307F	3	20	6	11	11	11	33	33	0	0	master	0,6	55 %
AT-324	10	20	6	7	6	6	60	60	0	10	master	1,0	55 %
AT-324	10	20	12U	1	1	1	10	10	0	0	master	0,2	re-scheduled exam
AT-327	10	20	06E	2	2	2	20	20	0	0	master	0,3	extraordinary exam
AT-327	10	20	12	27	26	25	260	250	10	10	master	4,2	135 %
AT-329	10	20	6	15	15	14	150	140	10	0	master	2,3	75 %
AT-330	10	20	6	13	12	12	120	120	0	10	master	2,0	65 %
AT-331	10	20	6	9	9	9	90	90	0	0	master	1,5	45 %
AT-332	10	20	12	4	4	4	40	40	0	0	master	0,7	20 %
AT-333	10	20	12	12	12	11	120	110	10	0	master	1,8	65 %
AT-334	10	20	12	8	7	7	70	70	0	10	master	1,2	70 %
AT-801	10	-	12	2	2	2	20	20	0	0	PhD	0,3	-
AT-824	10	-	6	4	4	4	40	40	0	0	PhD	0,7	-
AT-833	10	-	12	1	1	1	10	10	0	0	PhD	0,2	-
AT-834	10	-	12	6	3	3	30	30	0	30	PhD	0,5	-
Total				**166**	**158**	**155**	**1643**	**1613**	**30**	**85**		**26,9**	**67 %**
Master students	*41,5 master student months*							207,5				3,5	
Total production AT-department								**1820,5**				**30,3**	

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

Tab. 8. 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 2019.

4.9. ECTS production – Arctic safety

The group Arctic safety consists of the courses AS-101 "Arctic survival and safety", AS-203 "Arctic safety and field leadership" which is reserved for the Arctic Nature Guide-students, in addition to the courses classified under Arctic safety center. Three new master courses within arctic safety were established in 2019. This group is now of such a magnitude that we find it appropriate to report courses within Arctic safety as a separate group.

Until 2014 this group was only consisting of the mandatory course AS-101. (In 2013 the course AHSE-201 "HSE in the Arctic" was also included. This course was only arranged this year.) In 2015, the course AS-203 was established, reserved for the Arctic Nature Guide-students. All these courses are at bachelor level. In 2018 the master course AS-301 "Risk assessment of Arctic natural hazards" was established. In 2019, this was followed by the master courses AS-302 "Safety management in the Arctic", AS-303 "Emergency preparedness and response in the Arctic" and AS-304 "Risk, technology and human performance in Arctic operations". The four latter courses fall under the Arctic safety center. This development of course portfolio also explains the development of ECTS production within Arctic safety. In 2019 a small number of guest master students were also added. The filling degree in the master courses within Arctic safety was lower than for UNIS as a whole (69 %). 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 10.

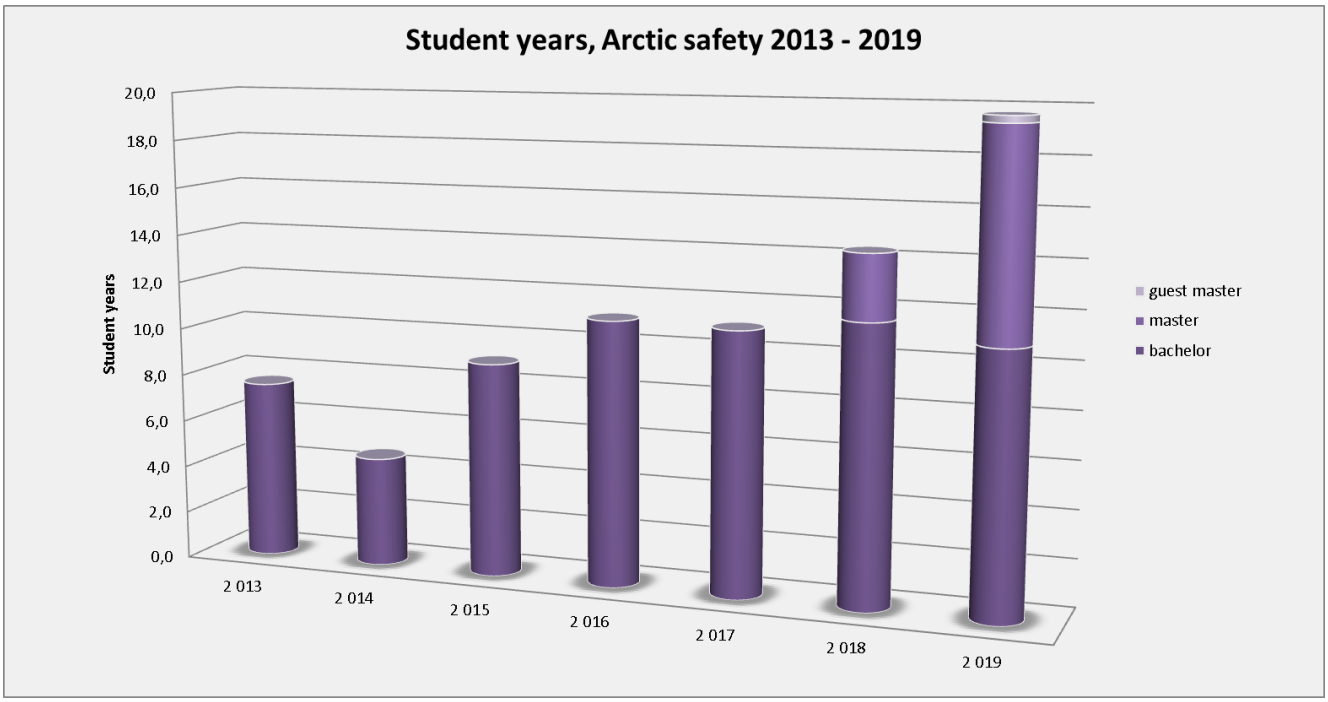


Fig. 23. ECTS production in student years, courses within Arctic safety 2013 – 2019.

Arktisk sikkerhet	2013	2014	2015	2016	2017	2018	2019
Bachelor	7,5	4,6	9,0	11,1	11,0	11,6	10,9
Master	0,0	0,0	0,0	0,0	0,0	2,7	8,5
Guest master	0,0	0,0	0,0	0,0	0,0	0,0	0,3
Total	**7,5**	**4,6**	**9,0**	**11,1**	**11,0**	**14,3**	**19,7**
Courses	7,5	4,6	9,0	11,1	11,0	14,3	19,4
Educational offer	**8,3**	**4,5**	**10,3**	**10,3**	**11,0**	**14,9**	**24,8**

Tab. 9. ECTS production in student years, Arctic safety 2013 – 2019.

