

Number:

Zvolen 16.11. 2021

**Evaluation of the educational activities at the Faculty of Forestry, TU in
Zvolen
for the academic year 2020/2021**

(1st degree, 2nd degree)

Material for the hearing

Proposal for resolutions of the Scientific Council
of the Faculty of Forestry

on 25. 11. 2021

The evaluation is accepted:

- without comments
- with comments

It shall be submitted on the basis of
§ 12(1)(c)
of the Higher Education Act 131/2002 Coll.

Prepared and submitted by: doc. Ing. Miroslav Kardoš, PhD., Vice-Dean of the Faculty of Forestry

SUMMARY

The aim of the presented evaluation report is to summarize and evaluate the pedagogical process through indicators recorded in the University Information System (UIS) and the Dean's Office of the Faculty of Forestry for the academic year 2020/21. IN THE academic year (AY) 2020/21, teaching was conducted at the Faculty of Forestry in the bachelor study programmes Forestry and Applied Zoology and Hunting. In the second cycle of studies, education was provided in the study programmes Adaptive Forestry, Applied Zoology and Hunting and Forest Ecology.

Pursuant to the Decree of the Ministry of Education, Science, Research and Sport of the Slovak Republic on the system of study disciplines of the Slovak Republic No. 244/2019 Coll. the original fields of study have been replaced by a single new field of study Forestry. As part of the offer of study programmes in this field of study, the study programme Arboriculture and Communal Forestry was also available for applicants at the bachelor's degree level. In the engineering study programmes, there was additionally the possibility of enrolling students in Geoinformation and Mapping Techniques in Forestry, Forestry Technology and the study programme in English Forestry and Wildlife Management. Despite their promotion among potential candidates, these were not opened due to a lack of applicants.

The academic year under review is particularly specific in terms of the ongoing pandemic and the resulting impact on full-time teaching, which persisted for almost the entire winter and summer semesters. As in the previous academic year, part of the teaching took place at a distance via MSTeams. The state examinations for the graduating students in both 1st and 2nd cycle were conducted in a face-to-face format.

At the same time, processes, structures, and guidelines were formed at the university and faculty level during the AY in connection with the work on the alignment of curricula according to the standards of the accreditation agency.

At the Faculty of Forestry in the evaluated AY 2020/21, a total of 608 students studied in the 1st and 2nd cycle of studies, years, as well as both forms of study, which is a decrease of 38 students compared to the previous AY 2019/20 (646 students).

The number of students enrolled in the assessed AY 2020/21 increased in the 1st cycle of full-time and part-time studies by 35 students in total. In the current AY 2021/22, a total of 162 students have enrolled.

The deadline for applications for the next AY was March 31, 2021. Following this, student enrollments were held in two rounds (7/2021 and 9/2021). In order to promote studies at the Faculty of Forestry, opportunities to reach potential applicants were used, mainly through targeted campaigns via social networks, advertisements, direct outreach via Edupage in cooperation with secondary schools.

In the academic year 2020/21, a total of 63 internal lecturers were involved in teaching. The total teaching time is 53,159 points, while the average teaching time of 61.07 full-time in-house teaching staff is 870 points, a decrease of 60 points from the previous AY.

EVALUATION OF EDUCATIONAL ACTIVITIES AT THE FACULTY OF FORESTRY OF THE TU IN SVOLEN FOR THE ACADEMIC YEAR 2020/21

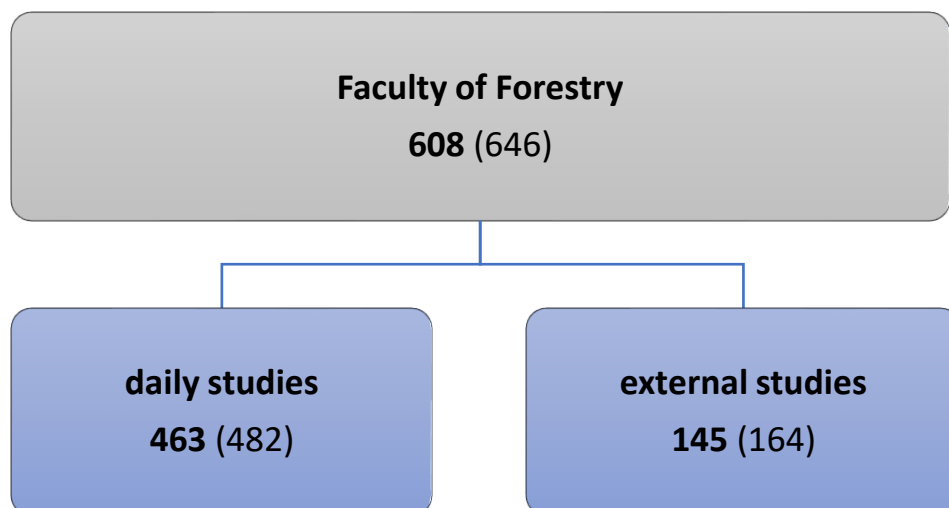
1. Study programmes and fields of study in which teaching was provided at the Faculty of Forestry in the academic year 2020/21

In the academic year 2020/21, the following accredited study programmes were taught at the Faculty of Forestry:

1. degree (Bachelor's degree):
 - Study programme **Forestry**, full-time and part-time
 - Study programme **Applied Zoology and Hunting**, full-time and part-time
2. degree (engineering):
 - Study programme **Adaptive Forestry**, full-time and part-time
 - Study programme **Applied Zoology and Hunting**, full-time and part-time
 - Study programme **Forest Ecology**, full-time form

2. Number of students at LF in the academic year 2020/21 (as of 31.10. 2020)

The numbers of students in each form, degree and study programme are shown in Figure 1a, b,c. (note: the data, also for the previous AY, are adjusted for duplicate students



registered in the UIS, e.g. due to transfer to external studies)

Fig. 1a Number of students at the Faculty of Forestry by form of study in AY 2020/21
Note: Figures in brackets are for the 2019/20 academic year

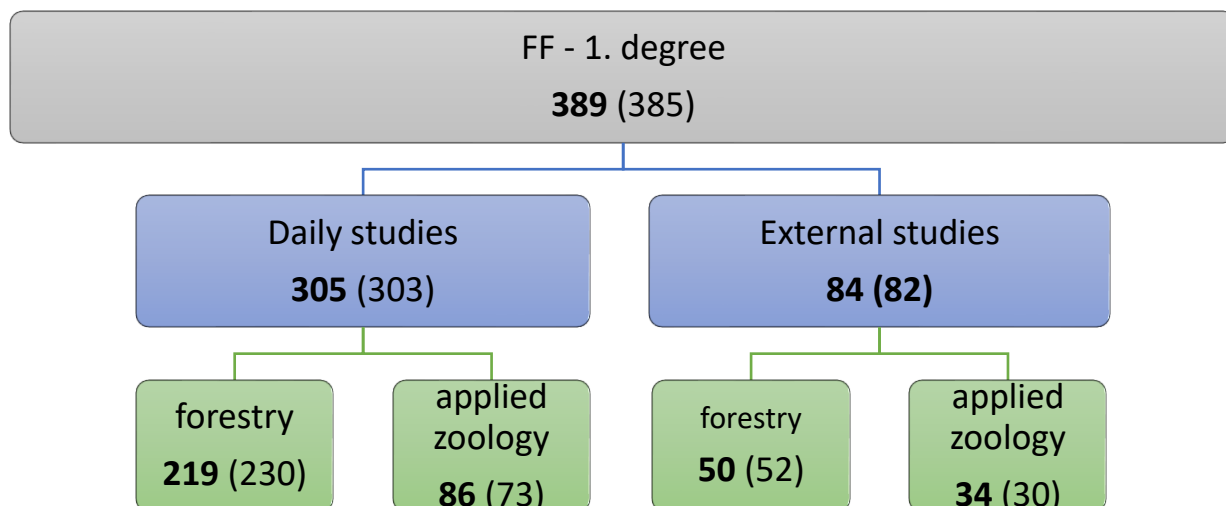


Fig. 1b Number of students at the Faculty of Forestry in the academic year 2020/21 in the first cycle of studies

Note: Figures in brackets are for the previous academic year 2019/20

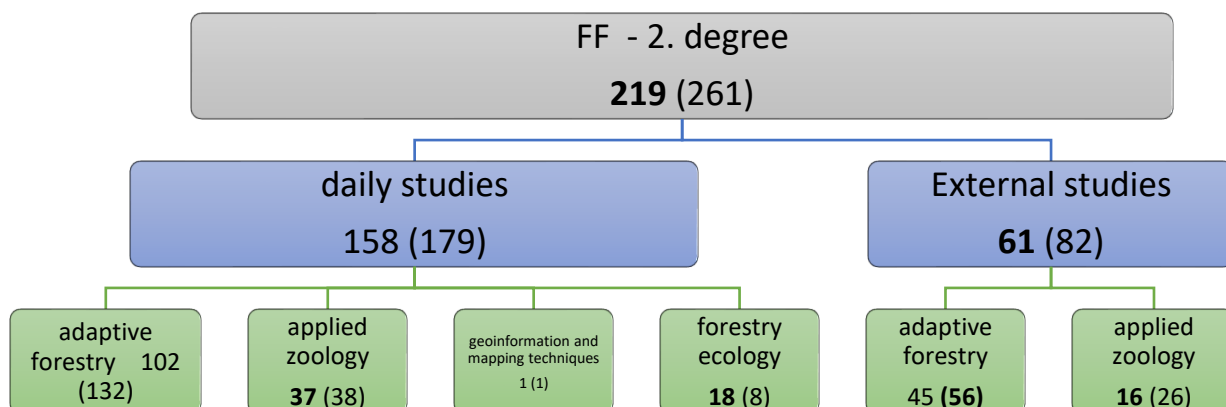


Fig. 1c Number of students at the Faculty of Forestry in the academic year 2020/21 in the second cycle of studies

Note: Figures in brackets are for the previous academic year 2019/20

3. Study programmes

3.1. Bachelor's degree programmes

Table 1 presents the figures for students on Bachelor's degree programmes in the academic year 2020/21.

Table 1 Number of students enrolled in the academic year 2020/21- I. degree									
study programme	enrolled students	Completion of the academic year 2020/2021							
		successful completion of AY		have interrupted their studies		dropped out, were expelled		code 79 - transfer	
		number	%	number	%	number	%	number	
I. degree - full-time study									
Forestry	220	171	78	5	2	44	20	2	
applied zoology and hunting	87	56	64	3	3	28	32		
<i>full-time study total</i>	<i>307</i>	<i>227</i>	<i>73</i>	<i>8</i>	<i>3</i>	<i>72</i>	<i>23</i>	<i>2</i>	
I. degree - external study									
Forestry	52	33	63	4	8	15	29	1	
applied zoology and hunting	34	24	70	-		10	29		
<i>external study total</i>	<i>86</i>	<i>57</i>	<i>66</i>	<i>4</i>	<i>5</i>	<i>25</i>	<i>29</i>	<i>1</i>	
<i>ES + ES TOTAL</i>	<i>393</i>	<i>284</i>	<i>72</i>	<i>12</i>	<i>3</i>	<i>97</i>	<i>25</i>	<i>3</i>	

In full-time studies, 73% of the 307 students of the first cycle of studies successfully completed the academic year (76%, 80% in the previous two ARs), in external studies 66% of the 86 enrolled students successfully completed the academic year (50%, 60% in the previous two ARs). Of the total number of first cycle students (307) enrolled in the academic year 2020/21, 72 % successfully completed the year of study (71 %, 76 % in the previous two ARs).

A total of 72 full-time students (66 - AY 2019/20, 59 - AY 2018/19) and 25 part-time students (28 - AY 2019/20, 31 - AY 2018/19) dropped out or were withdrawn, i.e. a total of 97 students (104 - AY 2019/20, 90 - AY 2018/19) out of a total of 393 students enrolled in both forms of study, which is 25% compared to 27% in the previous AY and 21% in AY 2018/19.

The number of expelled students is partly related to the difficulty of studying at the Faculty of Forestry, but it has also been influenced to some extent by the coronavirus pandemic in the current AY.

An important task in this regard for teachers remains increased activity in communication and work with students, motivation of students by partial assessment during the semester, the use of alternative forms of teaching (block exercises, joint problem solving in a team, problem-oriented assignments, highlighting the practical content of the taught issues).

3.2. Engineering study programmes

Table 2 presents the figures on students of engineering study programmes in the academic year 2020/21. In full-time study, 91% of 159 students of the 2nd cycle of study successfully completed the academic year (94% - AY 2019/20, 95% - AY 2018/19), in part-time study, 98% of 63 enrolled students successfully completed the academic year (82% - AY 2019/20, 86% - AY 2018/19).

Of the 222 enrolled 2nd cycle students in the academic year 2020/21, 93% of students successfully completed the academic year (90% of students in the last AY, 93% in AY 2018/19).

