

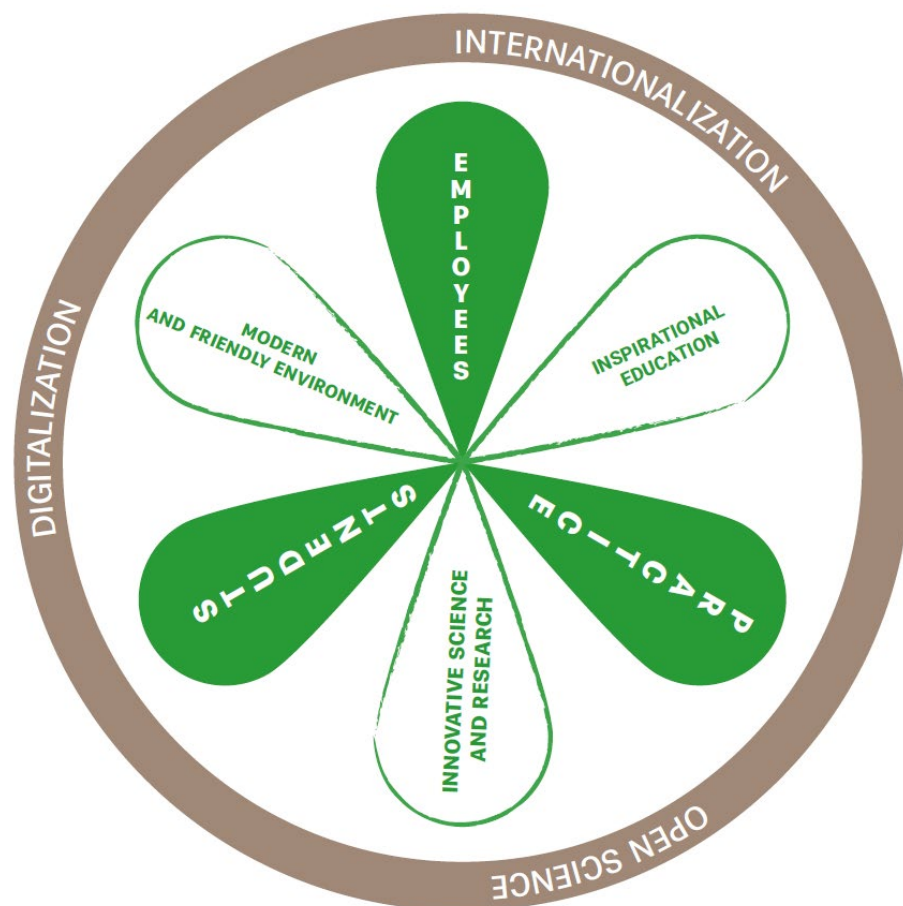


Faculty of Forestry  
and Wood Sciences

# Strategic Plan for educational, creative and other activities of the Faculty of Forestry and Wood Sciences

Czech University of Life Sciences in Prague  
for the period from 2021

(FFWS Strategic plan 2021+, FFWS SP 2021+)



Approved by the Dean's Board of the Faculty of Forestry and Wood Sciences of the Czech University of Life Sciences in Prague on 4 of May 2021.

Discussed by the Scientific Board of the Faculty of Forestry and Wood Sciences of the Czech University of Life Sciences in Prague on 5 of May 2021.

Approved by the Academic Senate of the Faculty of Forestry and Wood Sciences of the Czech University of Life Sciences in Prague on 18 of May 2021.

### FFWS SP 2021+ starting points:

FFWS SP 2021+ is a strategic conceptual document of the Faculty of Forestry and Wood Sciences, CZU in Prague (hereinafter FWSS or the Faculty), which sets out development priorities for the coming period. This document is based on the CZU Strategic Plan 2021+, or the Strategic Plan of the Ministry of Education, Youth and Sports for the area of universities for the period from 2021.

FFWS, as one of the components of the CZU, has no legal obligation to prepare a strategic document of this type; however, FFWS management considers it appropriate to accept a conceptual document of a medium to long-term nature and acquaint the FFWS academic community with it. Subsequently, on an annual basis, annual implementation plans will be prepared which will specify the priority tasks, the progress of work for the next period, and will gradually lead to the fulfilment of FFWS SP 2021+. These implementation plans will be submitted for approval to the Dean's Board and the FFWS Academic Senate and will be discussed at the FFWS Scientific Council. The following year, these plans will be evaluated in the context of FFWS SP 2021+.