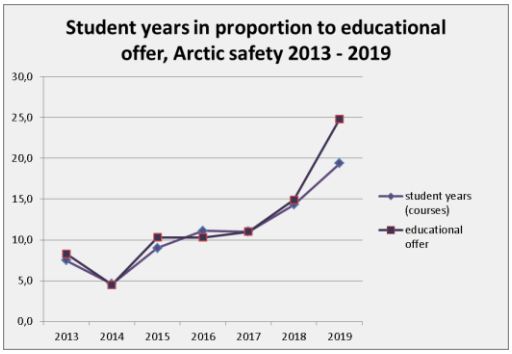


Fig. 24. Student years related to educational offer, Arctic safety 2013 – 2019.

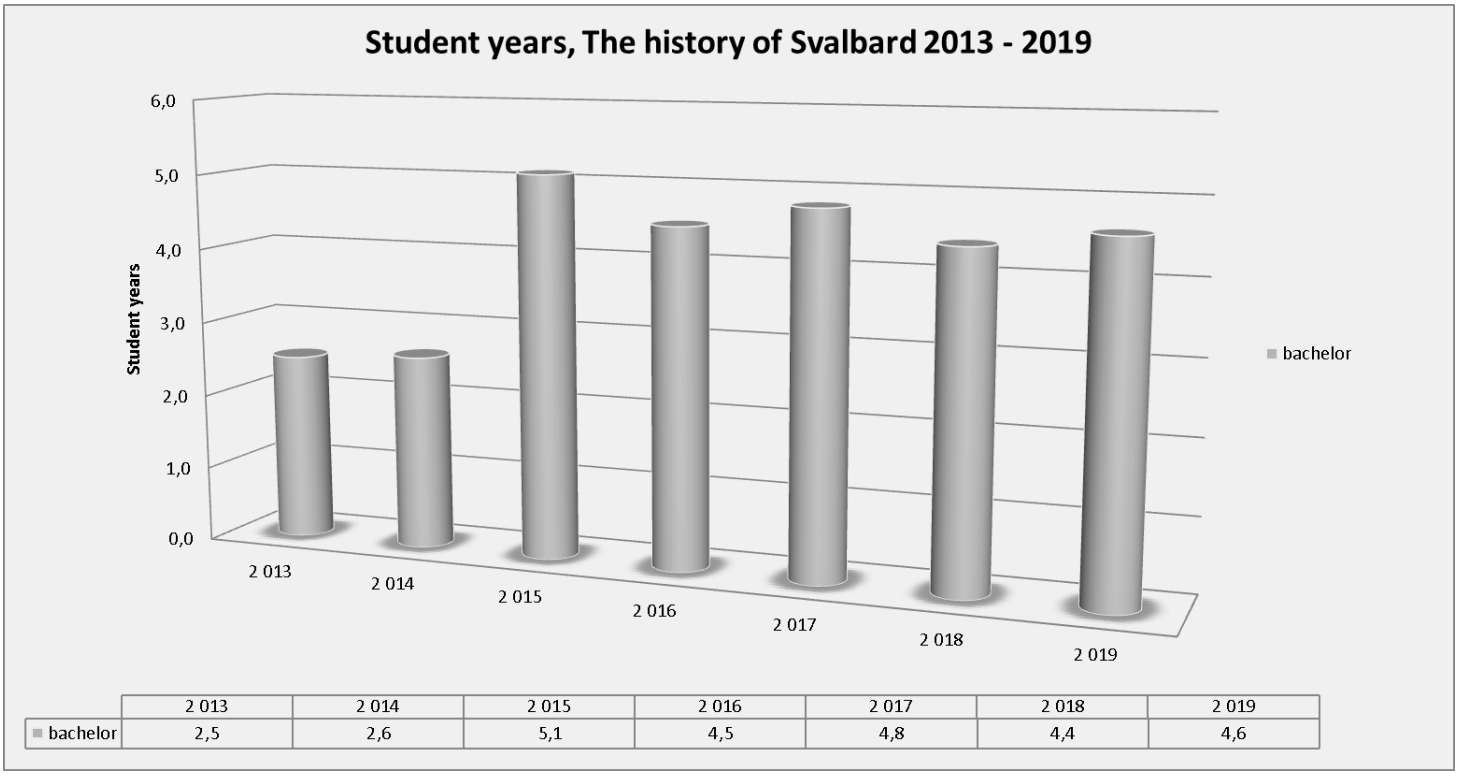
Arctic safety													
Course code	**ECTS**	**Max number**	**Autumn / Spring**	**No. candidates**	**Showed up**	**Passed**	**ECTS showed up**	**ECTS passed**	**Fail in ECTS**	**No-show in ECTS**	**Level**	**Student years**	**Filling degree***
AS-101	3	104	06E	1	1	1	3	3	0	0	bachelor	0,1	extraordinary exam
AS-101	3	104	6	104	102	99	306	297	9	6	bachelor	5,0	-
AS-101	3	104	06K	1	1	1	3	3	0	0	bachelor	0,1	re-sit exam
AS-203	14	27	6	27	25	24	350	336	14	28	bachelor	5,6	-
AS-203	14	27	12K	1	1	1	14	14	0	0	bachelor	0,2	re-sit exam
AS-301	10	20	12	13	12	12	120	120	0	10	master	2,0	65 %
AS-302	10	20	12	11	11	11	110	110	0	0	master	1,8	55 %
AS-303	10	20	12	18	17	17	170	170	0	10	master	2,8	90 %
AS-304	10	20	12	13	11	11	110	110	0	20	master	1,8	65 %
Total				**189**	**181**	**177**	**1186**	**1163**	**23**	**74**		**19,4**	**69 %**
Master students	*3,5 master student months*							17,5				0,3	
Total production Arctic safety								**1180,5**				**19,7**	

* AS-101 «Arctic survival and safety» and AS-203 «Arctic safety and field leadership» are omitted when calculating the filling degree. AS-101 does not have restricted admission, and is open for all new bachelor students at UNIS in spring semester, while AS-203 is reserved for Arctic Nature Guide students, and the admission is done by UiT – The Arctic University of Norway.

Tab. 10. 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 2019.

4.10. ECTS production – The History of Svalbard

The course SH-201 "The history of Svalbard" is open for all UNIS students and is mandatory for the Arctic Nature Guide students. The ECTS production has been relatively stable over the years, and the course accounts for 4-5 student years each year (fig. 25). 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 11.



	2 013	2 014	2 015	2 016	2 017	2 018	2 019
bachelor	2,5	2,6	5,1	4,5	4,8	4,4	4,6

Fig. 25. ECTS production in student years, SH-201 «The history of Svalbard» 2013 – 2019.

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	71	06U	1	1	1	6	6	0	0	bachelor	0,1
SH-201	6	71	6	71	49	45	294	270	24	132	bachelor	4,5
Total				**72**	**50**	**46**	**300**	**276**	**24**	**132**		**4,6**
otal production The history of Svalba								**276**				**4,6**

Tab. 11. 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 2019.

5. Grade statistics – results from final assessment

Several assessment forms exist when assessing a course at UNIS. Examples are written or oral exam, practical exercises, report, presentation, poster, take-home exam, or a combination of these. In some courses only the final result is reported. In other courses, part grades for the different assessment forms are reported, in addition to the final grade. 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.