Table 2 Number of students enrolled in the academic year 2020/21 - Level II

study programme	enrolled students	Completion of the academic year 2020/2021							
		successful completion of AY		have interrupted their studies		dropped out, were expelled		code 79 - transfer	
		number	%	number	%	number	%	number	
II. degree - full-time study									
adaptive forestry	102	93	91	-	-	9	9	5	
Geoinformation and mapping techniques in forestry	1	-	-	-	-	1	100		
applied zoology and hunting	38	34	89	2	5	2	5	1	
forest ecology	18	18	100	-	-	-	-		
full-time study total	159	145	91	2	1	12	8	6	
II. degree - external study									
Forestry	46	46	100	-	-	-	-	1	
applied zoology and hunting	17	16	94	-	-	1	6		
external study total	63	62	98	-	-	1	2		
ES + ES TOTAL	222	207	93	2	1	13	6		

The average grades by year and programme for the academic year 2020/21 are shown in Table 3a.

The overall mean grade of LF students in the Bachelor's degree is 2.6, which is a slight improvement from the previous AY (2.67) (Table 3b). The best average grade was achieved by students in the AZP external form (2.43), the lowest repetition index of 1.57 was achieved by forestry students in the full-time form.

The overall average grade of LF students in the engineering degree is 2.2, almost identical to the previous AY 2019/20, with the same repetition index of 1.33. The best results were achieved by students in the Forest Ecology engineering degree programme, with an average grade of 1.62 and a repetition index of 1.14.

Table 3a Average grades by year, study programme, field of study in the academic year 2020/21 for full-time and part-time studies combined

study programme (field)	P r o o c e s s								
	Level I					Level II			
	I.	II.	III.	IV.	Together	I.	II.	III.	Together
Forestry - B-LESN	2,67	2,64	2,52		2,61				
	1,74	1,58	1,38		1,57				
Forestry - B-Forestry	3,27	2,76	2,61	2,65	2,82				
	2,27	1,81	1,64	1,33	1,76				
app. Zoology and hunting B-AZP	2,97	2,5	2,41		2,63				
	2,05	1,67	1,47		1,73				
app. Zoology and hunting B-AZPE	2,82	2,55	1,91		2,43				
	1,96	1,52	1,27		1,58				
S P O L U - Level I (ES + ES)	2,93	2,6	2,4	2,65	2,6				
	2,0	1,6	1,44	1,33	1,7				
Adaptive Forestry I-ALES						2,15	2,0		2,06
						1,27	1,25		1,26
forest ecology I-EL						1,97	1,27		1,62
						1,26	1,01		1,14
Adaptive Forestry I-ALES (ES)						2,72	3,04	2,32	2,69
						1,56	2,05	1,35	1,65
geoinformation and mapping techniques in forestry									
app. zoology and hunting. I-AZP						2,05	2,05		2,05
						1,32	1,22		1,27
app. zoology and hunting. I-AZPE						2,13	2,81	2,08	2,34
						1,6	1,82	1,12	1,51
S P O L U - II. degree (ES + ES)						2,20	2,23	2,2	2,2
						1,40	1,47	1,24	1,33

Note: the first row is the average mark, the second row is the repetition index

Table 3b average grades and repetition index for the past 4 academic years

Level 1						
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
average	2,7	2,63	2,6	2,62	2,67	2,60
Index op.	1,7	1,59	1,55	1,55	1,68	1,7
Level 2						
	2015/16	2016/17	2017/18	2018/19	2019/20	2020/21
Average	2,1	2,13	2,14	2,27	2,27	2,20
Index op.	1,26	1,27	1,25	1,39	1,33	1,33

4. Evaluation of the main exercises (ME)

In the academic year 2020/21, the main exercises took place in the winter semester in full-time form for two days only, then switched to the distance form and alternative ME solutions according to the instructions of the tutors.

Transportation was paid for by a grant from the University Forestry Enterprise. Transportation requests need to be defined on the application forms for entry to the HCFP due to production scheduling and student safety during ME. Settlement of earmarked activity funds (including for transport to ME) takes place annually during October for the past period with the participation of the management of the UFE. The transport funds saved have been used to provide practical aids for teaching.

The main exercises in the summer semester of AY 2020/21 were carried out in the same distance form. Course tutors were contacted with a request to send their opinion on how they plan to implement ME in the distance learning mode, while alternative ME solutions were offered, e.g. assignment to work in stands in the vicinity of the student's residence, solving the task on the basis of existing measured data from the university forestry enterprise, sending instructional videos, the possibility of uploading 360° panoramic shots from selected locations. Several teachers approached the alternative ME solution very responsibly as evidenced by the positive feedback from students.

4.1 Graduates and practice

According to the Dean's guidelines on the involvement of students in the professional forestry manager (PFM) certificate programme during their studies, students of engineering study programmes have the opportunity, after meeting the basic requirements (e.g. an average for undergraduate studies up to 1.5), to apply for and subsequently undergo work experience in various positions within the UFE. These internships will allow students to gain practical knowledge of PFM activities during their studies. As PFM practice necessarily requires a full-time form of teaching, the PFM programme was not opened in the assessed AY. The standard 25-day internship covers all areas defined by the PFM Decree, i.e. forest cultivation, forest management, forest harvesting and transport, forest protection, legislation. Following the completion of the internship, a special state examination committee is formed, where students answer questions from thematic units that are in line with the requirements for the PFM examination according to the PFM Decree and the requirements of the Ministry of Forests and Forestry of the Slovak Republic.

Of course there is a compulsory operational practice I. in the 1st year of study, which is carried out at the University Forestry Enterprise TU in Zvolen in order to gain practical experience in basic forestry activities. From the 2nd year of bachelor's studies, students are

obliged to undergo Operational Practice 2 after a period of study leave. They can complete the internship at individual organizational units of the State Forests of the Slovak Republic or at private communities, urban gardens, conservation organizations, national parks, etc. This work experience is carried out on the basis of an agreement on the placement of the student for operational practice with the respective organisation. The agreement also includes guidance on the specific content of the internship, so that it corresponds to the profile of the graduate of the relevant field of study. Students are then required to submit a written report and a certificate of completion of the internship, on the basis of which the internship can be recognised. In this academic year, as in AY 2019/20, due to the pandemic, the operational practice could not be carried out in the above form, so students were given an alternative assignment, which was prepared in cooperation with the Vice-Dean for Teaching activities by the tutors of the individual courses that the students had taken in the given year. The task of the first year students was to prepare a project, which consisted of the selection of a site in the place of residence and its characterization in relation to the acquired knowledge from the subject Geology, Bioclimatology, characterization of soil conditions on the basis of soil probes, photo-documentation and characterization of trees and herbs. The 2nd year students worked out a concrete solution for the calculation of stand characteristics on the example of a selected stand through forestry GIS in the locality of residence, as well as the identification and photo-documentation of abiotic and biotic harmful agents in the given stand. The completed field reports were emailed by the students to the Associate Dean for Educational Work for which they were awarded 2 credits.

Students of the 1st year of the 2nd stage of studies completed a pre-diploma practice in the scope of 3 weeks in the months of July - August 2020. The pre-diploma practice serves to obtain the basis for the preparation of the diploma thesis. The pre-diploma practice is supervised and credit is awarded by the supervisor of the diploma thesis.

Within the framework of linking education with practice and increasing the share of practical teaching, the subject of adaptive forest management in forestry practice has been introduced, where lecturers from the external environment (forestry operation, nature and landscape protection) are invited, who point out positive examples of nature-friendly forest management in practice through their lectures and discussions with students. The course was not open in the evaluated AY, but the lecturers from forestry practice under the leadership of prof. Saniga - the course supervisor - developed university scripts, which met with high interest among students and the public.

5. Evaluation of the quality of teaching

In terms of evaluating the quality of teaching, feedback from students and translating measures to improve the quality of learning into study programmes plays an important role. In this context, at the Faculty of Forestry we have started in the previous AY to implement the process of the so-called optimization of the pedagogical process, in which about 40 teachers, practitioners and students participated. On the basis of an extensive discussion, theses were formulated, which are gradually being implemented and reflected in the teaching or optimisation of study programmes. The basic themes include increasing the knowledge level of students, facilitating the personal development of students, intensifying the transfer of research and development knowledge into teaching and practice through graduates, and improving the conditions for a successful course of study. This also includes the permanent collection of feedback from students through the UIS and questionnaires for graduates of the 1st and 2nd cycle of studies, respectively. The material has been discussed and approved by the Dean's

College as well as the Scientific Council and is a tool through which we are continuously meeting our objectives in relation to raising the standards for the quality of studies at the Faculty of Forestry.

As part of the ongoing evaluation and quality assurance of the pedagogical process, we have carried out the following steps within the AY:

1. Control of the number of theses supervised

An important criterion is the adequacy of the number of university teachers, researchers or artists supervising theses in relation to the number of students. In this context, however, we have continued to implement measures (through a regulation of the Dean of the Faculty of Forestry) to redistribute indirect teaching more evenly, i.e. to limit the maximum number of theses supervised. By the instruction of the Dean of the Faculty of Forestry, from the AY 2018/19 onwards, a maximum of 5 students with their theses can be enrolled with one thesis supervisor (B.Sc. and Eng. theses together).

2. Control of the deadline for the submission of bachelor's and master's theses

Based on the results of the final thesis submission check, we would like to draw the attention of the teachers to instruct their graduates and undergraduates to submit their bachelor and master theses on time, as well as upload them into the university information system. Similarly, students are reminded to get their theses and dissertations done by the end of June in the 2nd year of B.Sc. Thesis topic and supervisor should be selected by November at the latest in the 1st year of B.Sc. and by November at the latest in the 1st year of Eng. Thesis supervisor and thesis topic. During the year, the scientific and pedagogical staff are notified of the announcement of new thesis topics and their updating in the UIS. Additionally, in this AY we have been offered to cooperate on the topics with NLC within the Memorandum of Cooperation with NLC and LF TUZVO. The topics were provided to our scientific and pedagogical staff by the research staff at NLC Zvolen, who will be their consultants in case of student's application for the topic.

3. Control of the handing in of examination sheets at the Dean's Office of the Faculty of Forestry

Teachers are also reminded repeatedly to fulfil their obligations to students (entering the assessment in the UIS) as soon as possible after the examination, which becomes even more important with the abolition of paper indexes. It is also important to hand in the examination papers by the deadlines set because of the obligation to archive them.

4. Finding out the number of announced examination dates (number of places for registered students)

From the level of the dean's office, a survey was conducted through the UIS to determine the number of dates during study leave.

- Both 1st and 2nd make-up dates should be posted during study leave so that students can plan their exam schedule.
- Examinations, including make-up dates, can be taken up to 31 July of the academic year in question, please advise teachers by email communication to announce the dates continuously during this period, or in the case of student interest.

5.1. Evaluation of the quality of teaching by students

The evaluation of the quality of teaching by students or the evaluation of individual teachers is carried out on the basis of a survey in the UIS, which includes the evaluation of the quality of studies for the academic year 2020/21. Students have the opportunity to comment on a specific subject, but also on additional questions related to satisfaction with the faculty, etc. At the same time, the questionnaires for teacher and subject evaluation were updated in the AY.

Questionnaire for the evaluation of teachers and subjects of ZS and LS 2020/2021:

1. Did the lecturer manage to arouse your interest in the subject?
2. Did the practitioner succeed in arousing your interest in the subject?
3. Is the speaker's form of expression (verbal, written, ...) appropriate to your requirements?
4. Is the form of the practitioner's expression (verbal, written, ...) appropriate to your requirements?
5. Lecturer's approach to students is correct, tactful, within the limits of "fair-play" ...
6. The practitioner's approach to students is correct, tactful, within the limits of "fair-play" ...
7. To what extent did you attend lectures?
8. Is the knowledge and information acquired in the course new and not repetitive (not duplicated with another course)?
9. Do you get the impression that the lecturer is interested in the students mastering the material?
10. Did the lectures provide you with more than just studying the recommended readings?
11. Did the exercises provide you with more than just studying the recommended literature?
12. Practical examples are used in teaching the subject?
13. In your opinion, how does the lecturer handle the subject?
14. How, in your opinion, does the practitioner handle the subject matter?
15. You rate the interpretation of the course content as ...
16. This subject ma ...
17. The difficulty of the subject, in your opinion, is ...
18. What did you like and dislike about the course (lecture)? (Your observations, comments, suggestions, criticism, ...) What new things would you suggest to revive the teaching of the subject in the future?
19. What did you like and dislike about the course (exercise)? (Your observations, comments, suggestions, criticism, ...) What new things would you suggest to revive the teaching of the subject in the future?

Part of the evaluation is the opportunity to comment on the quality of the teaching process at the faculty.

