

SIP FME TUL 2021

STRATEGIC IMPLEMENTATION PLAN EDUCATIONAL AND CREATIVE ACTIVITIES OF THE FACULTY OF MECHANICAL ENGINEERING OF THE TECHNICAL UNIVERSITY OF LIBEREC FOR 2022

Discussed by the Scientific Council of the Faculty of Mechanical Engineering of TUL
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on 19 March 2022.

INTRODUCTION

The Plan for the implementation of the Strategic Plan of the FME TUL for 2022 is based on the Strategic Plan of the Educational and Creative Activities of the FME TUL for the period 2021–2025 with a view to 2030.

It presents a set of concrete steps for 2022 that will lead to the achievement of the 2025–2030 target state.

The FME TUL 2022 Implementation Plan follows the evaluated FME TUL Implementation Plan for 2021.

The Implementation plan of the FME TUL 2022 is based on the Implementation Plan of the TUL Strategic Plan for 2022.

The Implementation plan of the TUL FS 2022 is based on the TUL Strategic Management Support Programme for 2022-2025

In all areas of activity, the faculty will support activities that will lead the elimination of weaknesses and the strengthening of strengths, the exploitation of opportunities and to counteract threats.

In 2022, standard activities will be carried out in the individual areas of activity and the established and proven activities and measures evaluated in the annual activity reports of the Faculty of Mechanical Engineering of TUL will be continued.

Priority will continue to be given in 2022 to measures and activities related to the provision of education in the context of the measures related to the pandemic Covid-19 situation.

The following selected measures and activities will be implemented in targeted sub-areas.

STRATEGIC AREAS

- A/ Education and study
- B/ Science, research, development, innovation
- C/ Social responsibility
- D/ Academic community and faculty community
- E/ Management of activities
- F/ Infrastructure

A/ EDUCATION AND STUDY

- To complete in cooperation with the TUL management the documents for the Institutional Accreditation of TUL in the field of education 27 Mechanical Engineering, Materials and Technologies.
- Prepare documents for the accreditation of doctoral study programmes.
- Set a timetable for the preparation of documents for the accreditation of habilitation and professorship procedures for submission in 2023.
- Actively engage in the implementation of the National Plan for the Renewal of the Transformation of Universities, to adapt to new forms of learning and the changing needs of the labour market.
- Participate in the preparation of a professional BSP implemented in cooperation with the Faculty of Economics and accredited under the Faculty of Economics.
- To continuously innovate study programmes, to optimise the structure and content of study programmes in relation to scientific research activities and modern knowledge.
- Strengthen the competences of academic staff for educational activities.
- Analyse academic failure, set up measures to increase academic success and study permeability.
- Implement the set system of teaching evaluation, evaluate and publish results, actively respond to evaluation results.
- Strengthen activities to increase the number of self-paying students.
- Implement supportive educational activities, in the form of special courses for students 1. and 2. year BSP.
- Evaluate the performance of tutors and optimise the content and scope of their activities.
- Complete the computerization of processes in doctoral study programmes.
- To continue with the set concept of DSP, i.e. to implement courses for professional and professional growth, for improving academic skills and social science seminars.
- To implement activities to introduce a dual-led doctoral programme, the so-called "cotutelle".
- Strengthen the introduction of modern forms of teaching and smart technologies in teaching.
- Creation of digital learning materials that will be part of the learning support in elearning systems within the development of blended learning.
- To develop and pilot Blended Intensive Programmes, i.e. combined intensive programmes using innovative ways of teaching by combining physical and virtual activities.
- Make maximum use of electronic teaching texts and other digital teaching materials and aids as a standard supplement to face-to-face teaching.
- Continue to develop forms of cooperation with the application sphere in the educational field.
- Once a year to hold a round table with representatives of secondary schools, with the participation of representatives of the Liberec Region and the City of Liberec.
- Support students' extra-curricular creative activities, e.g. FormulaStudent TUL.

- Organize summer schools for students, support participation in Student scientific professional activity TUL and other competitions.
- Implement and develop activities under the new Erasmus+ programme, including short-term mobilities, combined mobilities, virtual mobilities, international mobilities, etc.
- To the extent possible, implement the Erasmus+ credit mobility and CEEPUS programmes.
- Discuss the position of FME TUL on the so-called "mobility windows" and possible next steps.
- Set up a concept for further cooperation with Conestoga Polytechnic and the University of Waterloo Build on the successful history of student internships, possibly expanding to other topics.
- Actively participate in about 2 B2B student fairs, present FS TUL and study programs.
- Strengthening of partnership links within CEEPUS networks, preparation for a working meeting of university representatives.

B/ SCIENCE, RESEARCH, DEVELOPMENT, INNOVATION

- Continue to implement the R&D&I FME TUL +2030 Strategy.
- To make a major contribution on behalf of TUL in the Ford 2000 industry group to quality results and outputs.
- Support activities to strengthen the indicators monitored by the M2017+ methodology.
- Start preparing the basis for the faculty evaluation in 2023 within Module 3 of the M2017+ methodology.
- Adjust the parameters of the faculty assessment of scientific research activities in the performance system.
- Strengthen the international dimension of scientific research activities by submitting projects to international calls for proposals.
- Prepare topics and areas of faculty involvement in OP projects.
- To organize an international conference within the framework of the university project OP R&D Excellent Research "Hybrid Materials for Hierarchical Structures", together with the Faculty of Textiles of TUL and Cxi TUL.
- Establish and use a project management and record keeping system.
- To carry out individual evaluation of staff in terms of scientific research activities and their involvement in the research programmes of the Faculty of Mechanical Engineering of TUL.
- Focus on supporting and motivating individual academics based on individual evaluation and research direction.