5.1. Exam results for UNIS as a whole

In 2019, 1121 final exams were arranged at UNIS. This is a small reduction from last year (1140 final exams). Considering a lower ECTS production, this is expected (cf. chap. 4.2). A summary of the results for 2019 is found in fig. 26.

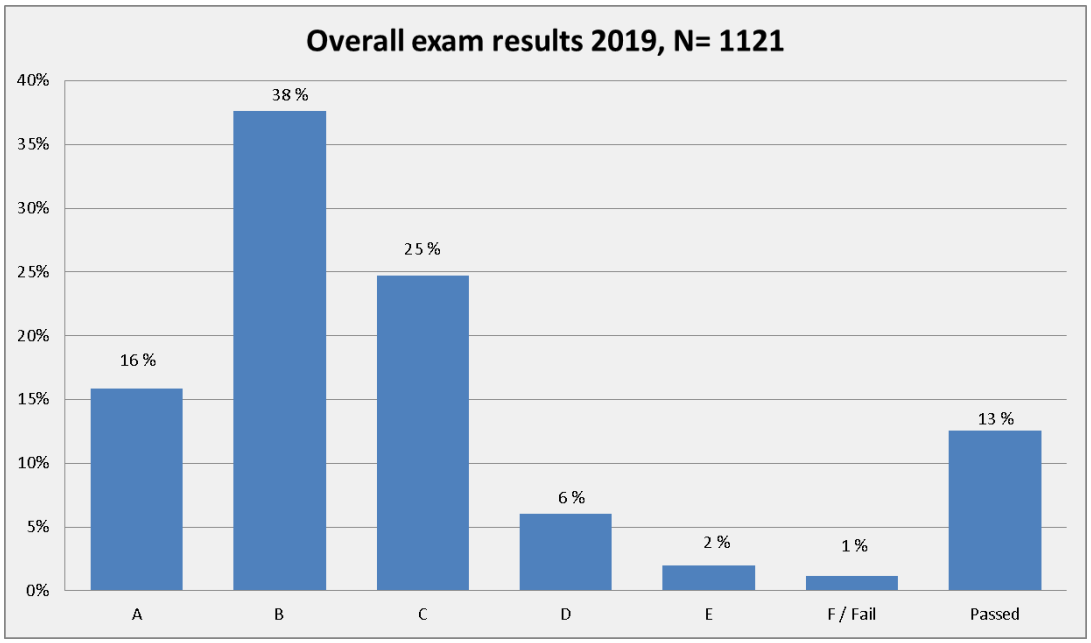


Fig. 26. Exam results for UNIS 2019. N= number of final exams.

Like previous years, the grading scale is skewed towards high grades, with a mean value around the grade B. There is a small shift towards more Cs at the sacrifice of As and Bs than previous years, but the difference is rather small (1-2 %). Seen over several years with such a high number of grades, a normal distribution with mean value around the grade C should be expected. UNIS had a percent of failing grades of 1 % in 2019, the same level as in 2017 and 2018. The percent of failing grades is very low compared to the Norwegian universities.

There can be several reasons behind UNIS' students receiving quite good grades, but the following can be mentioned:

- When applying for admission, the students compete for places in the courses based on their GPA from previous university education. Thus primarily, students with high GPA will be admitted.
- UNIS has an expressed strategy to include students in field based authentic research. Several studies show that such authentic research experiences lead to increased motivation and better

understanding of scientific processes. This is also confirmed in the students' own course evaluations. Furthermore, UNIS is partner in BioCeed – Center for excellent education in biology, working actively with the development of new teaching methods and establishing a good teacher culture.

- Students are taught in small groups, with close follow-up from course responsible and lecturers.

5.2. Dropout rate

9,8 % of the students starting at UNIS courses finished without a passed result. As mentioned, 1 % of these were students failing the final exam. UNIS had a dropout rate of 8,5 %. These consisted of 2,4 % not showing up for the final exam, 0,4 % due to illness at the exam date, and 5,7 % who had their exam registration cancelled during the course (tab. 12a).

Students registered with «no show» as final result are either students not showing up for their final exam, 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 exam.

By omitting AGF-216 «The Stormy Sun and the Northern Lights» and SH-201 «The History of Svalbard", the dropout rate decreases markedly (tab. 12b). AGF-216 is voluntary for all students and is followed in addition to the 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 exam. The results show that a large part of the students who had their exam registration cancelled were students in AGF-216 and SH-201 who either withdrew or failed to fulfil the attendance requirements in the courses.

Students without passed result	% of students	Student years
Fail	1,2 %	1,5
No show	2,4 %	4,4
Withdrawal during exam	0,1 %	0,2
Illness	0,4 %	0,9
Cancelled exam registration	5,7 %	6,8
Total	9,8 %	13,8

Tab. 12a. Students without passed result for final exam, divided in «fail» and dropout categories.

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

Tab. 12b. Students without passed result for final exam, divided in «fail» and dropout categories, excl. the courses AGF-216 and SH-201.

5.3. Exam results – Department of Arctic biology

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

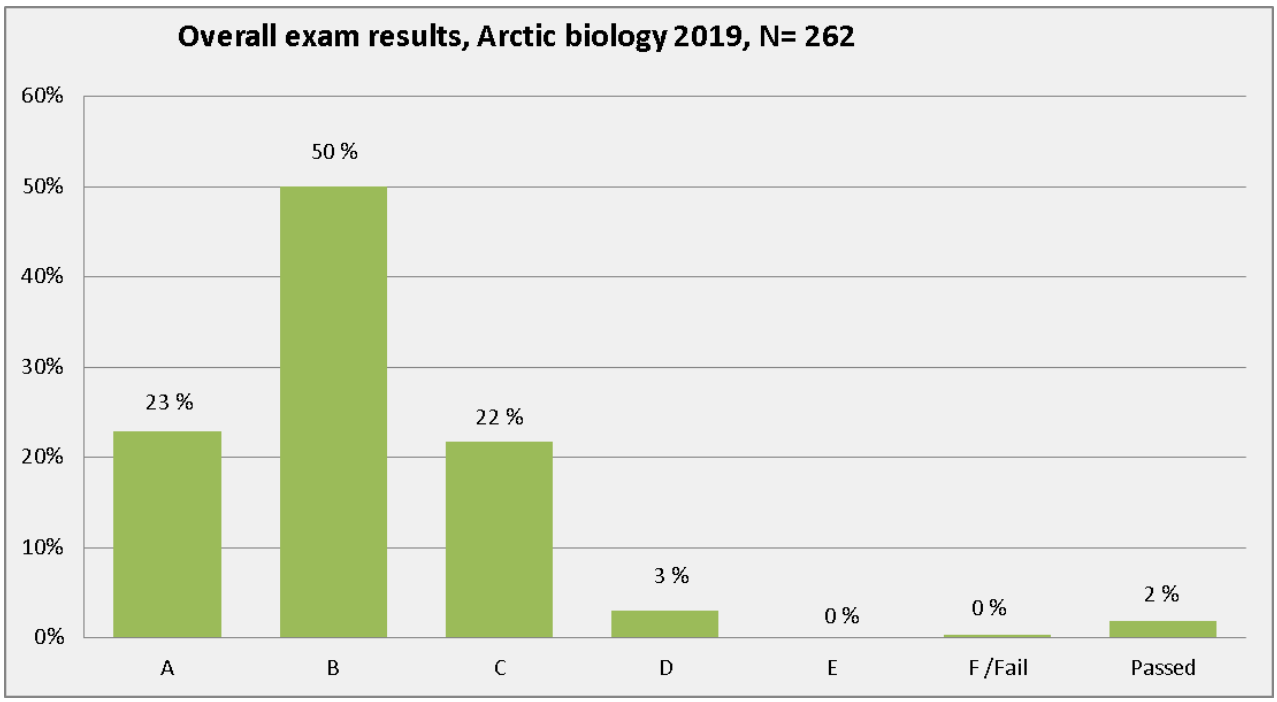


Fig. 27. Exam results Department of Arctic biology 2019. N= number of final exams.