1. How satisfied are you with your choice of faculty (university)?
2. How satisfied are you with your choice of the programme you are studying?
3. How satisfied are you with the information at the faculty, university?
4. Do you feel that if you want to, you have the possibility and opportunity to express your opinion on the quality of the educational content at the faculty, university?
5. What do you think is the provision of didactic and computer technology?

6. How satisfied are you with the services of the study department at your faculty, university?

Table 4. Overall statistics of course evaluation in UIS (comparison AY 2020/21, 2019/20)

Period: LF - LS 2020/2021			AR2019/20	
Course evaluation				
Potential number of respondents:	647		695	
Actual number of respondents:	33	5%	42	6%
Number of duly enrolled subjects in the period:	75		73	
Number of subjects with answers:	30	40%	28	38%
Number of completed survey ballots:	91		102	
Average number of tickets per subject:	1,21		1,4	
Additional questions				
Potential number of respondents:	605		640	
Actual number of respondents:	19	3%	24	3%
Period: LF - ZS 2019/2020				
Course evaluation				
Potential number of respondents:	632		703	
Actual number of respondents:	84	13%	105	14%
Number of courses duly enrolled in the period:	68		68	
Number of subjects with answers:	48	70%	51	75%
Number of completed survey ballots:	272		332	
Average number of tickets per subject:	4,00		4,88	
Evaluation of individual subjects				
Additional questions				
Potential number of respondents:	611		650	
Actual number of respondents:	52	8%	56	8%

Students are invited to complete the above questionnaires via UIS automatically after the end of the semester. We have also taken the opportunity to mobilize students for course evaluations through SMS gateway. The percentage of completion of questionnaires on the quality of learning provided has been maintained at the level of the previous AY.

We recommend that lecturers themselves encourage their students to complete the survey after the lectures and tutorials (e.g. during the last week of the semester tutorials). Student evaluations are an important tool not only for the educator himself, but also for the continuous improvement of quality and standards in the curricula.

In addition to the course evaluations in UIS, we also used our own tools to gather feedback, especially from students of the 1st and 2nd cycle of study. The results of these questionnaires are discussed by the management of the Faculty of Forestry and are part of the proposals for changes that we continuously submit to the academic community (e.g. corrections of study plans, proposals for changes in the process of conducting state examinations at the Faculty of Forestry, which are approved by the Academic Senate of the Faculty of Forestry).

Graduates of both 1st and 2nd degree studies were contacted after successful defence of their bachelor thesis and passing the state examination to express their opinion especially on

the state examinations, but also on the overall pedagogical process for the whole study through an anonymous questionnaire via Google form application.

In the questionnaire, the following questions were asked to both undergraduate and graduate students (the answers are also given). In addition to the above questions, the students could also express their opinions on the teachers themselves, the way of conducting the state examination, their practical application after graduation and, of course, any comments on the course of study at the Faculty of Forestry.

Engineering graduates:

A total of 25 engineering graduates participated in the survey.

In the questionnaire, students were asked the following questions:

1. How do you evaluate the prepared training camp before the state exams through MS Teams?
2. How do you evaluate the seminar on writing and presenting a thesis that you had the opportunity to attend during your studies??
3. To what extent were you satisfied with the state examinations (defence and oral examination)?
4. Are you in favour of holding the annual re-examination of the state examinations during the month of August?
5. Write the name of 1-3 teachers who have most positively influenced you during your studies at LF (you can also give a reason).
6. Write the name of 1-3 teachers who have left negative memories in you during your studies at LF (if you also give a reason it will be better).
7. Do you have a job offer after graduating from LF?
8. If you are not considering a career in forestry, please state the reason.
9. Please express your any comments or suggestions that can help us to improve the course of study at LF in the future.

Som absolventom/kou študijného programu:

25 odpovedí

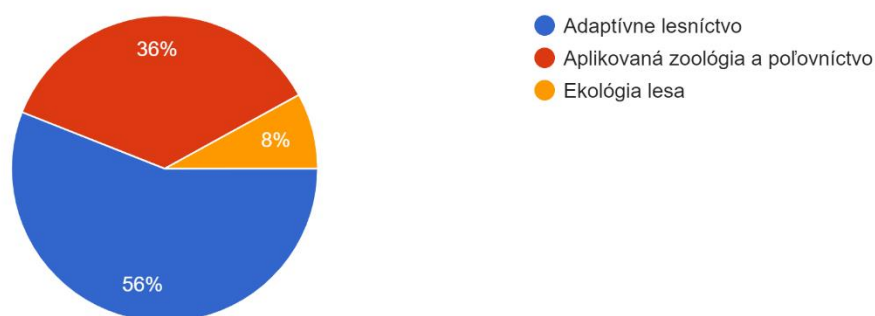


Fig. 2a Structure of study programmes according to respondents' answers

Ako hodnotíte pripravené sústredenie pred štátnicami cez MS Teams?

25 odpovedí

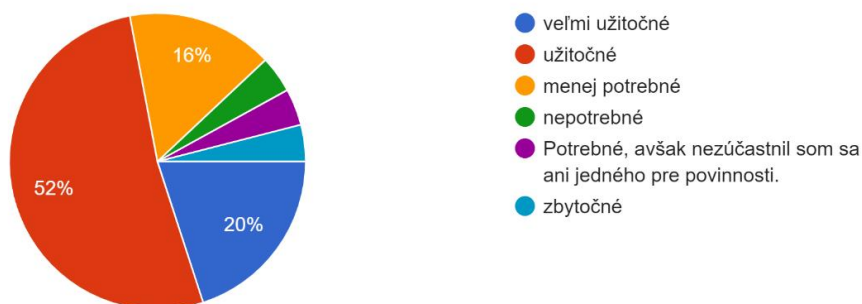


Fig. 2b Evaluation of the implemented concentration before the state exams

Ako hodnotíte seminár k písaniu a prezentovaniu záverečnej práce, ktorý ste mali možnosť absolvovať počas štúdia?

25 odpovedí

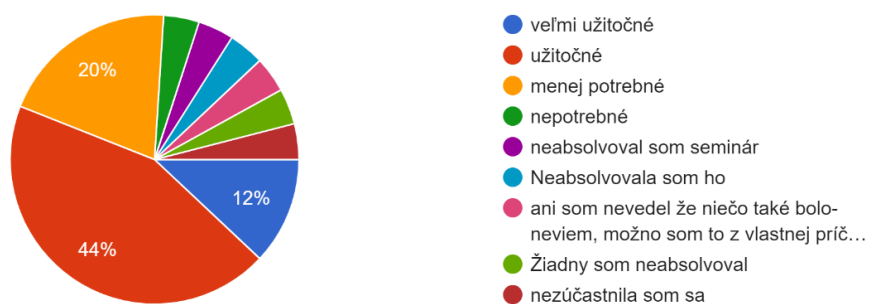


Fig. 2c Evaluation of the seminar for improving the quality of theses

Do akej miery ste boli spokojný/á s priebehom štátnych skúšok (obhajoba a ústna skúška).

25 odpovedí

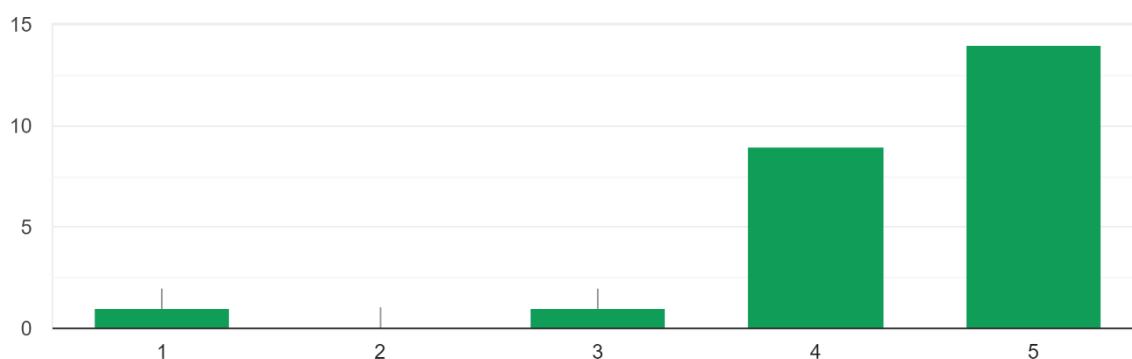


Fig. 2d Students' satisfaction rating with the level of state thesis examinations (note: 1 least satisfied, 5 most satisfied)

Ste za to aby sa každoročne konali opakované štátne skúšky v priebehu augusta?

24 odpovedí

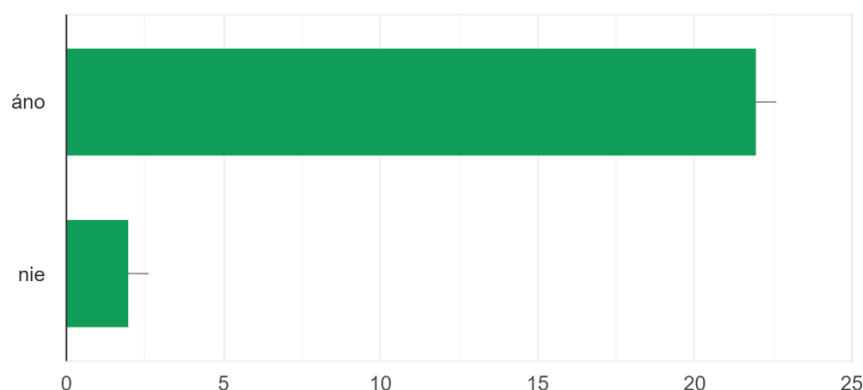


Fig. 2e Students' responses regarding the national re-tests

Máte po ukončení štúdia na LF ponuku zamestnania?

22 odpovedí

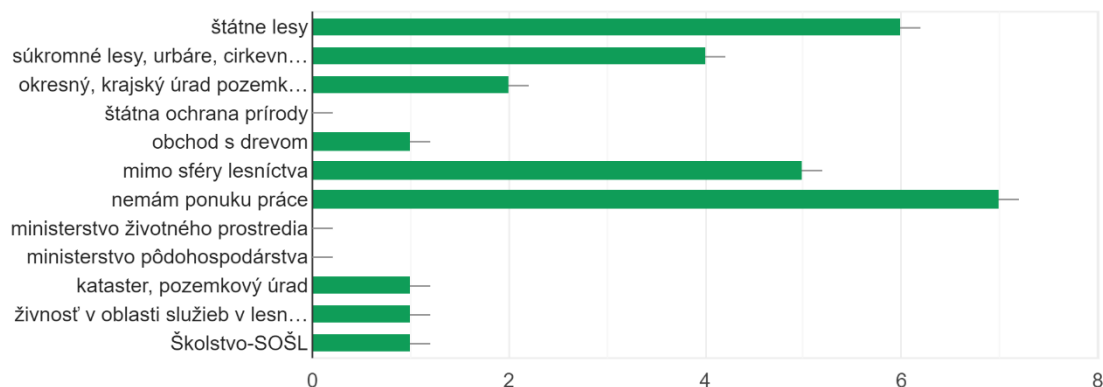


Fig. 2f Students' responses regarding employment after graduation from LF

5.2 Evaluation of state examinations by members of state examination boards

Each year after the state examinations are completed, the chairs of the state examination boards are asked to evaluate them from the perspective of the individual state examination boards.

Based on the comments of the members of the State Examination Boards, the students were distributed more evenly among the Boards over more days, and the examination days were shortened to ensure greater hygiene of the working process. In the future, we consider it important to objectify the supervisor's and opponent's evaluations of the final thesis so that they contain an appropriate number of questions. Also, the state thesis topics are updated by the

course tutors well in advance and should be more comprehensively formulated in order to assess the student's understanding of the context in relation to the knowledge acquired.

Due to the partial relaxation of the pandemic-related teaching restrictions, the state examinations were held in full-time attendance, with safety and hygiene measures being observed. Based on the comments of the members of the State Examination Boards, the students were distributed more evenly among the Boards over more days and the examination days were shortened to ensure a more hygienic working process. Examinations were conducted with spacing between examiners as well as the student himself, with disinfection of the premises and hands and covering of the respiratory tract being a matter of course. The state examination, consisting of the defence of the diploma or bachelor's thesis and the oral part, lasted in both cases for 50 minutes, which in most cases was considered by the examiners to be sufficient time to evaluate the student's answers. Based on the comments of the members of the State Examination Boards, the students in this AY also submitted one version of the printed final thesis in accordance with the approved rules for the organisation of the State Examinations.