The implementation of individual activities is not part of this document and the FFWS management assumes the use of the full range of instruments in the areas of funding from the state budget, evaluation of research organizations, funding from the European Structural and Investment Funds, the programme to support strategic management 2021-2025, and others.

This Plan is prepared in the first half of 2021 for the period from approval for another 5 years and more, as well as the CZU Strategic Plan 2021+, or the Strategic Plan of the Ministry of Education, Youth and Sports for the area of universities for the period from 2021. It will become binding for the FFWS management on the day of approval by the FFWS Academic Senate.

### Structure

FFWS SP 2021+ does not have the ambition to grasp and describe in detail all activities carried out at the Faculty. Detailed activities will be presented in the annual implementation plans. The aim of FFWS SP 2021+ is to focus on the fundamental tasks and target groups of FFWS. From this point of view, the following fundamental pillars are defined:

1. inspirational education,
2. innovative science and research,
3. modern and friendly environment.

The key target groups are:

- students (potential students, current students, PhD students),
- internships (graduates, organizations and companies in the forestry and wood science area and related fields, public awareness, and the professional public),
- employees.

All of the above must be framed by quality strategic management, which integrates the following areas:

- internationalization,
- Open Science, and
- digitization.

**Vision:**

FFWS is considered to be an irreplaceable and integral part of the Czech University of Life Sciences in Prague and thus a part of the educational system of the Czech Republic. With regard to its focus, it actively contributes to the fulfilment of Sustainable Development Goals (SDGs) and takes a responsible approach to the protection and use of the environment in an international context. Through educational and creative activities, it fully responds to current global changes and contributes to preserving the environment for current and future society.

**Mission:**

Through education, science, and research in the fields of forestry, wood science, hunting, protection and care of the environment, environmental economics and other related fields, the FFWS mission is to be an institution which contributes to the development of knowledge in these fields, integrates professional knowledge and passes it on to the lay and professional public at the national and international level. Thereby, it contributes to the development of international society.

## QUALITY STRATEGIC FACULTY MANAGEMENT

Strategic management at Czech universities has long been a neglected area, even though universities have a high degree of autonomy. Competent strategic management of the Faculty is a necessary prerequisite for increasing the prestige and quality of the Faculty as a whole. The facilities created by Faculty management and the Dean's departments must lead to cultivation and productive development in the educational and research area of FFWS and to a reduction in the administrative burden of professional staff in the field of education, science and research. The main goals running across all activities of the Faculty are the following:

### Internationalized FFWS

The internationalization of university education is a key task for the coming period and, at the same time, a tool for the development of professional and general competencies of students and staff. The internationalization of FFWS entails the need to link all tasks, agendas, and activities with an international dimension. The Faculty will never be able to achieve international competition with similar workplaces from abroad unless it takes advantage of internationalization across agendas. In addition to the professional development of human capital, the international element carries with it a fundamental personality dimension of students and academics.

FFWS will be able to maintain a positive growth trend in its activities only if it strengthens its activities in the international field – both at the levels of educational and research organizations, but also at the level of foreign representatives of practice (employers, international professional associations, etc.). It must also be attractive to foreign partners who will search for FFWS and work there in various positions (trainer, teacher, researcher, etc.).

The FFWS aim is to increase the degree of internationalization in all its agendas and thus increase its role in the international environment. Simultaneously, it will profile itself as an active player in an international environment.

Examples of measures:

- a) adoption of the FFWS's own Internationalization Strategy with the definition of specific activities for its strengthening,
- b) internal communication in the academic community will be automatically created in Czech and English,
- c) internal FFWS materials will be automatically 100% created in Czech and English,
- d) Faculty bodies (FFWS Academic Senate, FFWS Scientific Council) adapt their functioning in the event that one of its members is an English-speaking only student or employee,
- e) non-academic staff will be able to deal with common work tasks in English,
- f) trips abroad (long-term internships, short-term internships, practice, summer schools, etc.) during study will become a common part of study programmes,
- g) FFWS will increase its attractiveness for students and teachers from partner institutions from abroad,
- h) academic staff will consider trips to foreign partner universities within the Erasmus+ and similar programmes as standard to subsequently provide teaching in English within the FFWS study programmes,
- i) FFWS will be an attractive faculty for foreign researchers and teachers,
- j) FFWS will actively support and organize events (workshops, summer schools, etc.) with international participation,

- k) FFWS will promote the interests of forestry and wood science as actively as possible in international organizations,
- l) FFWS will be more active in establishing contacts with representatives of practice from abroad.