C/ SOCIAL RESPONSIBILITY

- Maintain the scope, volume and quality of scientific research cooperation with the application sphere.
- Specify and offer new contract research topics.
- Promote steps to increase interest in the study of technical disciplines.
- Set up a concept of cooperation with the newly established The University Company Ltd.
- To promote steps to strengthen R&D activities for fulfilling the third role of the University.
- Continue traditional events to strengthen cooperation with the application sphere (T-forum, HR point, company presentations, student involvement in SBC events) and look for new opportunities and forms of cooperation.
- To develop the implemented forms of cooperation with the application sphere in the educational field.
- Develop forms in the field of lifelong technical education and within the University Third Age TUL.
- Establish a new Industrial Council of the FME TUL and start its activities.
- Develop interaction between the academic environment and the non-university environment and industry.
- Strengthen the national and regional anchorage of the faculty by participating in the creation of strategic and development documents of the Liberec Region.

D/ ACADEMIC COMMUNITY, FACULTY COMMUNITIES

- To open the term of office of the Dean doc. Ing. Jaromír Moravec, Ph.D., to establish the Scientific Council of FS TUL and other bodies.
- Continue the continuous personnel renewal in terms of generation and qualifications.
- Initiate and set up regular informal meetings of academics on selected topics.
- To continue the so-called Diamond Graduation Ceremonies for faculty graduates after the 1960.
- Reach out to graduates of the faculty for feedback in terms of evaluation of the educational process and application in the labour market.
- To prepare the first issue of the Newsletter "Strojař-UNI", to start the presentation and promotion of the scientific research assets through available networks (e.g. Twitter).
- Prepare and present the stories of our alumni.
- To start preparations for the celebration of the 70th anniversary of the foundation of VŠS-VŠST-TUL in 2023.

E/ MANAGEMENT OF ACTIVITIES

- Establish a system for evaluating the quality of academics' activities, implement pilot testing and set the next steps.
- To analyse the status and needs of human resources management of the FME TUL and to set up measures resulting from the HRS4R Strategy of the European Commission.
- Implement a plan of education and training activities for administrative staff.
- Increase the digital literacy of employees.
- Gradually switch to a new faculty website, including an English version, which will reflect the current requirements of the faculty and the visual identity of TUL.
- Strengthen information and promotional activities on social networks in cooperation with TUL.
- Continue electronic advertising campaigns promoting the studio in an international environment.
- Continuously innovate and create promotional videos for faculty presentation in electronic media.
- Prepare advertising campaigns to promote the study in an international environment for approximately three selected countries.
- To hold a faculty meeting on the evaluation of the implementation of the R&D&I FME TUL +2030 Strategy.
- To create a database of offers/positions for internships of foreign students at FME TUL, to approach foreign universities with the demand for positions for internships of FME TUL students.
- To create a network of FME TUL contact persons/mentors for selected foreign institutions who would advise students in case of planning trips.

F/ INFRASTRUCTURE

- Complete the renovation of departments, classrooms and laboratories in Building F and implement the move of departments back to Building F.
- Complete the construction of the new laboratory of the Department of Power Equipment.
- To implement, in cooperation with TUL, the reconstruction of the Vesec laboratory facilities for the possible use of space and areas for prototype testing of R&D outputs and results.
- Develop a plan for the anticipated upgrade of instrumentation and laboratory equipment for 2021–2027 in relation to the implementation of research programmes and teaching and in relation to the 2021–2027 programme period.
- Continuously renew the infrastructure of laboratories for the development of research programmes.
- Digitalize technological and production processes, support the creation of a virtual laboratory.

- Consider equipping one classroom with technology for streaming lectures. Equip 2 to 3 classrooms with Blended Learning technology with the support of the NPO project.
- To continuously retrofit the teaching with new SW and to ensure the upgrade of the existing, necessary for teaching, SW for improving R&D skills and Open Science.
- To equip the faculty's workplaces with 10 licenses of the Patent Inspiration software.
- To continuously modernize and retrofit the faculty's workplaces with new equipment and new technologies for teaching.
- To equip an additional room for online exams, state final exams, dissertation defenses, admission interviews, etc.

FINANCIAL RESOURCES

- Contribution from the state budget of the Czech Republic
- Subsidies from the state budget of the Czech Republic
- Investment Programme for the Development of Infrastructure of Higher Education Institutions of the Ministry of Education of the Czech Republic
- Institutional Development Programme of the Ministry of Education of the Czech Republic
- Grant programmes of regions and Prague
- Programmes of the CAS, GA CR, TA CR and ministries of the Czech Republic
- OP JAK, OP TAK and other EU operational programmes
- EUROPA2020 programme
- International cooperation programmes in research and development
- Programmes to support student and academic mobility
- Own resources FME TUL
- Contract research
- Additional activities
- Other resources