5.3 Evaluation of teaching during the transition to distance learning

In the academic year 2020/21, a significant proportion of teaching was distance learning due to the pandemic and associated measures. In the winter semester of AY 2020/21, teaching was full-time for 2 weeks, with 2 days of core classes. Subsequently, due to the worsening pandemic situation, a switch to distance learning was made, which practically lasted the entire summer semester. For the first time in the summer semester, students came in attendance for the final state examinations and thesis defenses. Teachers used a variety of software tools to communicate with students, conduct lectures and tutorials, but especially Microsoft Teams (MST), which is available to all staff and students free of charge as part of Office 365. Students are assigned to their respective group directly from the UIS, and the list of students is regularly updated.

Equally important was communication via UIS, document server or email. To this end, students' emails were redirected to Office 365, where there is significantly more storage space compared to UIS. In addition to online lectures via MST, some lecturers also made use of sending annotated lectures and were available for online consultations via MST. In this context, we have prepared a presentation with instructions for educators to create an annotated lecture via Microsoft Powerpoint.

An important element of quality assurance of distance learning was the collection of feedback from students, which was carried out through a survey. The results pointed to several shortcomings, e.g. lack of internet connectivity for students, lack of experience of lecturers with online teaching, poor communication with students. In order to continuously improve the quality of distance education, we initiated a survey among all FF students, the results of which we report:

Survey: Distance Learning and Examination of the ZS 2020/21 (70 responses)

V akom stupni štúdia študujete?
70 odpovedí

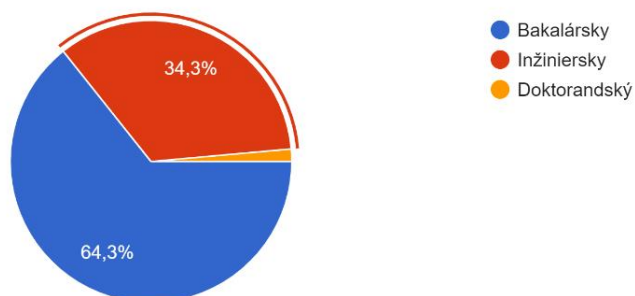


Fig. 3a Level of study according to respondents' answers

V akej forme štúdia študujete?
70 odpovedí

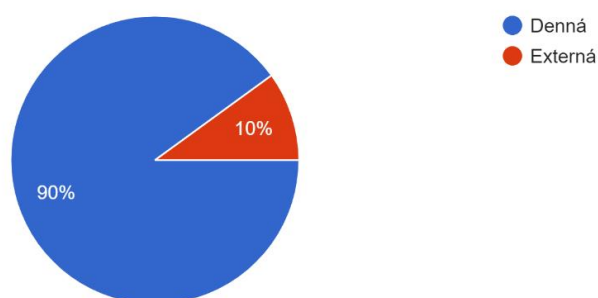


Fig. 3b Form of study according to respondents' answers

V akom študijnom programe študujete?
70 odpovedí

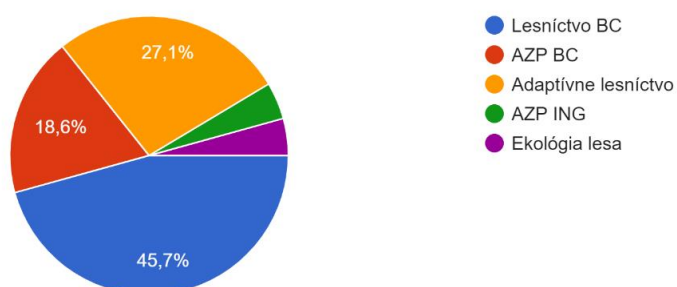


Fig. 3c Structure of study programmes according to respondents' answers

Aká je úroveň Vášho hardvérového vybavenia pre dištančnú výučbu?

70 odpovedí

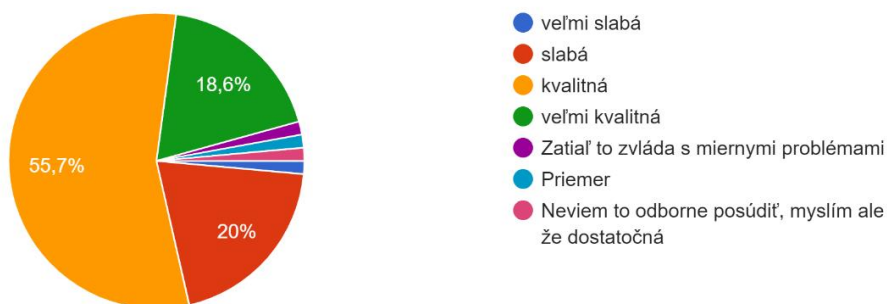


Fig. 3d Level of hardware equipment of students for distance learning

Aká je rýchlosť Vášho internetového pripojenia?

67 odpovedí

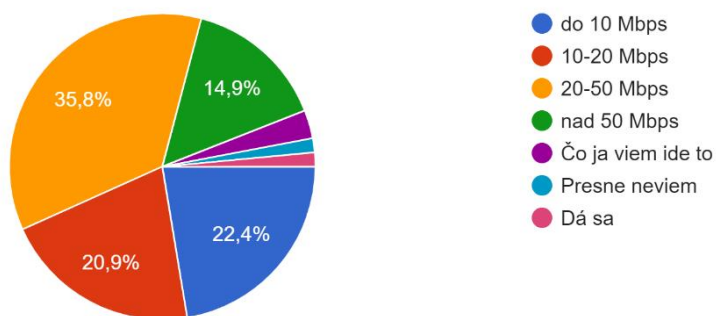


Fig. 3e Internet connectivity of students in the home environment for distance learning

Zhodnoťte úroveň zabezpečenia dištančnej výučby na LF v ZS 2020/21?

70 odpovedí

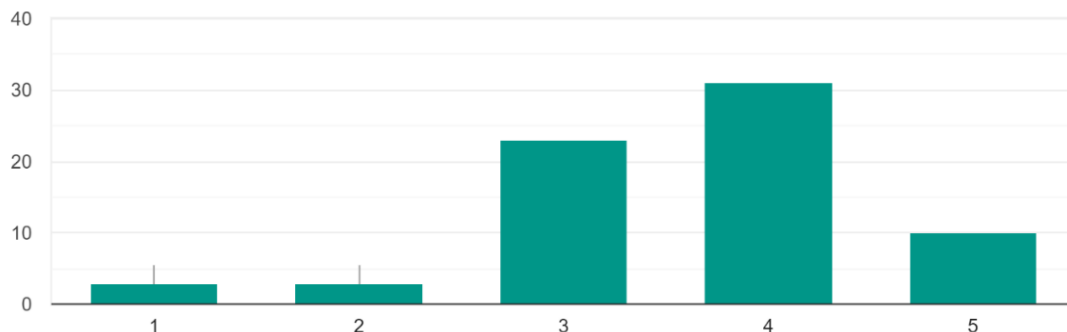


Fig. 3f Evaluation of distance learning provision according to respondents' answers (note: 1 - poor level, 5 - high level)

Next, the students had the opportunity to comment on the following questions (the answers are not given due to the range and diversity of responses, but were evaluated by members of the LF management).

Which 3 subjects do you consider to be the best managed with regard to distance learning (subject, teacher, form of distance learning)?

Name specific problems in teaching specific subjects (if any).

Name specific problems in securing the examination process (if any).

Make any comments not covered in the previous questions, e.g. the issue of conducting end-of-year theses, etc.

Survey: Distance Learning and Examination LS 2020/21 (46 answers)

V akom stupni štúdia študujete?

46 odpovedí

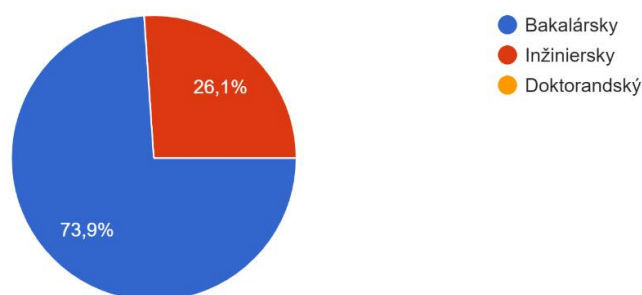


Fig. 4a Level of study according to respondents' answers

V akom študijnom programe študujete?

45 odpovedí

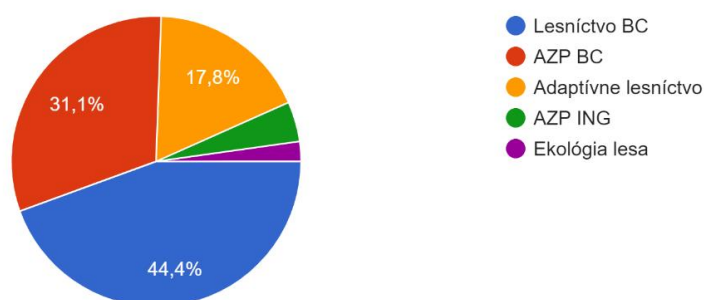


Fig. 4b Form of study according to respondents' answers

Zhodnotte úroveň zabezpečenia dištančnej výučby na LF v LS 2020/21?

46 odpovedí

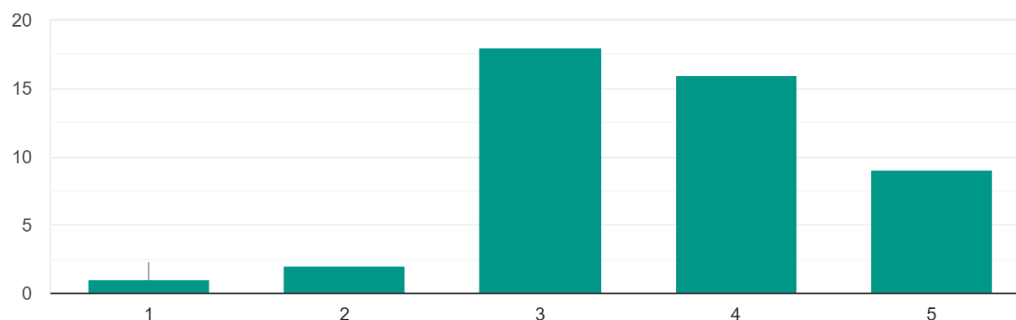


Fig. 4c Evaluation of distance learning provision according to respondents' answers (note: 1 - poor level, 5 - high level)

Next, students had the opportunity to comment on the following questions (the answers are not given due to the range and diversity of responses, but were evaluated by members of the LF management).

Which 3 subjects do you consider to be the best mastered with regard to distance learning (subject, teacher, form of distance learning).

Which 3 subjects do you consider to be the least mastered with regard to distance learning (subject, teacher, form of distance learning). If these were not you do not need to give an answer. Name specific problems in teaching specific subjects (if any).

Name specific problems in securing the examination process (if any).

Make any comments not covered in the previous questions, e.g. the issue of conducting end-of-year theses, etc.

6. Evaluation of final state examinations

6.1 Evaluation of the State Examination in the Bachelor's Degree

The bachelor state examinations, which included the defence of bachelor theses, were held on 12 July - 14 July 2021 and the corrective state examinations on 17 August 2021. The defence of bachelor theses was attended by a total of 60 students in full-time study and 13 in part-time study. A total of 73 students participated in the bachelor thesis defences and the state examination. 2 students in the external form of study graduated with honours. The number of students according to the affiliation of the study programmes and the form of study, together with the evaluation, is available in Tab. 5 and Fig. 5a.

