



**Long-term intention
Faculty of Forestry of the Technical University in
Zvolen for the years 2017 - 2023 with a vision to
2030**

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Long-term plan of the Faculty of Forestry of the Technical University of Zvolen for the years 2017-2023 with a vision to 2030

Home

The Faculty of Forestry in Zvolen entered the 21st century as a part of the Technical University in Zvolen, first the University of Forestry and Wood Technology. The Faculty of Forestry is a continuation of the spiritual heritage of the Mining and Forestry Academy in Banská Štiavnica, which began in 1807.

The Faculty of Forestry links its own tradition of modern higher education based on forestry science with the vision of modern, progressive and adaptive forestry and management of renewable natural resources. As one of the pillars of TU Zvolen as a research university, it is guided by the principles of democracy and humanism and, in accordance with the applicable laws, carries out educational, scientific, research, development and other creative activities that build on the long tradition of forestry education and research in Slovakia.

In order to enable the LF to continuously and predictably fulfil its mission and role as a higher education institution according to

§ 1, paragraphs 2 to 4, and § 2, paragraph 10 of the Act. 131/2002 C o l l . on Higher Education Institutions and on Amendments and Additions to Certain Acts, as amended, the faculty develops its long-term plan as an important planning and development tool for a period of at least 6 years. The current long-term plan for 2016-2021 (hereinafter referred to as the "long-term plan") is compatible with the current long-term plan of the Faculty of Forestry, but focuses on the specific conditions, needs, tasks and objectives of the Faculty of Forestry. In addition, it is also based on the results of the comprehensive accreditation in 2014. The implementation of the development programmes is subject to annual evaluation.

Mission, Values and Vision

The main mission of the Faculty of Forestry of the University of Technology in Zvolen is to provide higher education in the fields of forestry and game management, based on current knowledge from its own and international scientific research. Creative research at the Faculty of Forestry reflects the development of world forestry science and the requirements for the profile of a graduate of the Faculty of Forestry.

The most important output of the Faculty of Forestry is the forest engineer as a specialist whose mission is to prepare conditions, organize and manage forest production using the most progressive approaches to ensure the ecological stability and adaptability of forest ecosystems, as well as the performance of forest functions, especially water management, soil protection, climate, health, recreation and production. To this end, the forest engineer is not only thoroughly familiar with the forest ecosystems of the temperate zone of Europe and aware of their social, economic and natural value, but is also prepared to effectively promote their biodiversity and sustainability under conditions of global climate change.

The education of forestry graduates meeting these demanding criteria in the transition to bioeconomic approaches is directly dependent on the implementation of cutting-edge scientific research at the faculty. Such research implicitly presupposes a thorough knowledge and incorporation of the knowledge of forestry sciences in the European research area. In the field of basic and applied scientific research with a link to student education, such as

and the need for variant approaches and solutions to the most current forestry challenges, the Faculty of Forestry aspires to be one of the leaders in the national and European framework.

The shared values of the Faculty of Forestry are mainly:

- respect for the rich history of forestry science, education and practice, as well as its representatives in Slovakia and worldwide,
- high demands on the current and future quality of the teaching process, scientific research activities and international cooperation,
- Consciousness of shared responsibility for the faculty's contribution to the quality of life and well-being of populations dependent on ecosystem functions and forest products through the education of quality graduates and cutting-edge research,
- Promoting the diversity and harmonious development of students and staff, their creativity, innovation, critical thinking and communicative skills,
- Lively communication and cooperation with forestry practice as an important means of inspiration and feedback for the activities of the faculty,
- respect for forests as the most complex terrestrial ecosystems and for their mission as defined by the requirements of society.

At the same time, the Faculty of Forestry declares its vision of being part of a research university that contributes significantly to a sustainable bioeconomy in the national and European framework, to the protection and adaptive management of forest resources, and to addressing the policy and commitments of the Slovak Republic in the field of mitigation and adaptation to climate change in the forestry sector.

Development Programme

1. Higher education

Objective

Recruitment of quality applicants for study at the Faculty of Forestry, preparation of graduates for practice and application of effective and innovative methods of the pedagogical process.

Tasks

1.1 Recruitment of applicants for study at the Faculty of Forestry with the prospect of employment on the labour market

- a) Building the quality brand of the Faculty of Forestry through curricular, extracurricular and PR activities of the Faculty of Forestry. Indicator: proportion of students with an average of < 1.5 among students applying to study at the Faculty of Forestry.
- b) LF's position at the top of relevant rankings and evaluations. Indicator: comprehensive accreditation assessment, ARRA.
- c) Activities to attract students to newly accredited study programmes in Slovak and English who are not interested in studying in traditional study programmes at the Faculty of Forestry; analysis of opportunities and subsequent preparation of new prospective study programmes with the potential to attract and employ students. Indicator: proportion of students enrolled in new study programmes.