Students at the Department of Arctic biology generally received high grades. The grade level was higher than for UNIS as a whole. The grades are slightly more spread (more As, Cs and Ds and correspondingly fewer Bs) than last year, but the difference is not large. The percent of failing grades was lower than UNIS as a whole; 0,4 %.

An overview of students finishing without passed result is given in table 13. An explanation of the different dropout categories is found in chap. 5.2. See also table 2 for course details.

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

Tab. 13. Students finishing without passed result, Department of Arctic biology; divided in «fail» and dropout categories.

5.4. Exam results – Department of Arctic geology

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

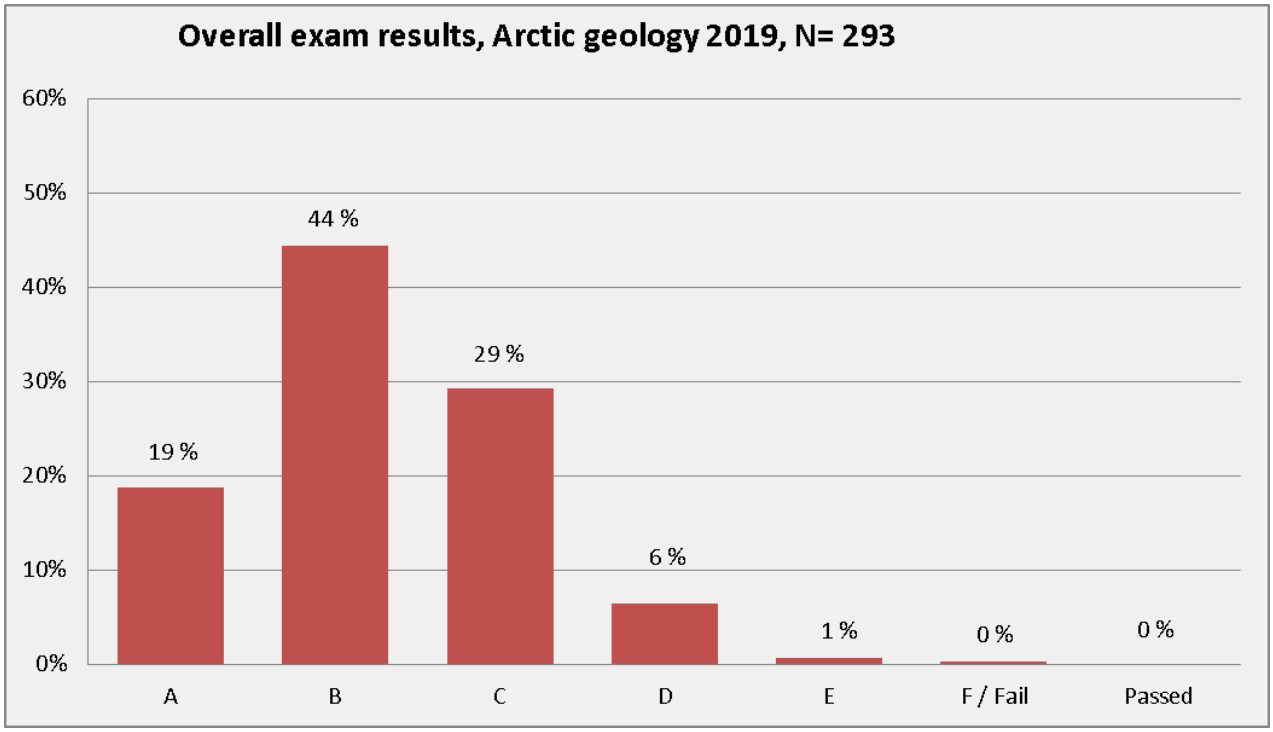


Fig. 28. Exam results Department of Arctic geology 2019. N= number of final exams.

Students at the Department of Arctic biology generally received high grades. There are slightly more Cs at the sacrifice of As and Bs than in 2018, but the difference is not big. The percentage of failing grades were lower than for UNIS as a whole; 0,3 %. All courses in the department were graded by letter grades, no courses were graded as «pass / fail».

An overview of students finishing without passed result is given in table 13. An explanation of the different dropout categories is found in chap. 5.2. See also table 4 for course details.