Tab. 5 Results of bachelor thesis defences and state examinations in the academic year 2020/21

Results of BP and ŠS defences	Full-time study			External study			DS + ES TOTAL
	Forestry	AZP	MS TOTAL	Forestry	AZP	ES TOTAL	
of which with distinction	-	-	0	-	2	2	2
excellent (1) - A	1	-	1	-	-	-	1
very good (1-) - B	22	6	28	1	2	3	31
good (2) - C	18	5	23	5	3	8	31
satisfactory (2-) - D	4	3	7	1	1	2	9
sufficiently (3) - E	1	-	1	-	-	-	1
failed - FX							
summary - students who have successfully completed their studies	46	14	60	7	6	13	73

Note: 4 full-time students of the forestry study programme took part in the remedial state examinations held on 17.08.2021,

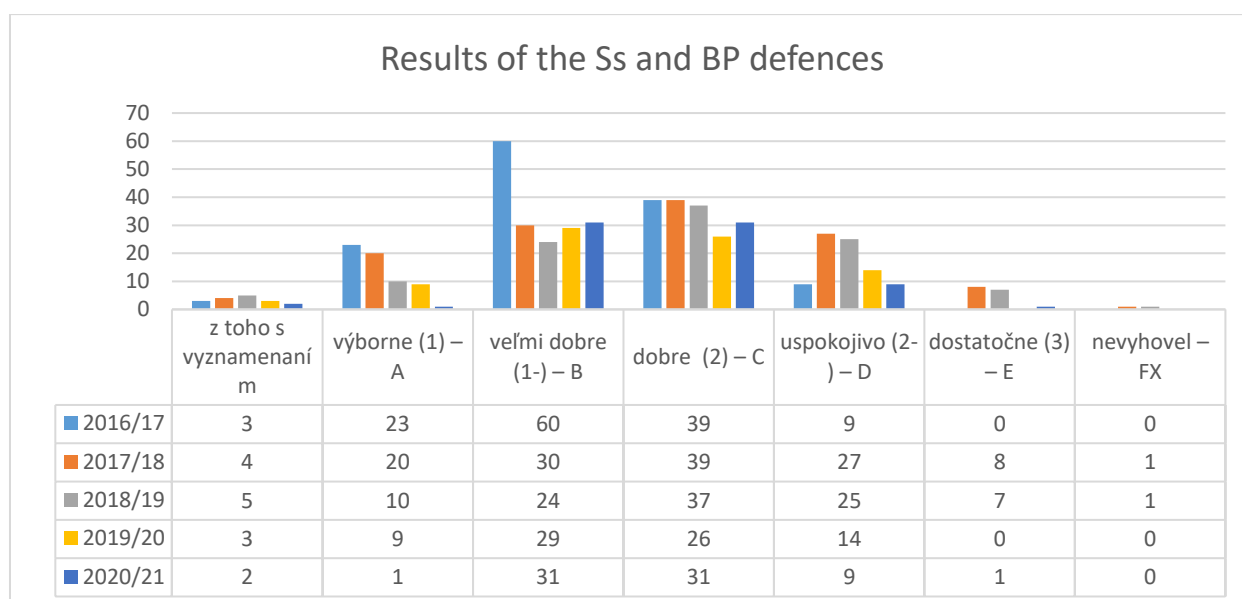


Fig. 5a Evaluation of the defences of BP and SS of 73 bachelor graduates

6.2 Evaluation of the State Examination in the Engineering Degree

State examinations and thesis defences were held on 21-25 June 2021 and the remedial state examinations were held on 17 August 2021. A total of 92 full-time and part-time students participated in the defences (Table 6, Fig. 5b). In the full-time form, the defence and the state examination took place in the study programmes Adaptive Forestry, Applied Zoology and Hunting and Forest Ecology. In the external form in the study programmes Adaptive Forestry and Applied Zoology and Hunting. 9 students in the full-time form of study and 4 in the part-time form of study graduated with honours.

Table 6 Results of thesis defences and state examinations in the academic year 2020/21

Results of the Ss and DP defences	Full-time study				External study					DŠ+EŠ together
	ALES	EL	AZaP	Total DS	ALES	EL	GMTL	AZaP	ES total	
of which with distinction	3	4	2	9	3	-	-	1	4	13
excellent (1) - A	6	4	3	13	3			1	3	16
very good (1-) - B	9	4	5	18	3			2	4	22
good (2) - C	16	1	7	24	2			4	4	28
satisfactory (2-) - D	9	-	4	13	6				10	23
sufficiently (3) - E	1	-	1	2	1				1	3
failed - FX										
S P O L U - students who have successfully completed their studies	41	9	20	70	15	-	-	7	22	92

Note: unsuccessful students at the SS - 13,

12 students appeared for the remedial state examinations held on 17/08/2021. 1 student did not appear for the remedial SS. There were 2 students from AZaP DS, 7 students from ALES DS, 3 students from ALES ES present for the remedial state examination.

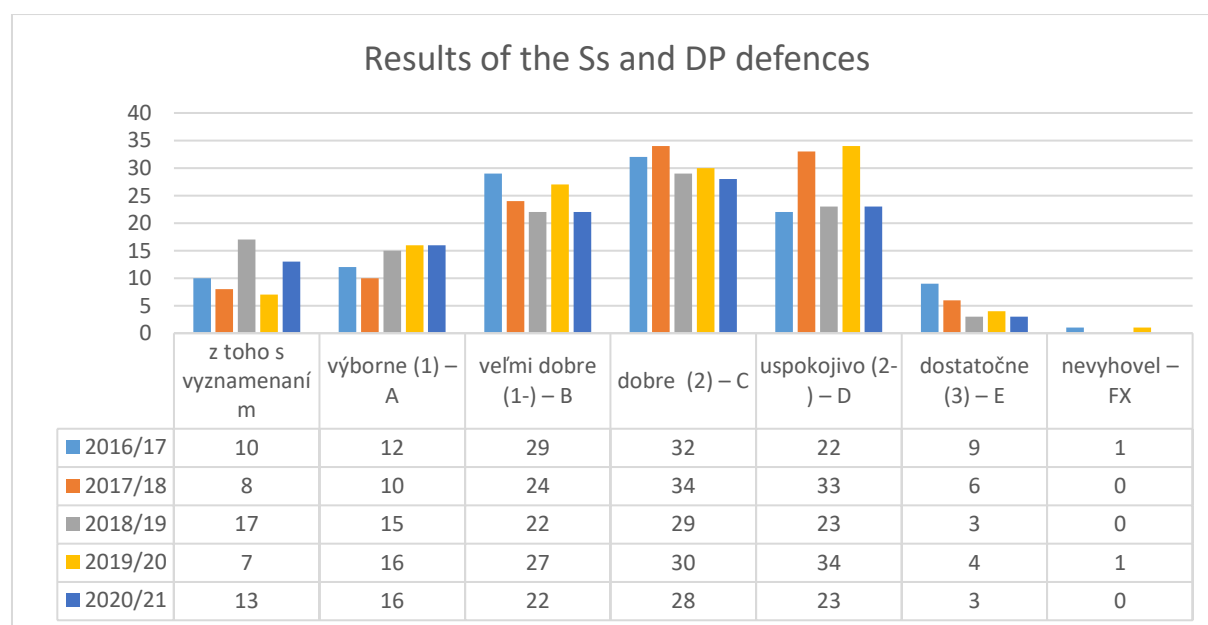


Fig. 5b Evaluation of defences of DP and SS 92 engineering graduates

7. Qualification structure of scientific and teaching staff in the academic year 2020/21

In the academic year 2020/21, a total of 63 in-house research and teaching staff (64 in the previous AY) with a total working time of 61.07 (61.25 - AY 2019/20) provided teaching as of 31 October 2020. Of these, 16 professors (+3), 24 associate professors (+4) and 23 (-8) assistant professors (note the change from the previous AY in brackets). An overview of the internal scientific and teaching staff at the Faculty of Forestry of TU Zvolen is presented in Table 7.

Tab. 7 Number of internal teaching staff at the Faculty of Forestry - status by departments as of 31 October 2020

Department	Category				
	Professors		Associate Professors		Professional assistants
	DrSc.	CSc., PhD.	Dr Sc.	CSc., PhD.	CSc., PhD.
KPP		2 (2)		3 (3)	
KF	1 (1)	2 (2)			4 (4)
KPL	1 (1)			5 (5)	1 (1)
KAZMZ		1 (1)		2 (2)	4 (2,1)
KIOLK		1 (1)		4 (4)	3 (2,98)
KLTLM		2 (2)		4 (4)	2 (1,99)
KPLZI		3 (3)		4 (4)	5 (5)
KERLH		3 (3)		2 (2)	4 (4)
Total	2 (2)	14(14)		24 (24)	23 (21,07)

Note: Figures in brackets represent actual working time

8 . Evaluation of the admission procedure

8.1 Admission procedure for Bachelor studies

Candidates were admitted to Bachelor's study programmes on the basis of admission procedures without personal participation and without entrance examinations, on the basis of the basic and additional conditions for admission (achievement of the specified benefit according to the type of secondary school - annual report cards and the benefit from the final examination), approved by the Academic Senate of the Faculty of Forestry.

Table 8 provides a detailed overview of the number of applicants to the Bachelor's degree programme at the Faculty of Forestry and the number of admitted and enrolled students starting from the academic year 2020/21, Tab. 9 shows the numbers of students in the current AY 2021/22.

Table 8 Number of students enrolled, admitted and enrolled in AY 2020/2021 for the 1st cycle of studies

Programme and form of study	Academic year 2020/2021			
	Number of applicants	Number of participants	Number of admissions plan/fact	Number of Enrolled
full-time study - Bachelor				
Forestry	115	107	120/107	99
Applied zoology and hunting	56	53	60/53	48
Arboriculture and municipal forestry	5		20/0	
Applied geoinformatics and geodesy	0		20/0	
full-time study total	176	160	220/160	147
external study - bachelor				
Forestry	30	29	20/29	24
Applied zoology and hunting	30	30	20/30	23
Arboriculture and municipal forestry	1		20/0	
external study total	61	59	60/59	47
DS + ES together	237	219	280/219	194

Tab. 9a Number of enrolled, admitted and enrolled students in AY 2021/2022 for the 1st cycle of studies

Programme and form of study	Academic year 2021/2022			
	Number of applicants	Number of participants	Number of admissions plan/fact	Number of Enrolled
full-time study - Bachelor				
Forestry	110	110	110/110	80
Applied zoology and hunting	48	48	60/48	26
Arboriculture and municipal forestry	7	0	20/0	0
full-time study total	165	158	190/158	106
external study - bachelor				
Forestry	26	26	20/26	25
Applied zoology and hunting	36	36	20/36	31
Arboriculture and municipal forestry	2	0	20/0	0

external study total	64	62	60/62	56
ES + ES together	229	220	250/220	162

The number of students enrolled in the current AY in the 1st cycle of full-time and part-time studies decreased by 32 students in total compared to the previous year.

Figure 6a provides an overview of students admitted and enrolled in the current academic year and 5 academic years back.

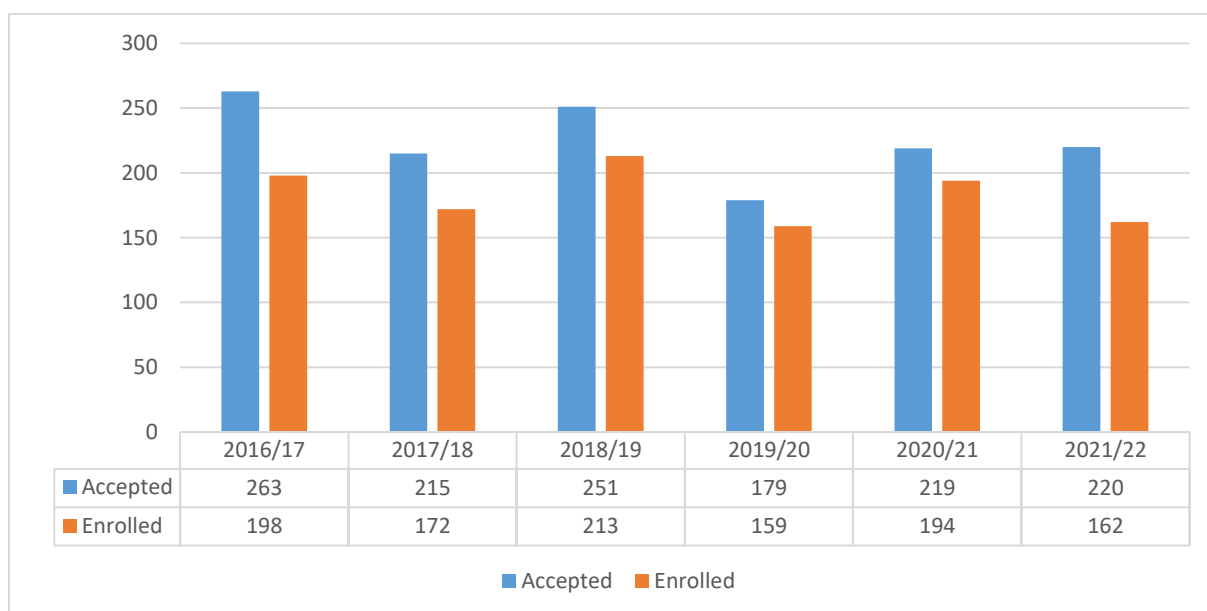


Fig. 6a Number of enrolled students AY 2016/17 to 2021/22 in the first cycle of studies - full-time form

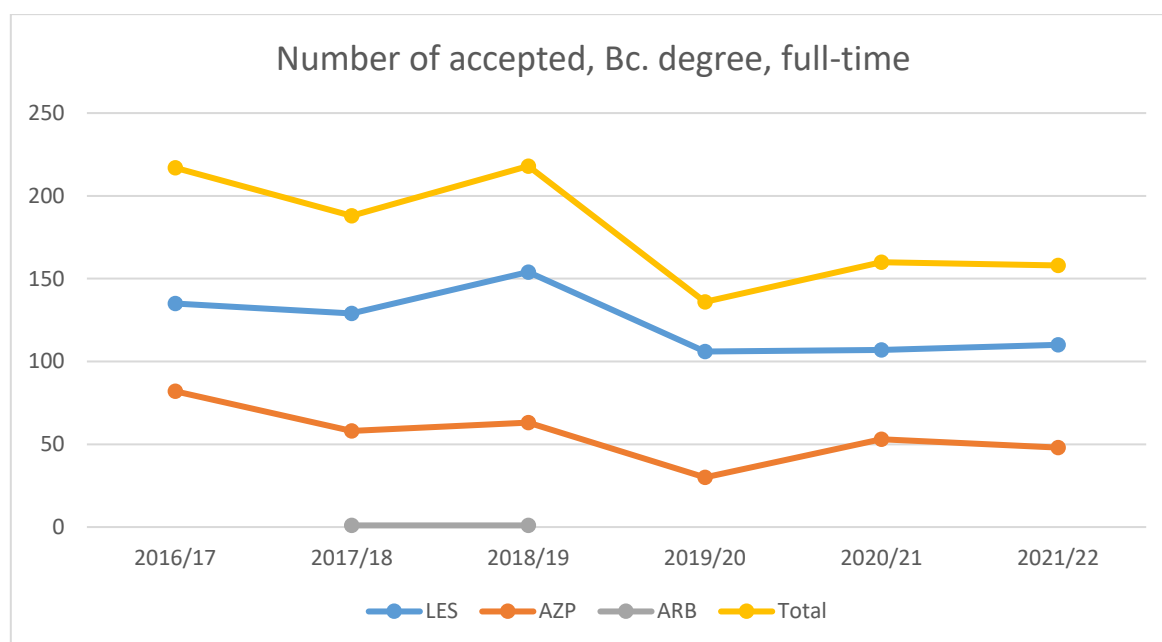


Fig. 6b Number of enrolled students AY 2016/17 to 2020/21 in the first cycle of studies - full-time form

Figure 6b shows an overview of students enrolled in individual study programmes in the first cycle of study. In the current academic year, we have recorded an almost identical number of applications for both open Bachelor's degree programmes as in the previous AY.