## Open Science at FFWS

Open Science is an important aspect for the scientific environment and must be part of FFWS's social responsibility activities. The benefits are the **availability** of reusable scientific results, **transparency**, which is a huge contribution to scientific integrity at all stages of the scientific process, **reproducibility**, and the promotion of **collaboration**, which is many times deeper, faster, and more effective.

The FFWS aim is to take steps that will lead to free access to scientific publications and controlled sharing of research data, i.e. Open Science. Open Science can be understood in two key areas that FFWS wants to focus on: "Open Access" – open publishing, and "FAIR Data" – management and access to scientific data (data management). The necessary basis is to improve the perception of the topic of Open Science by FFWS academic staff.

Examples of measures:

- a) introduce systematic support for the publication of outputs in Open Science mode,
- b) implement support, services, and tools for both "Open Access" (open publishing) and "FAIR Data" (data management),
- c) introduce individual counselling and education in the field of open publishing and data management for FFWS researchers (at least one methodologist at FFWS for these activities, which will be available for these purposes),
- d) introduce clear rules for sharing and storing internal data, i.e. data management,
- e) introduce advanced processing of research data in the form of data or text mining.

## Digitized FFWS

The digitization of agendas and external and internal processes must go hand in hand with the further development of FFWS. Due to the continuous development of the Faculty, the requirements for administrative tasks related to growth are increasing (both towards employees, students, inside and outside the CZU). Pursuit of the highest possible level of digitization is also based on regulation of the European Parliament and Council (EU).

The FFWS aim is to digitize internal processes between the Dean's Office and the departments (including interactive forms) and to enforce them within the entire CZU.

Examples of measures:

- a) maximum support for digitization and urging the Rector's Office to digitize administrative processes within the CZU,
- b) maximum support for digitization and urging the Rector's Office to digitize study agendas,
- c) strengthening literacy of employees in the online environment.

# 1 | INSPIRATIONAL EDUCATION

## 1.1 Promising candidates

A quality applicant has inner motivation to successfully complete university studies, have good results throughout their study, engage in extracurricular activities, and is interested in traveling abroad to improve their knowledge and application in practice. Thanks to cooperation with secondary schools, we want to introduce students to the study opportunities at FFWS and connect them with our Faculty while they are still studying at secondary school.

The Faculty's aim is to accept applicants who are really interested in the study programme and are well prepared for study. Emphasis is placed on obtaining quality candidates rather than quantity of candidates. The intention is to cooperate with secondary schools and provide their students with information about study opportunities at FFWS.

Examples of measures:

- a) create a network of secondary schools under FFWS auspices, actively communicate with their students and teachers, and offer them participation in FFWS events,
- b) participate in trade fairs, presentation events, open days, and other events where studies at FFWS will be presented,
- c) inform students from abroad about the possibilities of studying at FFWS,
- d) when promoting all three levels of study, emphasize the Faculty's modern infrastructure with state-of-the-art equipment and research results.

## 1.2 Students with inner motivation

Student education is one of the basic FFWS functions. The main intention of the Faculty is to prepare students for the transition to full economic activity in the 21<sup>st</sup> century market through study programmes. FFWS graduates will be sought and preferred in the national market in the environmental field.

They should be fluent in at least one world language. FFWS contributes to the development of society by offering relevant study programmes that respond to current labour market needs.

The FFWS aim is to increase inner motivation and support students to successfully complete their studies, create suitable facilities for school and extracurricular activities, and offer attractive study programmes responding to market needs with an emphasis on the applicability of knowledge in practice, both nationally and internationally.