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

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

5.5. Exam results – Department of Arctic geophysics

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

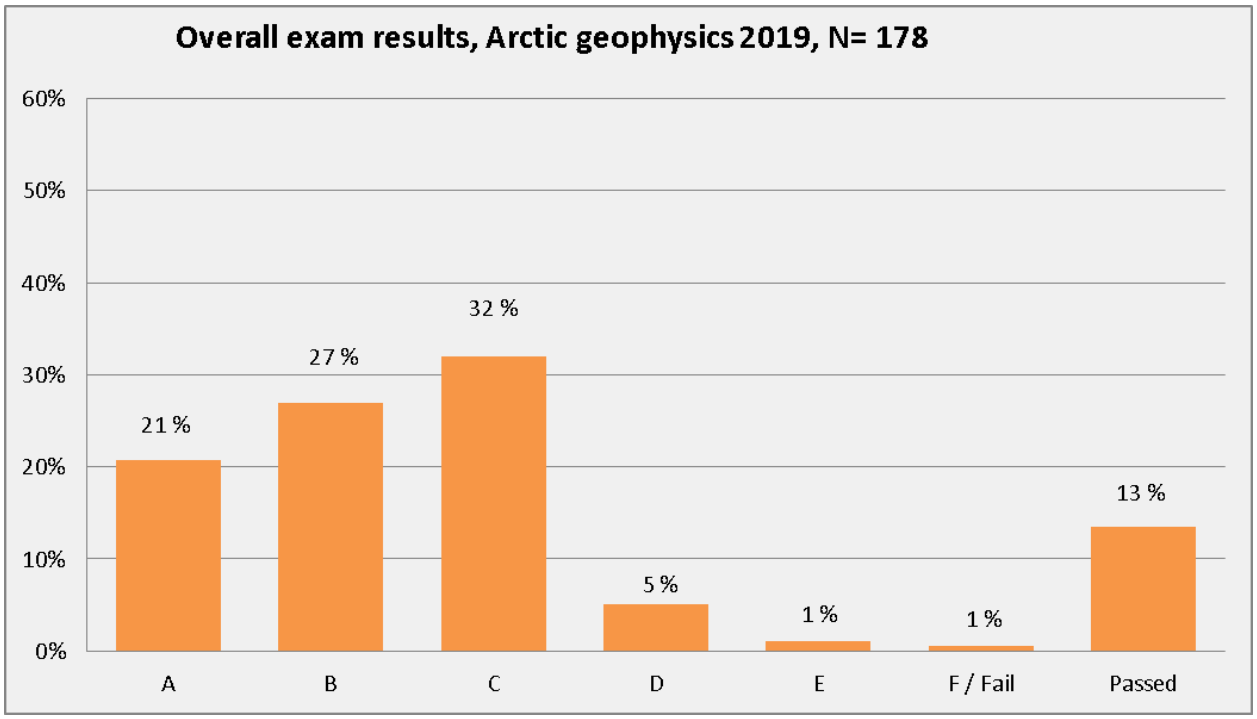


Fig. 29. Exam results Department of Arctic geophysics 2019. N= number of final exams.

The Department of Arctic geophysics had a somewhat different grade distribution than the other departments, with C being the most predominant grade. This has changed from 2018, when the most common grade was B, in accordance with the other departments. The percentage of "Passed" has also increased, due to the grading scale in the course AGF-353 / 853 "Sustainable Arctic energy exploration and development". The department reported a percentage of failing grades of 0,6 % in 2019.

An overview of students finishing without passed result is given in table 15a. 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 the exam or withdrawing their exam registration. This was largely due to students in the course AGF-216, which is voluntary for all UNIS students, and can be followed in addition to normal study progression. Table 15b 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 6 for course details.

Students without passed result	% of students	Student years
Fail	0,6 %	0,1
No show	4,3 %	1,1
Illness	0,0 %	0,0
Cancelled exam registration	18,6 %	3,6
Total	23,5 %	4,8

Tab. 15a. 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	0,6 %	0,1
No show	1,2 %	0,4
Illness	0,0 %	0,0
Cancelled exam registration	0,0 %	0,0
Total	1,9 %	0,5

Tab. 15b. Students finishing without passed result, excl. AGF-216, Department of Arctic geophysics; divided in «fail» and dropout categories.

5.6. Exam results – Department of Arctic technology

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

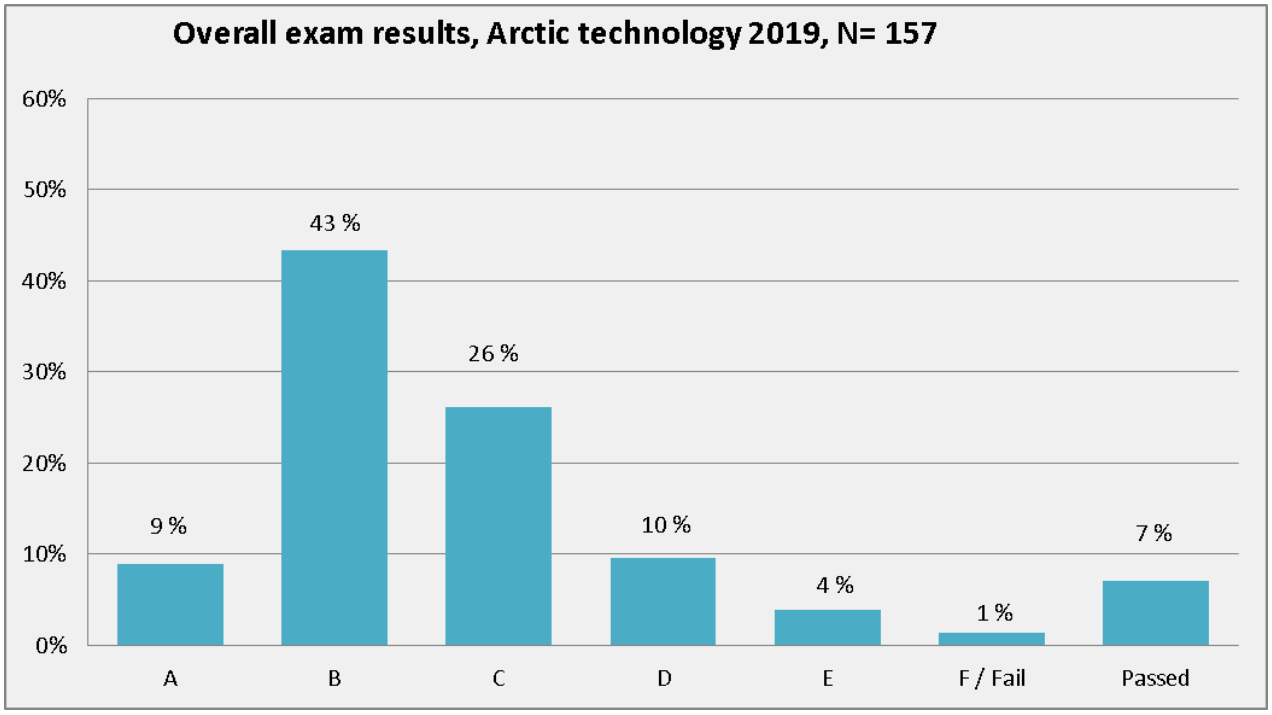


Fig. 30. Exam results Department of Arctic technology 2019. N= number of final exams.

The Department of Arctic technology had a grade level approximately in line with the total UNIS result, however there were slightly fewer As and some more Bs than UNIS as a whole. There is a higher number of Bs in 2019 than in 2018, at the sacrifice of As and Cs. The percentage of failing grades is approximately the same as for UNIS as a whole.

An overview of students finishing without passed result is given in table 16. An explanation of the different dropout categories is found in chap. 5.2. The department had, together with Arctic safety-courses (tab. 17), the highest percentage of students finishing without a passed grade (if the voluntary courses AGF-216 and SH-201 are not counted). See also table 8 for course details.

Students without passed result	% of students	Student years
Fail	1,3 %	0,3
Withdrawal during exam	0,6 %	0,2
No show	3,0 %	0,8
Illness	1,2 %	0,4
Cancelled exam registration	0,6 %	0,2
Total	6,7 %	1,9

Tab. 16. Students finishing without passed result, Department of Arctic geology; divided in «fail» and dropout categories.