1.2 Preparation of graduates for practical work and tasks arising from the need to adapt forestry and its transformation into a high-tech sector with high added value

- a) Increasing the proportion of contextual and collaborative learning in order to achieve students' ability to have a comprehensive, cross-cutting perception of the contexts within the forestry sector and its role in society. Indicator: number of collaborative learning events during the academic year.
- b) Achieving a state so that graduates, with their knowledge and comprehensive understanding of forest management, are able to successfully pass the OLH examination after the period in practice stipulated by the legislation and at the same time have the necessary flexibility and knowledge needed to design alternative solutions to the tasks of forest management under conditions of global change. Indicator: number of graduates with OLH after 3 years of 2nd cycle of higher education (Eng.) or after 5 years of 1st cycle of higher education (Bc.); assessment of Bc./Ing. theses.
- c) Creating opportunities for contact with invited specialists from practice and space for discussion on current topics and issues in the forestry sector. Indicator: number of timetable events, lectures and panel discussions with participation of practitioners and/or external experts.
- d) Continuation and development of optional semester practices of students within the VŠLP, increasing the quality of operational and pre-diploma practices. Indicator: number of

Students who have completed semester elective practicums; student satisfaction with the operational and pre-diploma practicums and major practicums completed.

- e) Supporting and guiding students during their studies in the development of entrepreneurship in the forestry sector, ecoinformatics, bioeconomy and other promising areas; supporting the establishment of innovative business entities (e.g. start-ups) with the participation of students and graduates of the Faculty of Forestry. Indicator: number of startups, founders and employees of innovative companies among LF alumni.

1.3 Development and progressive innovation of the pedagogical process in teaching

- a) Increase and promote student engagement through formal and informal tools. Indicator: trend in the use of regular exam dates, % of retakes and study average at LF.
- b) Promoting the awareness of scientific and pedagogical staff of the current knowledge of educational psychology and cognitive sciences and their application in the pedagogical process. Indicator: number of subjects in which qualitative innovations in teaching have been tested or introduced.
- c) Transforming the time-savings in the pedagogical process, triggered by the demographic decline by 2020, into cutting-edge research and reinvesting its results back into improving the pedagogical process. Indicator: proportion of teaching carried out in state-of-the-art laboratories, demonstration facilities or using unique methodologies (e.g. Pro Silva facilities, experimental workplaces, unique software, latest theoretical approaches and concepts).
- d) Internationalization of the environment and promotion of diversity at the Faculty of Forestry in both the student and scientific-teaching staff segments. Indicator: number of foreign students studying at LF, number of LF staff with PhD from a foreign university ranked in the world university ranking; number of LF staff with long-term lectureships or study placements at a foreign university ranked in the world university ranking.
- e) Support for professional and personal development of students and creative staff of the Faculty of Forestry through international mobility. Indicator: number and duration of foreign mobility of students and staff of the Faculty of Forestry.
- f) Reconstruction, modification and furnishing of the LF interiors to improve study opportunities, relaxation and overall residential comfort, motivation and retention of students in the faculty premises. Indicator: student use (occupancy) of the premises.
- g) Evaluation of the quality of education, in accordance with the rules for the continuous detection and evaluation of the level of quality of knowledge acquisition and skills development, and the labour market employability of graduates. Indicator: proportion of students participating in regular quality assessment.

Development Programme

2. Science and research

Objective

Increase the share of LF in the outputs of cutting-edge research on the problems of creating adaptive forest ecosystems and landscapes, adaptive management of forest resources and development of bioeconomy.

Tasks

2.1 Development, exploitation and dissemination of the faculty's scientific research potential and its outputs through multidisciplinary and cross-cutting approaches

- a) Outputs of scientific research activities, including PhD students, primarily oriented to journals indexed in the Current Contents database, or journals with high IF, or patents with a real prospect of copyright sale or implementation in practice. Indicator: a) number of outputs in CC-registered journals, b) outputs with high IF (> twice the median of the field) and c) patents implemented.
- b) To apply multidisciplinary, interdepartmental, interfaculty and international approaches in identifying and solving scientific problems with emphasis on continuously updated supporting research directions of the Faculty of Forestry. Indicator: number of outputs registered in the CC database, or outputs with high IF, containing explicit recommendations for practice.
- c) Identify and support the emergence of research teams with the potential for recognition as top teams according to the criteria of the Accreditation Commission. Indicator: number of LF staff in top teams or number of top teams with participation of LF creative staff.
- d) To gain international recognition by publishing high quality and topical scientific papers in journals registered in the Science Citation Index database in order to increase the Hirsch index of each creative worker. Indicator: median H-index of LF staff.
- e) Increase the involvement of the Faculty's scientific teams in international scientific projects Horizon 2020 or other projects on a pan-European platform. Indicator: number of LF staff involved in Horizon 2020 projects and number of projects in which LF staff are involved.
- f) Ensure sustainability and effectiveness of research at the Faculty of Forestry by submitting high quality plans and projects and obtaining funding from grant schemes of research agencies, as well as from LH entities with potential and interest in applying the latest findings of scientific research to LH practice. Indicator: amount of EUR obtained through projects per creative worker; number of outputs registered in CC, WOS and SCOPUS per EUR 1000,- obtained through projects.
- g) To ensure the scientific education of PhD students by their gradual inclusion in author teams of papers submitted to journals indexed mainly in the CC database, in their supervisors' projects and by sending them on foreign internships. Indicator: number of PhD students with output in CC, WOS and SCOPUS databases.