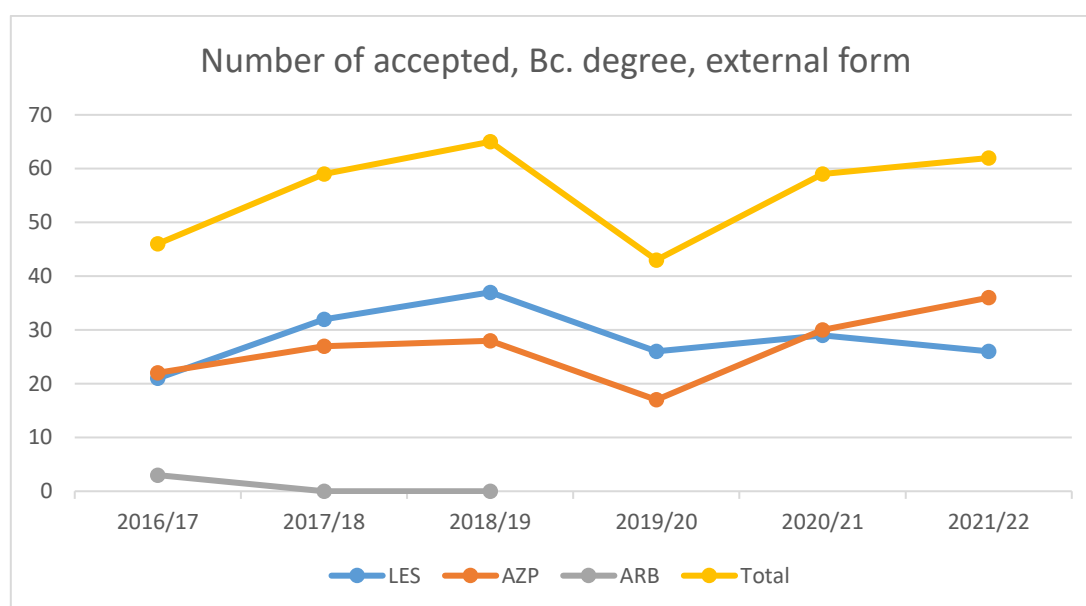


Fig. 6c Number of enrolled students in AY 2011/12 to 2019/20 in the first cycle of studies - external form

In the case of part-time study (Figure 6c), we have seen an increase in applications in both taught programmes in AY 2020/21. In the current AY, the increase is even more pronounced for the AZP study programme.

The tables and graphs presented so far informing about the numbers of admitted and enrolled students provided information about all students who were enrolled in the first year in the first cycle of studies. However, the data presented also include students who re-enrolled in the Faculty of Forestry after having been expelled (most often due to failing 2 times in the course they were enrolled in). These students are placed in the appropriate higher year after enrolment on the basis of examination recognition. In terms of newly enrolled students, there is a significant increase in the number of students in the external form of study. (Figure 6d).

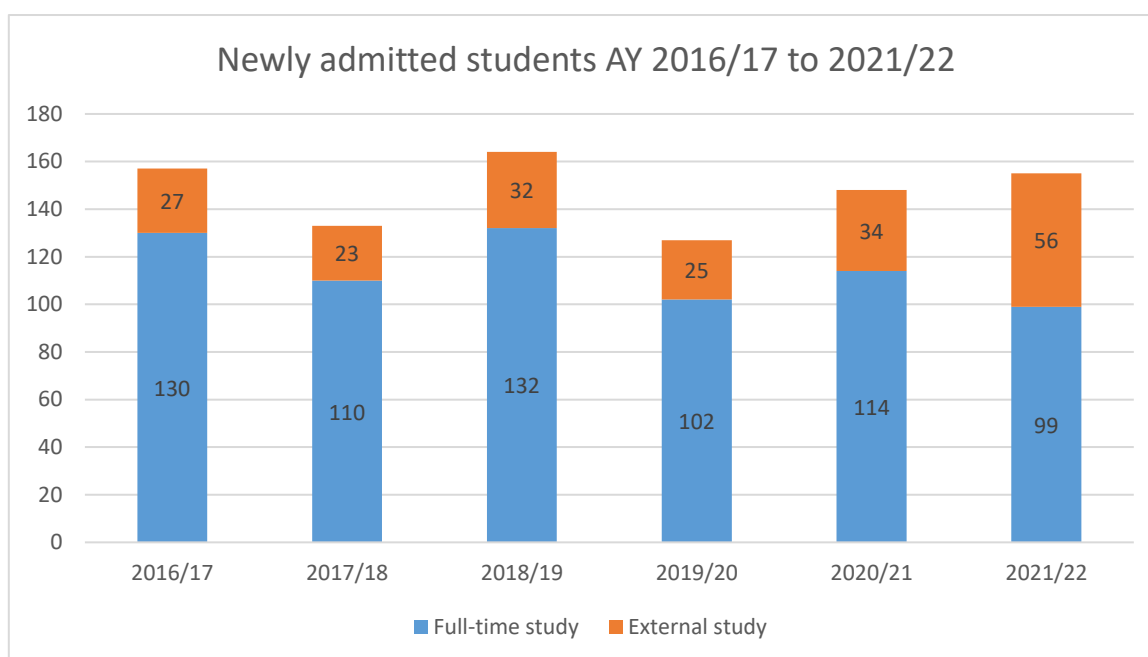


Fig. 6d Newly admitted students to the 1st cycle of studies at the Faculty of Forestry

Table 9b shows high school graduation rates from the perspective of newly enrolled students. Students graduated from forestry vocational secondary schools dominate, with a not insignificant part of them also being graduates from grammar schools.

Tab. 9b New students enrolled in AY 2021/22 and their high school graduation

	Bachelor's degree, Engineering complete				
	Total	Gymnasium	vocational secondary school	secondary vocational school	Other
from school	96	21	69	6	0
from workplaces and elsewhere	3	1	2	0	0
Total	99	22	71	6	0

Traditionally, when enrolling students in the first year of the Bachelor's degree, students are approached through an anonymous questionnaire that focuses on the reasons for enrolment, the district from which the students come and how they obtained information about their studies.

In terms of newly enrolled students, the Banská Bystrica region dominates, while in the current AY we have seen a significant increase in the number of students. We are followed by regions from where we traditionally have a strong representation of students (Prešov, Žilina, Košice).

In the following figures we present the students' answers:

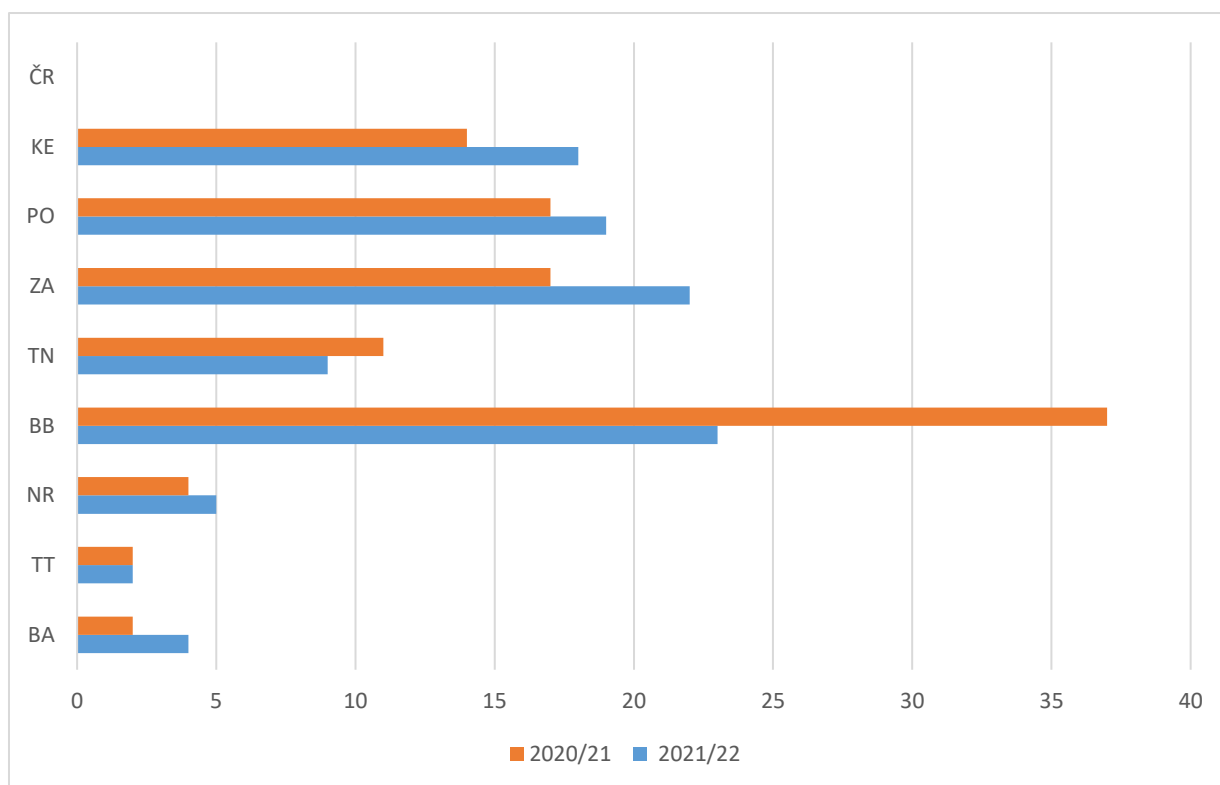


Fig. 6e Distribution of enrolled students by place of residence

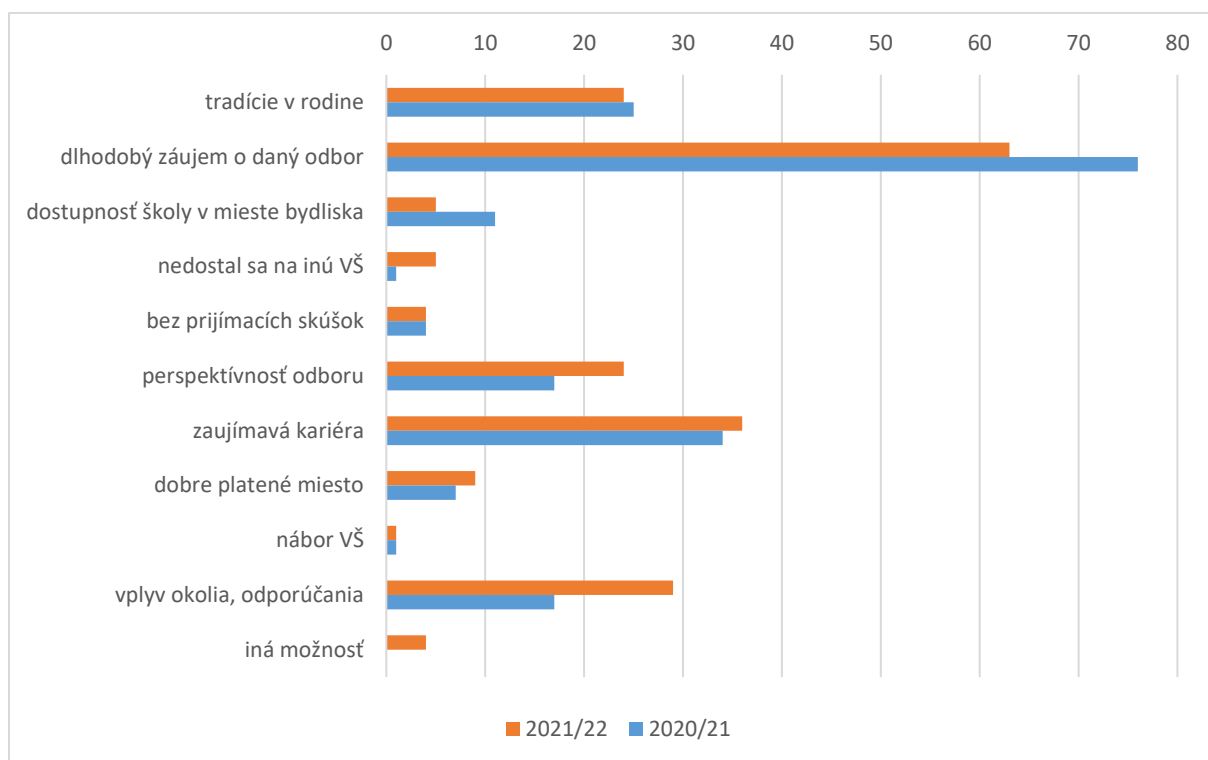


Fig. 6f Reasons for enrolment of students at the Faculty of Forestry in AY 2020/21