5.7. Exam results – Arctic safety

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

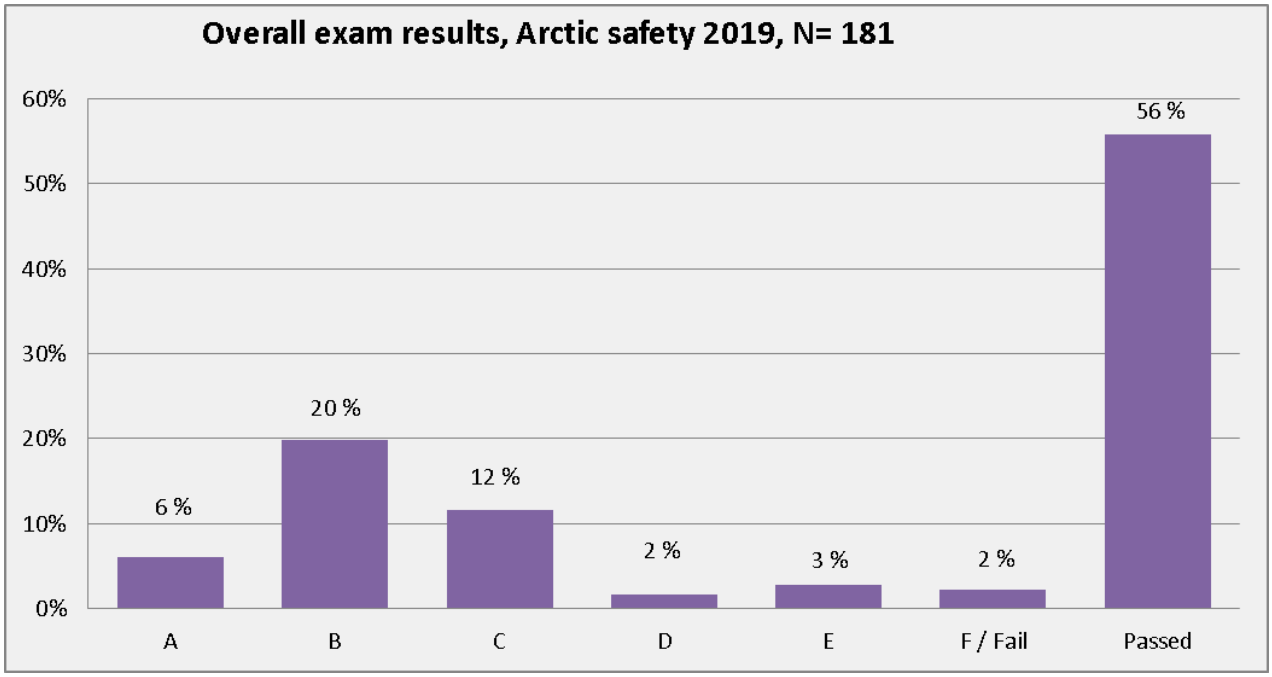


Fig. 31. Exam results, courses within Arctic safety 2019. N= number of final exams.

The course AS-101 with 101 candidates in total is grades as «pass / fail». The other courses are graded with letter grades A-F. This is the reason behind the high percentage "Passed" in this group. When disregarding this course, the grade distribution was more or less in line with UNIS as a whole. As 3 out of 6 courses in this group were new in 2019, it does not make sense to compare the results with previous years.

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. Courses within Arctic safety had a slightly higher percentage of failing grades than UNIS as a whole (2,2 %). Together with Department of Arctic technology, they had the highest percentage of students finishing without a passed grade (tab. 16). See also table 10 for course details.

Students without passed result	% of students	Student years
Fail	2,2 %	0,4
No show	2,1 %	0,6
Illness	0,0 %	0,0
Cancelled exam registration	2,1 %	0,7
Total	6,4 %	1,6

Tab. 17. Students finishing without passed result, Arctic safety; divided in «fail» and dropout categories.

5.8. Exam results – The History of Svalbard

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

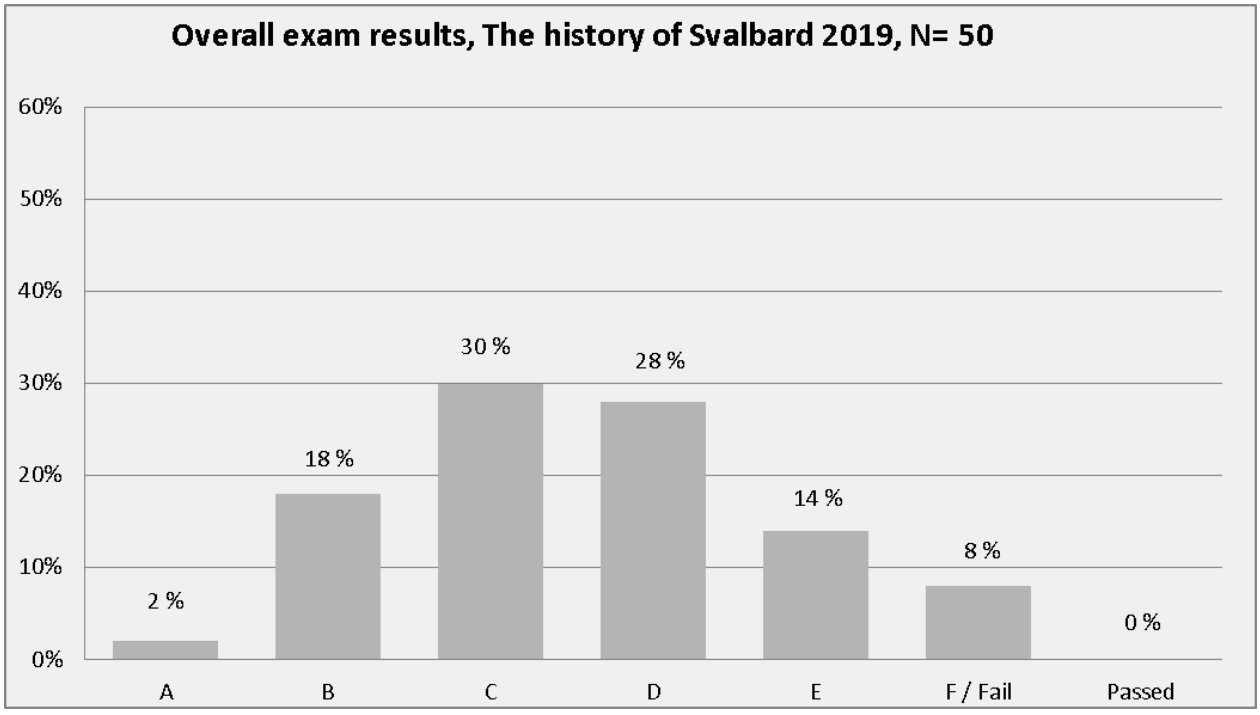


Fig. 32. Exam results SH-201 «The history of Svalbard» 2019. N= number of final exams.

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. Just above half of the students sitting the exam in SH-201 were ANG-students. The grade distribution for this course more or less followed a normal distribution, and the average grade was lower than for UNIS as a whole. 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. This is probably also the reason why this course had a higher percentage of failing grades than UNIS as a whole (8 %), and also the reason why a high percentage of the students withdrew their exam registration, or did not fulfil the attendance requirements to sit the exam.

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.