- h) Increase the number of quality applicants for doctoral studies, including applicants who are not graduates of the Faculty of Forestry of the University of Life Sciences. Indicator: Proportion of PhD applicants who are not graduates of the HEREF.
- i) To support the cooperation of the faculty with the business sector, the subsequent transfer of knowledge into practice and to create conditions for initiating start-up projects. Indicator: number of mixed teams involving students and young scientific and pedagogical staff developing technological solutions and innovative approaches for practical applications.

Development Programme

3. External relations and international

cooperation Objective

Building the brand, increasing the attractiveness and strengthening the influence of the Faculty of Forestry at home and abroad

Tasks

3.1 Increase the number of mobility and international partnerships of the Faculty of Forestry

- a) Increase the number of student and LF faculty mobilities in different geographical regions, including student internships in practice. Indicator: number of (man-days) mobilities and internships.
- b) Conclude, diversify and use memoranda of understanding on mutual mobility and scientific cooperation. Indicator: number and representation of mobilities by region.
- c) Acquire and implement Erasmus+ projects with a focus on faculty-business project cooperation. Indicator: number of students sent on internship to foreign enterprises and companies.
- d) To use existing schemes of the Department of Education and other departments, e.g. the NSP and Slovak Aid, to attract applicants to study at the Faculty of Forestry from abroad. Indicator: number of students recruited under semester and multi-semester mobility, number of full-time students from abroad.
- e) Monitor and take advantage of opportunities to attract international students - selfpaying students to the study programmes of the Faculty of Forestry, especially in AJ. Indicator: number of self-pay students.
- f) Develop faculty representation of faculty and staff membership in academic and professional international organizations (especially EFI, IUFRO). Indicator: number of positions held by LF staff in major international organisations.

3.2 To strengthen the awareness of the Faculty of Forestry and its position and opinionforming power in the Departments of Agriculture and Environment and in the public

- a) Develop engagement and proactive approach within contractual relations or memberships (especially SR Forests, SLsK, NLC, ÚEL SAV, MPaRV, MoEW SR and entities of non-state forests) in areas according to current needs. Indicator: level of acceptance of LF opinions, proposals and requirements in institutional and programme documents and legislation.
- b) With the participation of its own experts, to continuously formulate the opinions of the Faculty of Forestry on the most current issues and problems of forestry in Slovakia in the international context and to use and disseminate these documents as appropriate. Indicator: Number of published or sent opinions and responses (number, nature of response) to them.
- c) To ensure the transfer of knowledge from the Faculty's scientific projects to forestry practice and related sectors in Slovakia and abroad through the periodicals Lesokruhy, Lesník, etc. Indicator: number of articles published by LF staff in these periodicals.
- d) Raising awareness of the Faculty of Forestry and forestry among the general public by implementing and promoting attendance at faculty and student events (May Day, May Day, St. Hubert's Day events and celebrations, etc.). Indicator: number of visitors.
- e) Actively use the faculty website, UIS, dedicated or occasional LF websites, social networks and mobile apps for students and faculty, provide web services, release software products. Indicator: number of accesses, number and nature of user interactions, number of users and software downloads of web services.

3.3 Improving the quality of the environment of the Faculty of Forestry TU in Zvolen

- a) Encourage the creation and development of attractive interior and exterior faculty amenities for prospective and existing faculty students. Indicator: development of a faculty mini-relax zone and study area.
- b) To guide and valorise the clubs activities of the students of the faculty through the promotion, strengthening, self-governance and mutual coordination of the clubs in the Faculty of Forestry. Indicators: number of club members, participation of students, faculty, and/or the public in events organized by the clubs.
- c) Develop and support cooperation with the city of Zvolen and other forestry institutions within the framework of the signed memorandum of cooperation (Zvolen - city of forestry) on participation in the promotional activities of the city of Zvolen and its region. Indicator: number and contribution of cooperations to the LF.