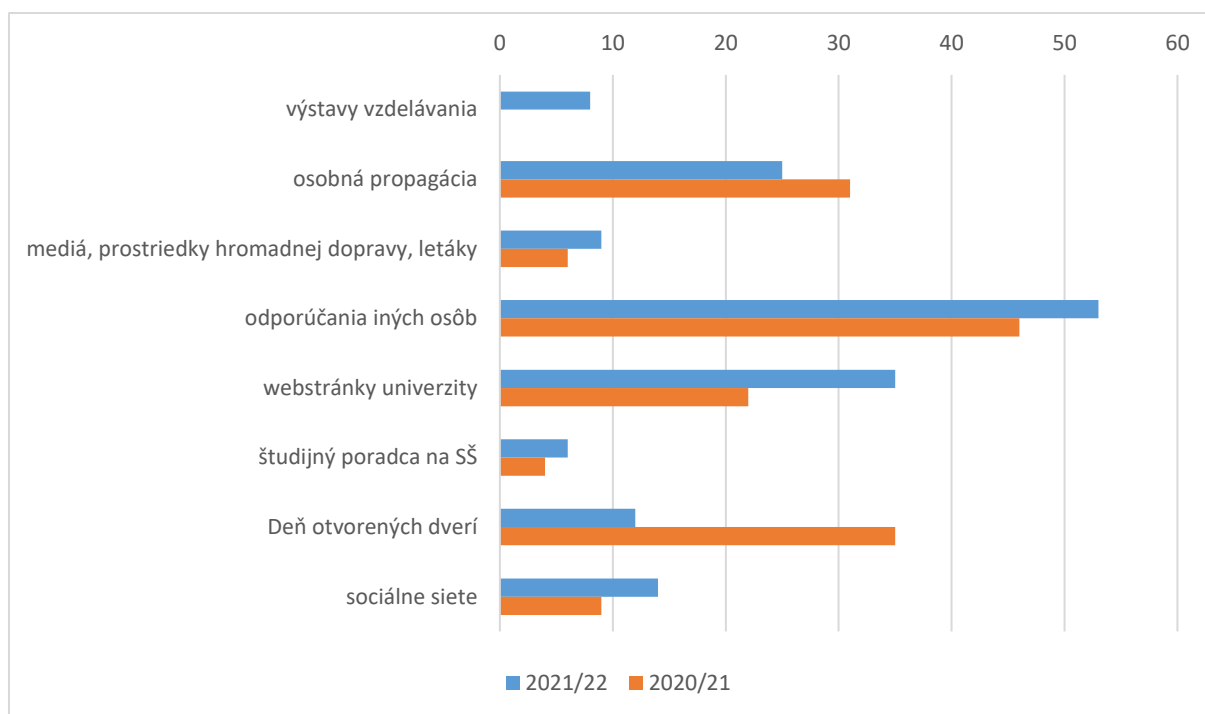


Fig. 6g Overview of students' responses to sources of information about studying at the Faculty of Forestry

8.2 Admission procedure for engineering studies

Table 10 provides an overview of the number of applicants enrolled, accepted and enrolled in engineering studies in the academic year 2020/21 and Table 11 provides data related to the current academic year 2021/22. In AY 2020/21, a total of 74 full-time students and 19 part-time students were enrolled in the first year of the second cycle of studies. 2 study programmes were opened in both full-time and part-time form (Adaptive Forestry, AAP) and one only in full-time form (Forest Ecology). In the current AY, 65 students were enrolled in the full-time form of study (Fig. 7a,b). There were 19 students enrolled in the part-time form, which is a total of 9 fewer students than in AY 2020/21.

Table 10 Overview of the number of applicants for the 2nd cycle of studies for AY 2020/2021

Programme and form of study	Academic year 2020/2021			
	Number of applicants	Number of participants	Number of admissions plan/fact	Number of Enrolled
full-time study - engineering				
Adaptive forestry	53	53	80/53	50
Geoinformation and mapping techniques in	4		15/0	
Forest ecology	10	10	15/10	9

Applied zoology and hunting	15	15	30/15	15
Forestry technology	1		15/0	
Applied geoinformatics and geodesy	0		40/0	
Forestry and wildlife management	0		10/0	
full-time study total	83	78	205/78	74
external study - engineering				
Adaptive forestry	13	13	20/13	13
geoinformation and mapping techniques in forestry	0			
applied zoology and hunting	7	7	20/7	6
Forestry technology	1		10/0	
external study total	21	20	50/20	19
DS + ES together	103	98	255/98	93

Table 11 Overview of the number of applicants for the 2nd cycle of studies for AY 2021/22

Programme and form of study	Academic year 2021/2022			
	Number of applicants	Number of participants	Number of admissions plan/fact	Number of Enrolled
full-time study - engineering				
Adaptive forestry	49	47	80/47	46
Geoinformation and mapping techniques in	4	0	15/0	0
Forest ecology	3	3	15/3	3
Applied zoology and hunting	16	16	30/16	16
Forestry technology	0	0	0	0
Forestry and wildlife management	0	0	0	0
full-time study total	72	66	140/66	65
external study - engineering				

Adaptive forestry	15	15	20/15	13
Applied zoology and hunting	6	6	20/6	6
external study total	21	21	40/21	19
ES + ES together	93	87	180/87	84

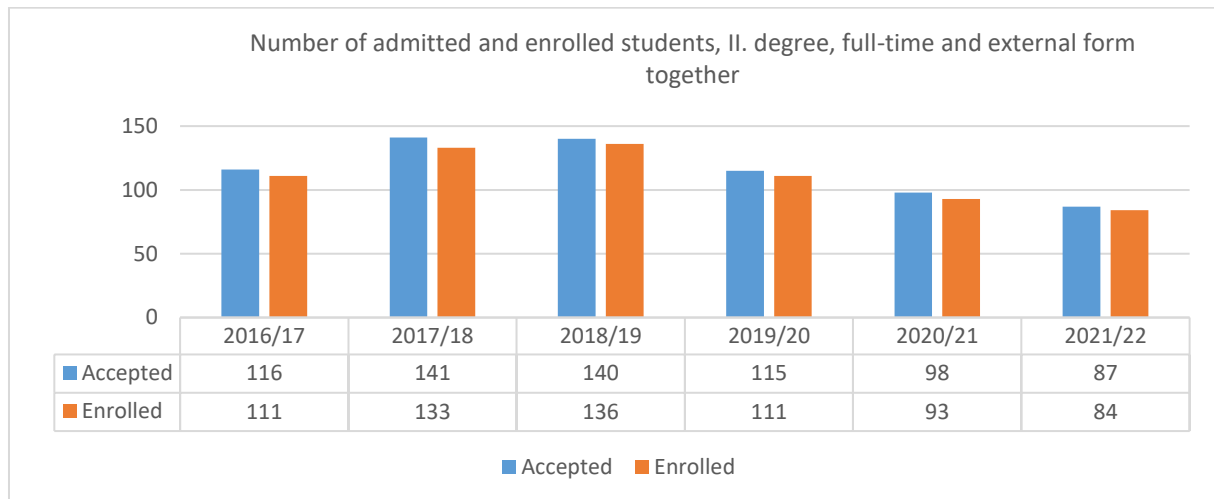


Fig. 7a Number of students admitted and enrolled in AY 2016/17 to 2020/21 at level II

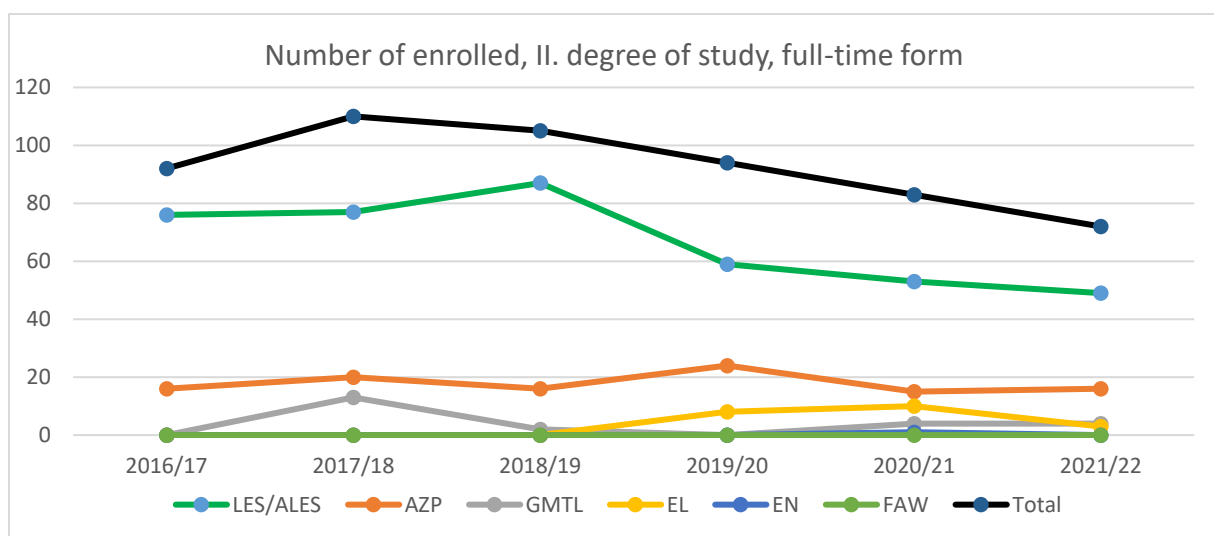


Fig. 7b Number of students enrolled in AY 2011/12 to 2019/20 for individual study programmes in the second cycle of study, full-time form

The greatest interest of students in the second cycle of study is traditionally in the study programme Adaptive Forestry, followed by the study programme Applied Zoology and Hunting. This year, after a long break, the study programme Forest Ecology was reopened thanks to the interest of students.

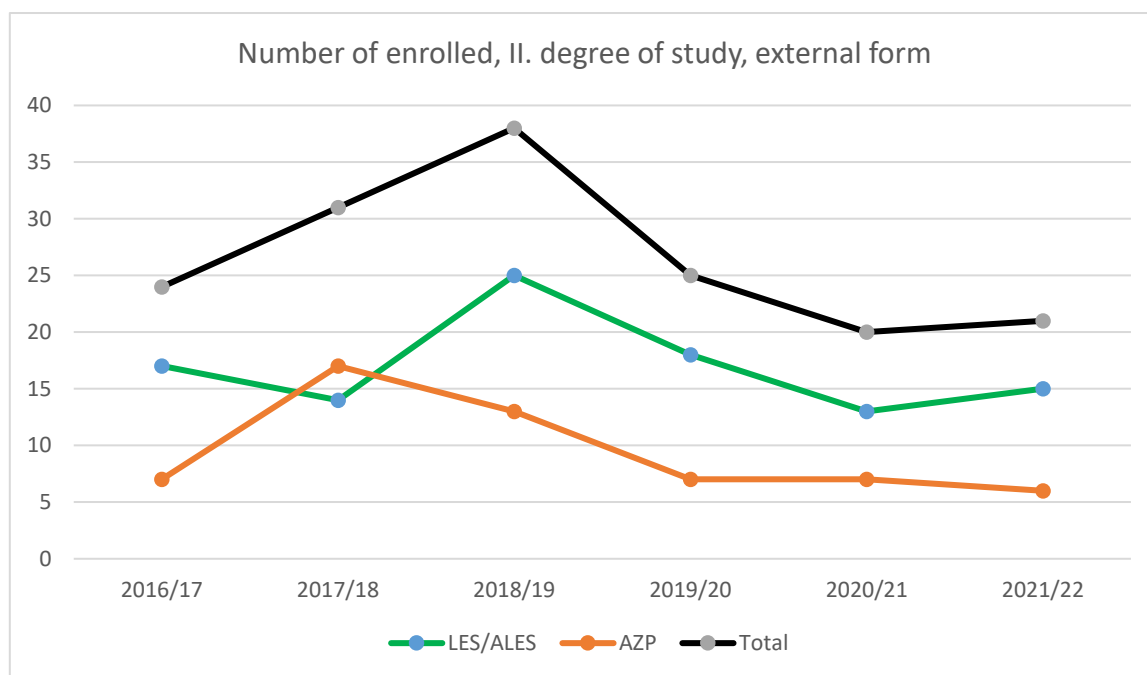


Fig. 7c Number of students enrolled in engineering studies for AY 2011/12 to 2019/20 for individual study programmes in the second cycle of study, external form

9. Evaluation of the teaching staff at the Faculty of Forestry TU Zvolen for academic year 2020/21

When calculating the teaching load, we used the data from the university's information system for the past academic year.