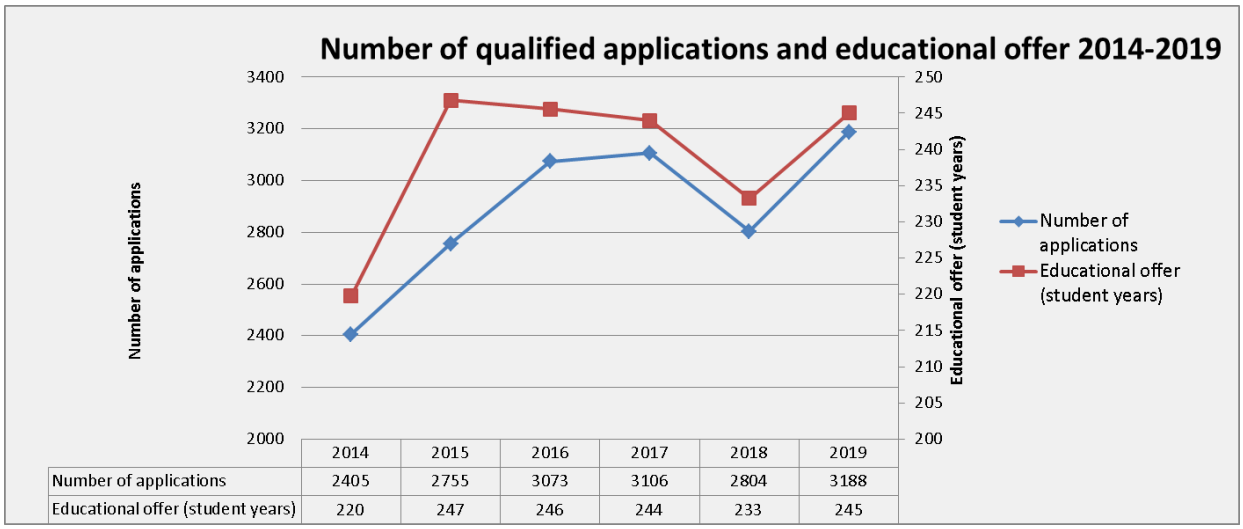
Students without passed result	% of students	Student years
Fail	8,0 %	0,4
No show	2,8 %	0,2
Illness	1,4 %	0,1
Cancelled exam registration	26,4 %	1,9
Total	38,6 %	2,6

Tab. 18. Students finishing without passed result, SH-201 "The history of Svalbard"; divided in «fail» and dropout categories.

6. Admission statistics

6.1. Applicants

UNIS received 3188 applications for courses in 2019, whereof 2173 were found qualified for admission to the courses applied for. This is an increase compared to the previous year, and is close to the peak year in 2017, when UNIS had 2218 qualified applicants. Naturally the number of applicants, both qualified and non-qualified varies with the total educational offer at UNIS (fig. 33). When reporting application numbers, the courses AS-101, AGF-216 and SH-201 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.



	2014	2015	2016	2017	2018	2019
Number of applications	2405	2755	3073	3106	2804	3188
Educational offer (student years)	220	247	246	244	233	245

Fig. 33. Number of qualified applications for courses, and educational offer in student years, 2015 – 2019.

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 is quite unchanged over the last years. The application numbers should be seen in light of the total educational offer in each department (chap. 4.5 – 4.9).

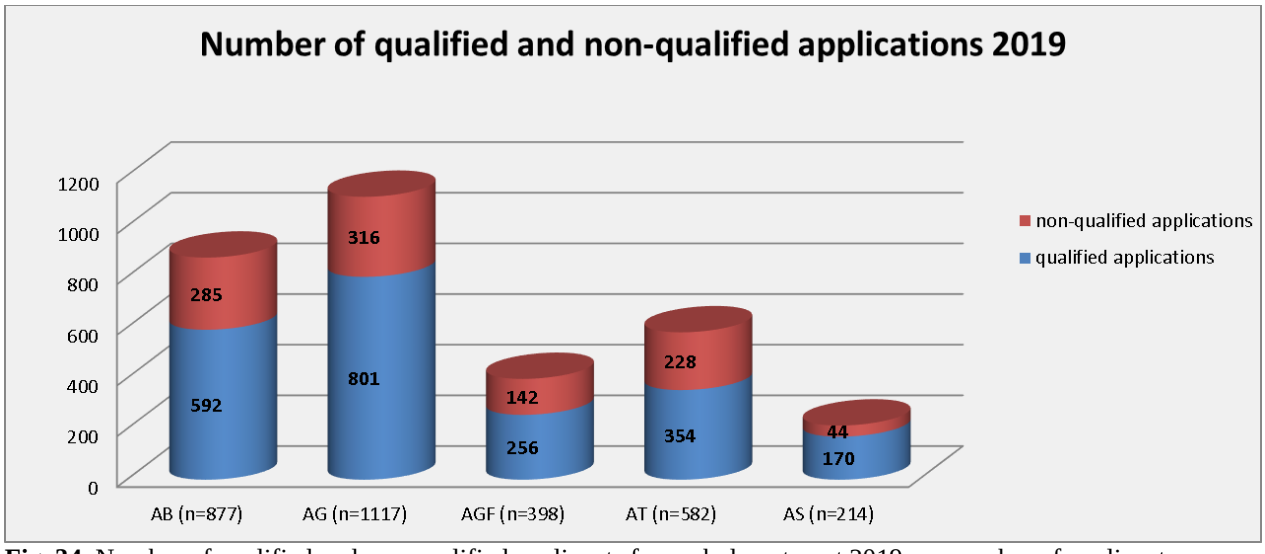


Fig. 34. Number of qualified and non-qualified applicants for each department 2019. n= number of applicants.

Figure 35 shows the percentage of qualified applications per department. The Department of Arctic geology had the highest percentage of applications and has increased from 31 to 37 % since 2018. These are, like last year, followed by the Department of Arctic biology, which increased their percentage of applications from 24 to 27 %. The percentage of applications at the Department of Arctic technology has decreased from 22 to 16 %, and the percentage at the Department of Arctic geophysics has decreased from 18 to 12 %. Arctic safety accounted for 8 % of the qualified applications to UNIS. For AS-203, the application number is set equal to the admission number (29 students), as this admission process is done by UiT – The Arctic university of Norway.