Examples of measures:

- a) improve conditions for successful study, which will lead to an increase in a student's inner motivation to study (increase student awareness, especially in the first years of study; systematically reduce the dropout rate of students),
- b) increase the quality of bachelor's, diploma and dissertation theses,
- c) support the activities of FFWS associations and involve them in the organization of FFWS events,
- d) increase the involvement of students in Faculty activities,
- e) support talented students (scholarship programmes, Young Researcher),
- f) increase the share of English teaching materials, which will be a common part of the teaching of profiling subjects in all study programmes at FFWS,
- g) increase the number of courses and lectures by foreign teachers at FFWS,

- h) increase the share of students of all study programmes who have foreign experience,
- i) increase the number of quality students from abroad on English study programmes (intensify promotion in the international environment),
- j) support and create a motivational system for student trips to study internships and professional experience at foreign universities,
- k) offer modern study programmes (including distance) taught in English, which will be competitive with similar programmes of advanced forestry and wood science faculties in Europe, and which will respond to current trends in the world in university education of the forestry and wood science sector.

### 1.3 FFWS graduates in practice

The aim of the study programmes is to prepare students for successful operation in the field of research or practice in the 21<sup>st</sup> century. To do this, it is necessary to have an up-to-date overview of the requirements of the practice and the success rate of FFWS graduates.

The FFWS aim is to support the involvement of Faculty graduates in Faculty activities (teaching, practice, providing data for final theses, involvement in research).

Examples of measures:

- a) intensify communication and cooperation with FFWS graduates (organize a meeting for graduates in order to support communication, organize professional seminars and educational events for graduates),
- b) increase the number of graduates who will participate in Faculty educational activities,
- c) organize regular meetings between graduates and guarantors of study programmes.

### 1.4 FFWS – a partner respected by practice

Continuous cooperation with practice is considered one of the priorities in all basic areas. The form and content of this collaboration is determined by the long-term goal, specified as the creation of a system ensuring systematic interaction of educational, research, publishing, and information activities.

The FFWS aim is that cooperation between the representatives of practice and the Faculty is ultimately enriching for both parties, depending on the area and the form of cooperation. The basic precondition for achieving the aim is the constant building and deepening of mutual trust.

Examples of measures:

- a) positive external promotion of FFWS activities,
- b) setting up functioning feedback mechanisms from practice,
- c) setting up systematic support for the application of the results of science and research in practice and their commercialization,
- d) support for activities aimed at obtaining contractual research,
- e) involvement of representatives of practice in teaching in the form of professional lectures, oppositions and consultations of final theses, and state final examination committees,
- f) implementation of a lifelong learning course focused on further professional education of professionals in forestry or wood processing industry.

## 1.5 FFWS as a part of public awareness in forestry and wood sciences

Passing information to the general and professional public is key to maintaining the good name of the Faculty in public awareness. It is universities that provide education, and their outputs are considered credible.

The aim is to strengthen the role of the Faculty as an important player in the discussion of current issues in society (such as climate change) and to play the role of an objective mediator in finding solutions to social problems. FFWS wants to be an institution integrating various currents of opinion and providing a platform in the form of background and experts for discussions and activities related to forestry and wood science topics.

Examples of measures:

- a) popularize the outputs of FFWS science and research and pass them on to society and practice,
- b) support employees in active appearance in the media,
- c) be part of professional working teams, groups, and editorial boards in the forestry and wood science sector,
- d) organize professional educational seminars and conferences for the professional public at the FFWS and beyond,
- e) be active in professional environmental and related organizations.



## 2 | INNOVATIVE SCIENCE AND RESEARCH

### 2.1 Support professional scientific outputs by FFWS employees

Excellent scientific outputs, which are well regarded by the scientific and professional community, are good for the Faculty's image and proof of quality long-term work in science and research. Simultaneously, it is a necessary prerequisite for inclusion among the most important scientific institutions at an international scale. By this, we mean professional publications in prestigious scientific journals and the creation of outputs with high potential for subsequent applicability in practice (carried out in the form of commercialization of outputs or in the form of application in public and state administration bodies in creating and fulfilling legislation or other methodological recommendations).

To create these outputs, it is necessary to look for optimal sources – from Faculty resources, external sources from contractual research, or project funds (with an emphasis on international projects).