Development Programme

4. Staff (human resources)

Objective

LF TUZVO staff as the most important resource ensuring the competitiveness of the faculty in all areas of its core activity

Tasks

4.1 To create the conditions and stimulate the development of the abilities of individuals, teams and the entire LF team to fulfil the mission of the faculty and achieve its goals

- a) Smooth recruitment and qualification growth of staff with emphasis on support and qualification growth of young scientific and pedagogical graduates under 35 years of age by senior staff. Indicator: average age of creative staff, associate professors and professors; % of MOM (salary incentive) for young scientific and teaching staff up to 35 years of age.
- b) Creating post-doctoral positions, identifying funding opportunities and selecting quality candidates from home and abroad. Indicator: total number of post-doctoral positions, number of post-doctoral candidates who are not graduates of the Faculty of Forestry of the University of Technology in Zvolen and number of foreign postdoctoral candidates.
- c) Increase the proportion of LF staff with a science, humanities and technical background to a level that reflects the need for specialisation, generalisation and trends co-determining and overlapping with the development of research areas and fields of study at the LF Indicator: proportion of staff with a university education in the humanities, natural sciences and technical fields (excluding LF).
- d) Internationalization of faculty, departments and work teams. Indicator: proportion of staff who have obtained a 3rd level university degree from a foreign university ranked in international rankings.
- e) Continuous training (to) staff in pedagogy, communication, teamwork and management. Indicator: number of training courses and participants at LF and their satisfaction.

4.2 To create the conditions for above-average performance, compatibility and the ability to cooperate at the level of individuals and teams by recruiting and selecting candidates for LF positions in a demanding way

- a) To continuously update the systemisation of the functional positions at the Faculty of Forestry based on the needs of the development of research areas, fields of study and the interest of applicants for study at the Faculty of Forestry. Indicator: number of students per 1 systematised scientific and teaching post.
- b) To create the possibility of selecting a larger number of candidates to fill a systematised post. Indicator: Number of applicants for a systemic post.
- c) Strictly apply in selection procedures the assessment of candidates' qualifications to perform the tasks in accordance with the applicable legislation (the Higher Education Act), the requirements of the Accreditation Commission and the general criteria for filling posts. Indicator: the proportion of staff who, in the 4-year period following the

selection procedure, have produced at least 2 outputs registered in the CC database and have innovated the teaching process in the subjects in which they are involved.

- d) Periodic, 2-year evaluation of the fulfilment of the criteria for filling the posts of professors, associate professors and assistant professors in accordance with the legislation in force (the Higher Education Act), the requirements of the Accreditation Commission and the general criteria for filling the posts. Indicator: evolution of the number of staff who have been notified of the need to meet the minimum requirements for the post they currently hold.

4.3 Promoting adequate motivation and regeneration of the workforce and personal development differentiated according to the performance of the workforce. Indicator: % of the incentive component (MOM) of the tariff wage.

Development Programme

5. Governance, financing and technical

development Objective

Stabilization and expansion of LF resources, adaptive management processes and resource generation for faculty development.

Tasks

- 5.1 Governance by sharing information and values at all levels of the faculty. Indicator: holding meetings of the Faculty Management, Dean's College and LF Departments in accordance with the timetable of work, or more frequently as needed, and subsequent dissemination of information documented by minutes.
- 5.2 Identification, solutions and optimization of factors influencing the competitiveness of the faculty and its organizational components. Indicators: ARRA assessment; % of student retention; LF annual summary outputs in WoS, CC database; LF student and alumni satisfaction surveys, LF employer satisfaction survey (every 2 years); faculty and university-wide predictive analytics tools; amount of available salary fund (annually); amount of LF share of actual salary requirement of university-wide departments and OOS vs. volume and quality of CUP and OOS services provided by LF.
- 5.3 Timely and adequate use of competencies by all managers. Indicator: record of timely identification of risks, problems and opportunities and their resolution in minutes and other official documents; performance of individual departmental staff by time and outputs registered in the WoS database.
- 5.4 Development and improvement of functionality, comfort, aesthetic level and motivational effect of the LF premises. Indicator:
- 5.5 Creation and provision of resources for the incentive component of the pay for overperformance, preferably in the areas of the greatest intersection of the criteria for the distribution of the subsidy to HEIs with the criteria of comprehensive accreditation and the most favourable subjective and objective conditions for increasing their fulfilment. Indicator: % of total MFA paid to top-performing faculty.

- 5.6 Fulfilling the reproduction fund and maximizing the profit fund as prerequisites for meeting departmental and faculty development needs or for supporting targeted faculty activities (e.g., faculty PR, support for student activities). Indicator: % of FR execution by LF departments, amount of costs (faculty, university-wide depreciation, fund contributions) and amount of transfer from LF HV to profit fund.
- 5.7 Use of cutting-edge equipment acquired from SF funds (after the moratorium expires) and know-how for commercial purposes within start-ups or entrepreneurial activities. Indicator: creation of start-ups, economic result from entrepreneurial activity.