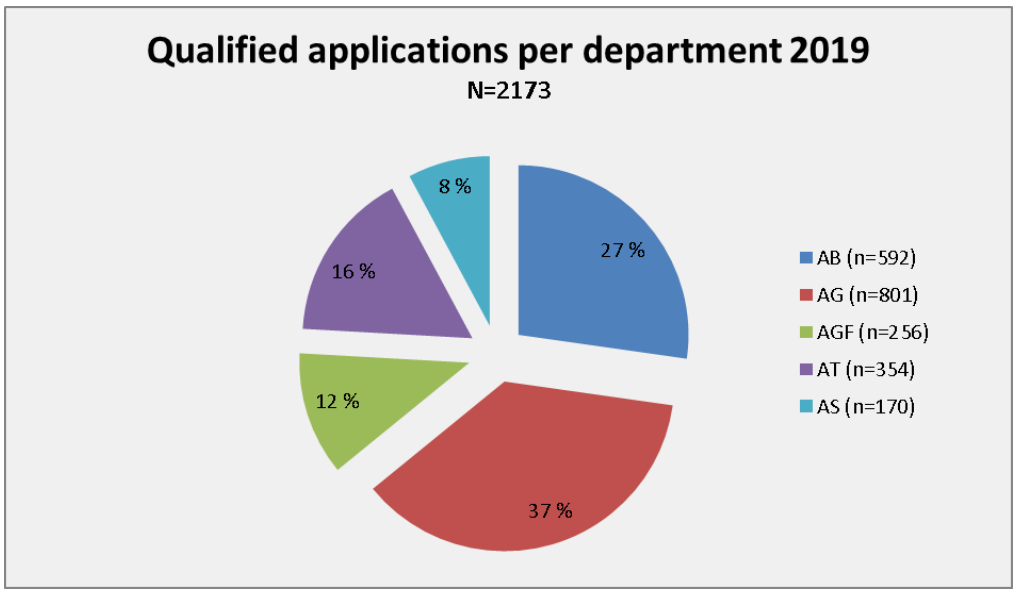
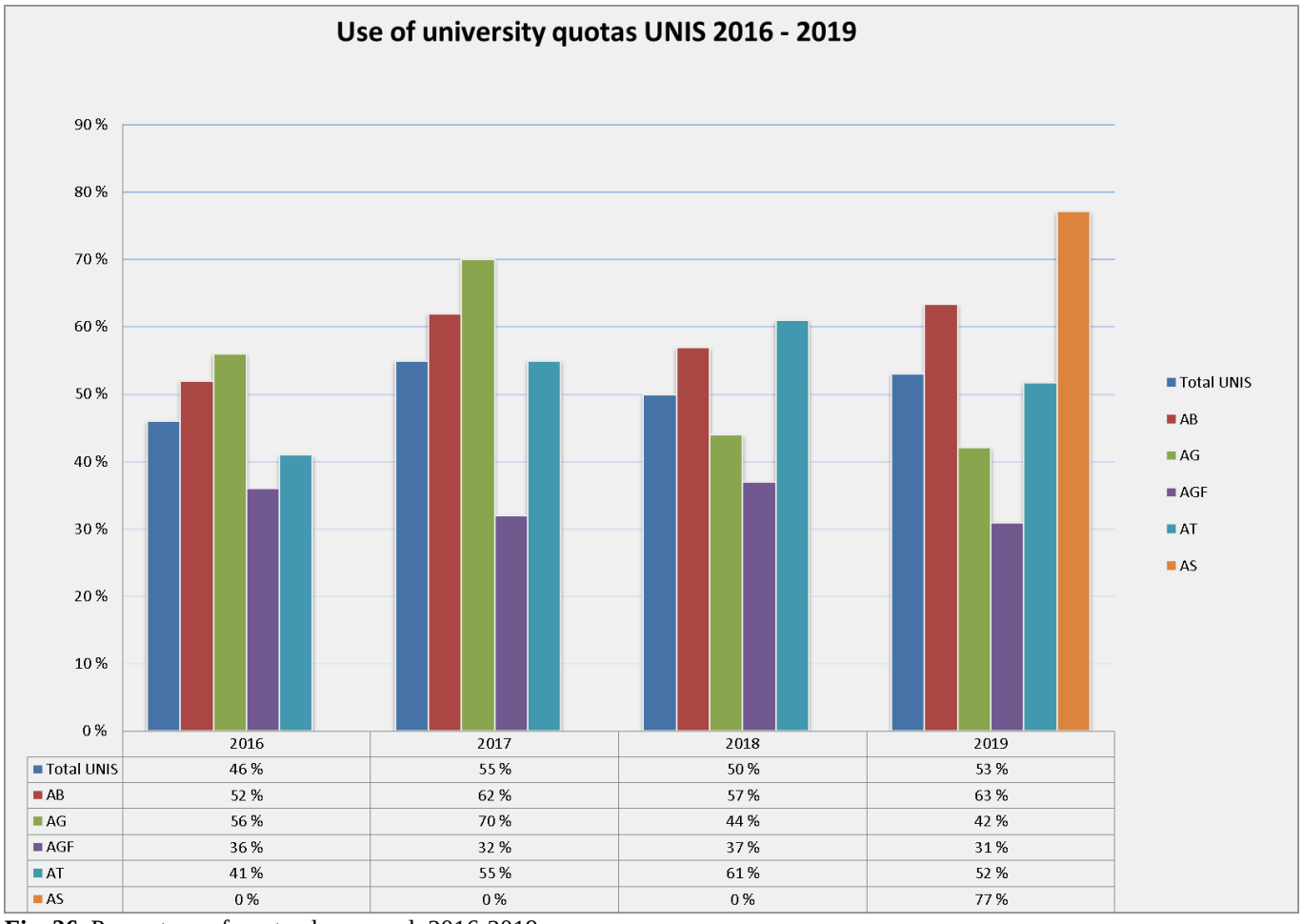


Fig. 35. Percentage qualified applications for each department 2019. N= total number of qualified applications. N= qualified applications for each department.

All in all, we see a decrease in the production of student years, despite an increase both in educational offer and in number of applicants. This relates to a lower filling degree in the courses. A closer examination of the application numbers shows that a higher percentage of students declined their study place at UNIS or did not show up at course start. While in previous years on average 1.5 study offers were needed to fill one study place, in 2019 1.6 study offers were needed to fill one study place.

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. Figure 36 shows that 53 % of the universities' quota places were used in 2019. The use of quotas has always been around 50 %, however it would be advantageous to increase the use of quota places. Courses within Arctic safety used a high percentage of their quota places. Use of quotas is not reported for Arctic safety prior to 2019, as the first course with quotas was established in 2018 (AS-301).



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

Fig. 36. Percentage of quota places used, 2016-2019.

The reason behind such a low percentage of quota places used is first and foremost due to a discrepancy between the universities' wishes for quota places in the specific courses, and the actual 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 different universities enhances the predictability in terms of incorporating the courses in the universities' study programmes.

7. Public defenses and PhD candidates 2019

28 PhD candidates were affiliated with UNIS in 2019. 18 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 RCN or external projects.

Seven doctoral research fellows were employed at UNIS in 2019. Three of these were employed at the Department of Arctic biology, two at the Department of Arctic geology, and two at the Department of Arctic geophysics. Three of the research fellows were financed by the Ministry of education and research, while one was externally funded. New this year is that three research fellows were employed through the Nansen Environmental and Remote Sensing Center, financed by the Ministry, RCN and the partner institutions.

Four public defenses were arranged at UNIS in 2019, two at the Department of Arctic biology, and two at the Department of Arctic geophysics (tab. 19). Two of the candidates were affiliated with UiT – The Arctic university of Norway, while one was affiliated with the University of Bergen. The last candidate was affiliated with Nord University, representing the first public defense arranged at UNIS for this university.

Six of UNIS PhD candidates were delayed beyond their PhD period during the entire year. Three more finished their PhD period in 2019 without having defended their theses.

	2019			
Department	Dept. of Arctic biology	Dept. of Arctic geology	Dept. of Arctic geophysics	Dept. of Arctic technology
No. candidates	9	9	8	2
Public defenses	2	0	2	0

Tab. 19. PhD candidates and public defenses in each department 2019.