The long-term goal of the Faculty is to support employees and PhD students in publishing excellent scientific and professional outputs. The strategy of the Faculty is not only to publish outputs in the most prestigious journals, but to make these outputs accessible to the general public (Open Access) and, simultaneously, to transfer these outputs to pedagogical activities at FFWS. The Faculty must also strive to maximize the applicability of results in practice, with emphasis on an international focus. For this reason, it is necessary to continue to support involvement and participation in promising project teams with an emphasis on those with international participation. FFWS strives to facilitate the administrative activities of researchers and educators in the preparation and subsequent implementation of projects.

Examples of measures:

- a) financial support and motivation for employees and PhD students to publish in the most prestigious journals and to create quality application outputs,
- b) active search and recruitment of prospective employees for scientific positions, including junior researchers from abroad with high publishing potential,
- c) long-term and active support of employees in obtaining significant and strategic projects, especially international ones, whose outputs will be excellent publications,
- d) strategic support for the transfer of scientific results to pedagogical activities at FFWS,
- e) preparation of a functioning system of support for the application of professional outputs in practice,
- f) active support for the adjustment and supplementation of professional outputs with elements supporting subsequent application in practice,
- g) supporting creation of excellent outputs that can be applied in the category of Social Relevance or Contribution to Knowledge within the M17+ Methodology (Module 1),
- h) creating conditions for commercialization of outputs with the aim of financial income for the Faculty (in the form of a spin-off company, etc.),
- i) maintaining good research practice (Code of Conduct for Research Integrity, Ethical Issues),
- j) support for the preparation and implementation of projects with an emphasis on international grant competitions,
- k) building professional staff capacity responsible for administrative and financial support in the preparation and implementation of projects.

## 2.2 Quality PhD studies

Quality PhD studies are an important factor and prerequisite for the development of university education and the research sector. The involvement of bachelor's and master's degree students in scientific research activities is an important prerequisite for subsequent follow-up in PhD studies. Well-prepared graduates are the driving force behind social and cultural development and the knowledge-based economy, whether they pursue purely scientific careers or apply their know-how in other sectors in which they will seek and implement innovative solutions to technological and societal problems.

PhD studies at FFWS must be attractive to talented master's degree graduates from both the Czech Republic and abroad, they must be inspirational, motivating, and beneficial. The intention is to educate important experts in their fields who will then find good employment. At present, FFWS has a relatively large number of students, but a low number of graduates. This fact corresponds to the situation in the whole of the Czech Republic. However, the ambition of FFWS is to change the ratio in favour of a larger number of excellent graduates.

The Faculty's aim is to improve PhD studies. An important step is to focus on an intensive search for prospective applicants and motivate these students to do their PhD at FFWS, and subsequently create adequate conditions for their work at the Faculty (establish them in a new environment, create a good base for them, pay above-standard scholarships to active students, provide guidance with quality supervisors, integrate them into scientific teams and projects, enable foreign internships, etc.). Emphasis will be placed not only on the PhD students, but also on improving the quality of supervisors.

Examples of measures:

- a) pay above-standard scholarships to active and talented students in the continuous fulfilment of study obligations,
- b) improve the quality of supervisors and consultants,
- c) increase the number of quality foreign supervisors and consultants (or introduce a system of support for international cooperation in the form of a cotutelle with a foreign institution),
- d) "caring" for PhD students, i.e., their education by increasing the proportion of soft skill subjects (Methodology of Research, Academic Writing, Communication and Popularization of Science, Ethics in Scientific Work, etc.),
- e) support for student projects from the Internal Grant Agency,
- f) creating a system of support for PhD students on trips to long-term internships abroad, conferences, and seminars.

## 3 | MODERN AND FRIENDLY ENVIRONMENT

### 3.1 FFWS as a progressive employer – employees with inner motivation

A key prerequisite for the success of all FFWS functions is to attract, select, and retain academic and non-academic staff with the necessary competencies; further, the Faculty should create a supportive environment for the staff to help develop and cultivate these competencies. In doing so, it is important to reflect the diverse profiles of staff expertise and appreciate their specialization not only in educational and creative activities, but also in other activities necessary for the operation and development of the Faculty, including quality assurance, project preparation and implementation, organizational and management activities, coordination of international cooperation, and activities falling within the third role of the Faculty (transfer of knowledge, popularization of research results, external communication, etc.). The activities of the Faculty must therefore reflect the values of openness, transparency, cooperation, and contributing to society, creating conditions for long-term professional growth of academic and non-academic staff and therefore encouraging them to remain at the Faculty.