Deduction of full-time teaching positions at the Faculty of Forestry of the University of Technology in Zvolen in the academic year 2020/21 is processed for the entire faculty and for individual departments (Fig. 8a,b,c). At the Faculty of Forestry, in the previous academic year 2020/21, there were a total of 63 internal scientific and pedagogical staff with a total teaching time of 61.07. Compared to the previous AY, there was a decrease of 0.5 teaching FTE, the number of internal staff remained the same.

The total full-time teaching activity in AY 2020/21 was 61 260 points. After subtracting the full-time teaching activity of external lecturers working at the Faculty of Forestry 53 159 points (59 078 in AY 2019/20).

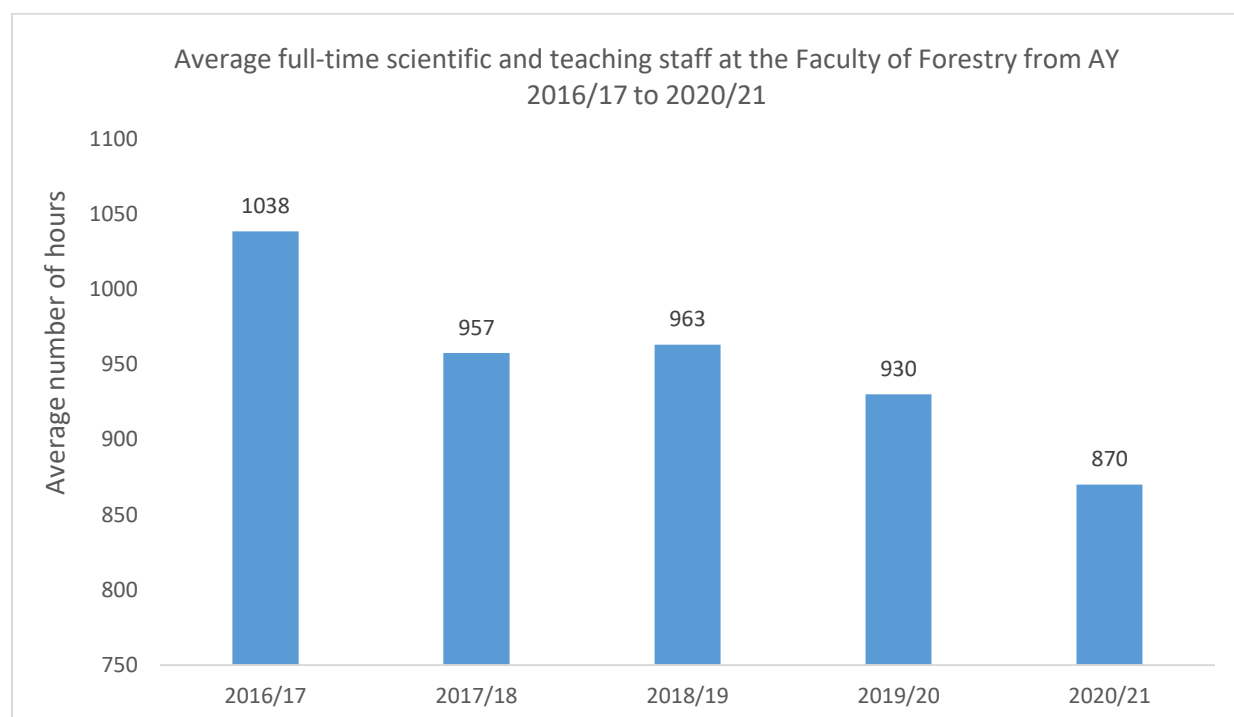


Fig. 8a Evolution of average full-time equivalents of LF in-house scientific and teaching staff for AY 2016/17 to 2020/21

The average teaching load reached 870 points, a decrease of 60 points from the previous AY (Figure 8a), and continues to trend downward due to the overall lower number of students in the faculty or the impact of distance education during the pandemic (optimization of ME, alternative ME solutions, increasing proportion of students who do not take the exam).

A total of 68 LF employees (including PhD students after the dissertation examination) participated in indirect teaching (69 thesis supervisors in the previous AY).

Fig. 8b shows the average time per internal lecturer in the department (related to the number of courses taught, especially in the Bachelor's degree). In this respect, the Department of Natural Environment and the Department of Logging, Logistics and Ammelioration have the highest teaching load.

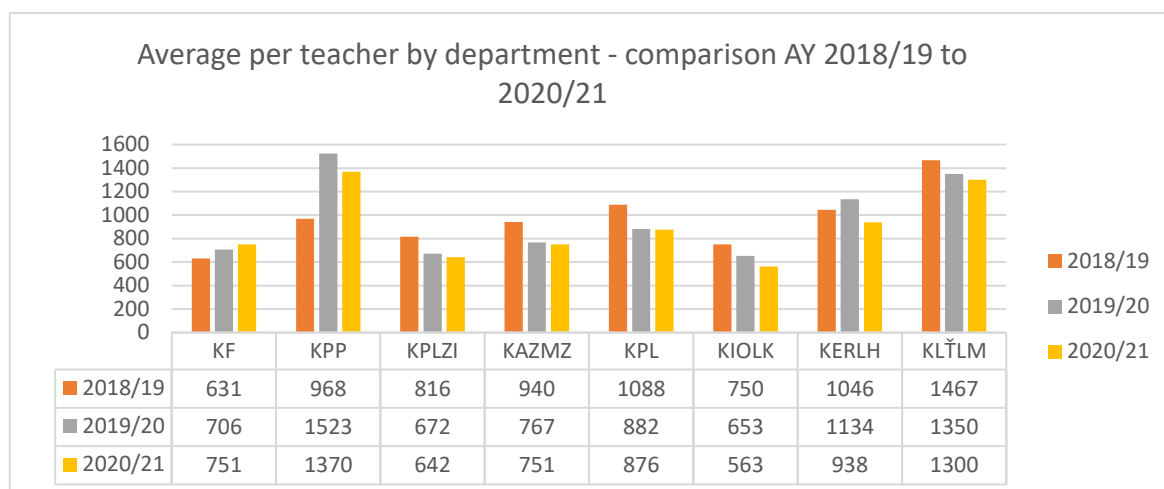


Fig.8b Average time per internal scientific-teaching staff member by department, comparison of AY 2017/18 and 2019/20

Fig. 8c shows the overall overview of teaching load by department, with a decrease in most cases, but an increase in the case of the Department of Phytology and the Department of Natural Environment (related to the continued teaching in the Forest Ecology programme at the engineering level).

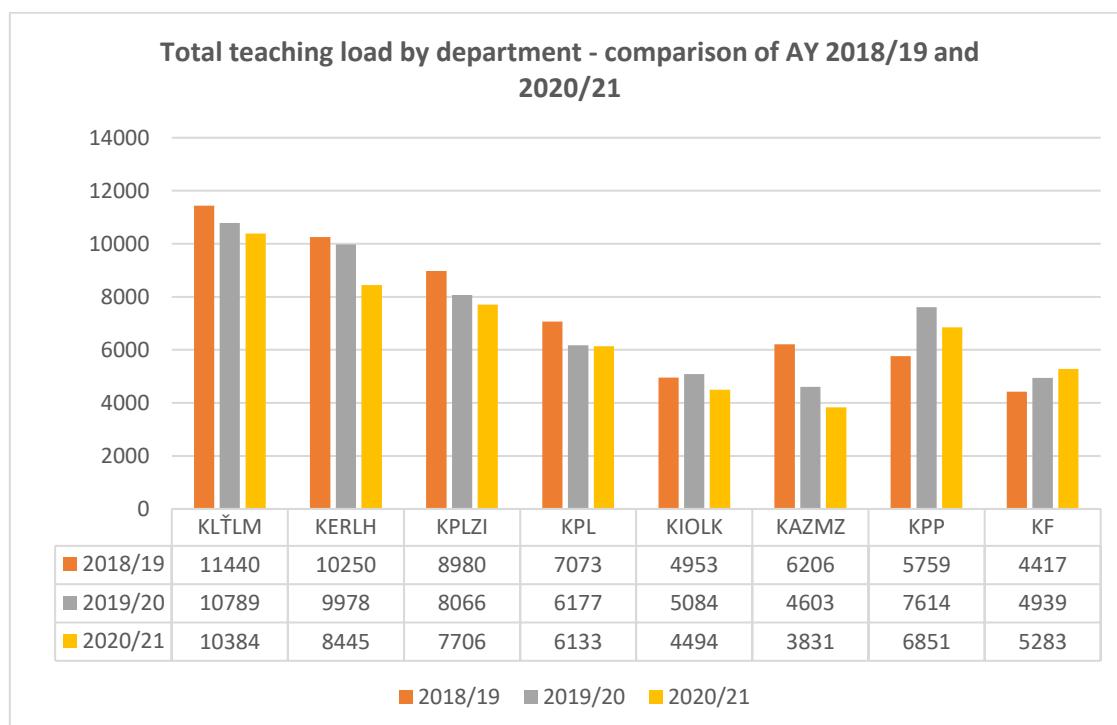


Fig. 8c Overview of the total amount of full-time teaching staff (all research and teaching staff) by department, comparison AY 2018/19 to 2020/21

10. Tasks of LF TU in Zvolen in the framework of educational activities

Completion of tasks for AY 2020/2021

- **Organize an open day in the month of January.**
The planned joint open day could not take place due to the persistence of strict anti-pandemic measures.
- **Promotion of LF in secondary schools. Updating of information materials on studying at the LF**
Due to the pandemic, it was not possible to continue personal visits to secondary schools in the summer semester, so we used other ways to reach students, e.g. by sending information via edupage and more intensive promotion via social networks, website, etc. All new print and visual documents were distributed through appropriate channels to potential applicants.
- **Implementation of other measures to optimise the pedagogical process**
A seminar on thesis writing and the principles of thesis presentation in the winter semester was held. In the summer semester, we prepared an online concentration before the state exams for engineering students, which was attended directly by the tutors of the individual state exam thematic units. In cooperation with the Ministry of Education and Science of the Slovak Republic, guidelines as well as forms for securing practice for obtaining the PFM certificate for students of the Faculty of Forestry were issued.

Task plan for AY 2021/22

- **To organize a virtual open day of the Faculty of Forestry in the month of January.**
Depending on the situation, organise a DOD in the framework of a joint HEREF DOD during early 2022.

Responsible: vice-dean for pedagogical work and vice-dean for external relations

Deadline: january - february 2022

- **Promotion of the LF at high school and education exhibitions. Updating of information materials on studying at LF**
Online meetings with high school students, information about studying via edupage, updating information about the admission procedure on the LF website, HE portal.

Responsible: vice-dean for pedagogical work and vice-dean for external relations

Deadline: september 2021 - march 2022

- **Implementation of measures to optimise the pedagogical process**
Implementation of an online seminar on thesis writing and presentation principles and also an online concentration before the state exams.

Responsible: vice-dean of LF for pedagogical work

Deadline: november 2021 - june 2022

- **Alignment of the internal quality assurance system with the standards of the accreditation agency, formation of processes and structures to ensure the quality of study programmes, audit of the existing offer of study programmes.**

Alignment of the study programmes at the Faculty of Forestry in the 1st and 2nd cycle of study with the standards of the accreditation agency. Preparation of accreditation files. Appointment of members of the Quality Council, members of the permanent working group in the study field of forestry, appointment of 5 persons responsible for the provision of the study programme.

Responsible: vice-dean of LF for pedagogical work and management of LF

Deadline: september 2021 - december 2021