The aim is to improve the conditions for Faculty academic and non-academic staff so that they have inner motivation and are sufficiently competent and active in fulfilling all the roles of the Faculty. It is also necessary to take measures to reduce the administrative burden on academic staff, so that they can focus primarily on professional activities.

Examples of measures:

- a) continuously increase employee awareness in order to perceive the Faculty as a whole,
- b) strengthen employees' competencies and abilities,
- c) strengthen the openness and international activities of employees in all areas of their work,
- d) strengthen supportive capacities in order to reduce the administrative burden on academic staff.

### 3.2 Quality technical equipment at FFWS

In accordance with the CZU strategy, it is necessary to ensure permanent investments in instruments and software and its renewal in the event of obsolescence. Given the large investments in equipment in the previous period, it is necessary to provide funds for permanent maintenance, service and, last but not least, investment renewal of instruments. In the area of infrastructure, it is necessary to continuously modernize the network distribution with the aim of increasing data transmissions and digitization options in buildings managed by FFWS. The intention is also to create an environment with the possibility of flexible sharing of laboratories and instruments using electronic tools for booking.

The aim is to maintain FFWS's technical and technological sophistication as a leader in high-tech equipment for teaching, science, and research in the fields of forestry and wood science and to ensure the effective use of such equipment.

Examples of measures:

- a) reconstruction and completion of the FFWS building in order to improve the administrative and working facilities for academic staff,
- b) reconstruction of teaching spaces,

- c) acquisition of relevant teaching aids (including modern software tools and their regular updates to improve teaching and research),
- d) ensure construction of infrastructure for forestry bio-economics and biomaterials, and strengthen the possibility of employing foreign academic staff,
- e) design and ensure the development of external FFWS workplaces,
- f) create a system of effective use of equipment across the Faculty, University, and other research workplaces.

### 3.3 FFWS as a good manager

Efficient and sustainable management is essential in an environment of unpredictable interventions in state financial support for universities. The Faculty must provide funding for sustainable development of the FFWS as a top institution providing educational, scientific, and research activities in Europe. These funds must be generated both from the funds from the Ministry of Education, Youth and Sports, as well as contractual research, ancillary and project activities.

The aim is to manage the allocated funds in such a way that there is a permanent creation of reserves to cover not only extraordinary costs, but especially to cover FFWS personnel, investment, and project development. Financial management must include the Faculty's ability to cover participation in national and international projects, make efficient use of overheads, and maximize profits from contractual research and ancillary activities.

Examples of measures:

- a) in the area of financial resources for personnel management and employees, funds must be permanently set aside for motivational components, support and remuneration of excellent publication outputs, and outputs directed straight to practice. As part of multi-source wage financing, ensure that the FFWS wages correspond to similar positions in the commercial sector,
- b) with regard to the parameters of university financing, it is necessary to increase the share of contractual research and ancillary activities in the FFWS budget,
- c) creation of means for successful commercialization of scientific outputs,
- d) manage the allocated funds so that reserves can be created for the FFWS for sustainable operational and investment development.

### 3.4 Sustainable and socially responsible FFWS

FFWS is aware of its responsibility to the environment and society, and its actions in all activities should be an example of an organization that does not exacerbate the current problems of society and nature; in contrast, it tries to minimize any negative impacts that threaten future generations. The intention is to focus on and develop educational and scientific research activities in the field of the Green Deal.

Simultaneously, FFWS perceives the special needs of students and staff and the related need to improve the conditions for study and work for people with disabilities, as well as current trends in the issue of gender and non-discrimination at the Faculty.

Due to the focus of the educational and research activities of the Faculty, these principles must be reflected in the study programmes as well as science and research projects, but also in all other activities.

Examples of measures:

- a) reduction of non-recyclable waste at FFWS events, but also during its normal activities,
- b) public lectures and discussions on social topics,
- c) organizing open events for society,
- d) implementation of U3A courses (University of the Third Age),
- e) implementation of lifelong learning courses for enterprises and state administration.