

STRATEGY OF FME TUL

2021

**Strategic implementation plan
of educational and creative activities
AT THE FACULTY OF MECHANICAL ENGINEERING
TECHNICAL UNIVERSITY OF LIBEREC**

FOR THE YEAR 2021

Plan for the implementation of the Strategic Plan concerning the Faculty of Mechanical Engineering, TUL was discussed by the TUL Scientific Board on June 16, 2021. It was discussed and approved by the Academic Senate of the Faculty of Mechanical Engineering TUL on June 16, 2021.

INTRODUCTION

The implementation plan of the FME TUL Strategic Plan for 2021 is based on the Strategic Plan of the educational and creative activities for the period 2021–2025 with the prospect to 2030. It presents a set of concrete steps for 2021, which lead to the fulfillment of the target state for 2025-2030.

In all areas, the faculty supports activities leading to the weaknesses elimination as well as reinforces strong points, the use of opportunities and balancing threats. Standard activities will be implemented, also the proven, established ones, and measures evaluated in the annual reports of the Faculty of Mechanical Engineering.

Selected measures and the mentioned activities will be implemented in targeted areas and activities related to the provision of education in connection with measures within the situation associated with the Covid-19 pandemic.

STRATEGIC AREAS FME TUL FOR THE YEAR 2021

- A/ EDUCATION AND STUDIES
 - B/ SCIENCE, RESEARCH, DEVELOPMENT AND INNOVATION
 - C/ SOCIAL RESPONSIBILITY
 - D/ ACADEMIC COMMUNITY
 - E/ MANAGEMENT OF ACTIVITIES
 - F/ INFRASTRUCTURE
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A/ EDUCATION AND STUDIES

- Prepare documents for the Institutional Accreditation of TUL in the field of education 27 Mechanical Engineering, Materials and Technologies.
- Evaluate the first years of implementation of new study programs within the Council of Guarantors of FME TUL.
- Initiate a discussion on adjusting the parameters for admission of students to BSP, analyze study failure and set up activities to strengthen the permeability of studies in relation to standard 1.8 of the National Accreditation Office.

- Continuously innovate study programs, optimize the structure and content of study programs in connection with scientific research and modern knowledge.
- Carry out an analysis of the teaching quality evaluation system for the last period and set the concept in accordance with the requirements of standard 1.7 of the National Accreditation Office.
- To computerize study texts in English for both bachelor's and subsequent master's degree programs. These will also be offered in parallel in Czech study programs to strengthen students' language competences.
- Computerization of processes in doctoral study programs.
- Implement courses for the professional growth of doctoral students and for increasing academic skills.
- Implement courses and seminars for doctoral students focused primarily on the basics of scientific work, academic writing, English language, intellectual property issues, skill courses, etc.
- Carry out an intensive training camp for doctoral students in Technical English with an emphasis on special vocabulary related to dissertation research.
- Prepare an analysis of paid scholarships for students of full-time doctoral study programs from the academic year 2020/2021.
- Implement part of the planned outbound and inbound mobility of academics and students within the FME TUL 2021 Mobility Fund.
- Establish cooperation and, as far as possible, implement activities in the CEEPUS program and Erasmus +, including new activities.
- Implement, as far as possible, activities within the Erasmus + Credit Mobility program.
- Use prepared materials and digital outputs for online teaching and apply them as a standard supplement to full-time teaching.
- Support non-teaching creative activities of students in student activities (student formula).
- Perform computerization and digitization of didactic and teaching tools in classrooms, laboratories and test rooms in accordance with the requirements for distance, hybrid and other forms of teaching, consultations, final state exams, etc.

B/ SCIENCE, RESEARCH, DEVELOPMENT, INNOVATION

- Develop and fulfill research programs, continue to implement the VVI FS TUL +2030 Strategy.
- Contribute substantially to quality results and outputs in the Ford 2000 industry.

- Initiate a discussion on the methodology and parameters of faculty assessment of scientific research activities and research programs.
 - Strengthen the international dimension of scientific research, start preparing 1-2 projects for calls under Horizon Europa.
 - Strengthen participation in basic research projects, prepare and submit 1-3 projects of the type GA CR, etc.
 - Organize XIII. International Conference on the Theory of Machines and Mechanisms a XV. Experimental Fluid Mechanics 2021.
 - Strengthen research teams with young workers, ideally from the outside environment.
 - Prepare the methodology of employees' evaluation from the point of view of scientific research activity.
 - Implement a project management system.
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C/ SOCIAL RESPONSIBILITY

- Maintain the scope, volume and quality of scientific research cooperation with the application sphere.
 - Strengthen the link with the University Enterprise and Lipo.Ink in connection with the possibilities of transferring results to industry.
 - To develop implemented forms of cooperation with the application sphere, involvement in the educational process and in the preparation of students for their future application and knowledge.
 - Develop the set forms of cooperation with the FME TUL Industrial Council in terms of feedback on education.
 - Develop interaction of the academic environment with the non-university one and industry.
 - Strengthen the national and regional anchoring of the faculty by participating in the creation of strategic and development documents of the Liberec region.
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D/ ACADEMIC COMMUNITY

- Participate in the preparation of the Dean's elections for the term of office 2022-2026.
- Continuation of running personnel change from the generation and qualification point of view.
- Consideration of setting up and using a university system for evaluating faculty staff.

- Continue the tradition of regular informal meetings of academics on selected topics.
 - Support students' involvement in the academic self-government of the faculty and in student activities.
 - Continue discussions on the weaknesses and needs of the faculty in relation to the preparation of topics / projects financed from the EU structural funds in the programming period 2021–2027.
 - Consider the preparation and implementation of the so-called Golden Graduations of faculty graduates after the 1950s.
 - Addressing graduates of the faculty for feedback in terms of evaluation of the educational process and employment in the labor market.
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E/ MANAGEMENT OF ACTIVITIES

- Set up a system for evaluating the quality of activities, link modules for recording and managing data for analyzing the evaluation of quality of FME TUL activities, i.e. recording and managing R&D results (TUL Publications), project management (GAP), database of academics (Cassandra), evaluation of academics and staff (Roliz), Agenda Management (STAG) and Academic Mobility Management (Mobility).
 - Initiate discussions on the future direction of the university.
 - Carry out an analysis of requirements and needs and prepare a plan of educational and training activities for administrative staff.
 - Set up a system for electronic enrollment in higher grades without the need for personal presence of students in the study department. Verify when enrolling in the academic year 2021/2022.
 - Set up a system for online state final examinations and dissertation defenses, including technical equipment of classrooms.
 - Create a new faculty website reflecting current requirements of the faculty based on the change of TUL website, a new visual identity and meet current needs in terms of security and user experience.
 - Prepare electronic advertising campaigns for the promotion of studies in the international environment and launch a recruitment campaign in the autumn of 2021.
 - Create a promotional video for the presentation of the faculty in electronic media.
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F/ INFRASTRUCTURE

- Start the reconstruction of departments, classrooms and laboratories in the building F.

- Start construction of a new laboratory at the Department of Power Equipment.
- Collaborate with TUL on the project of Vesec reconstruction for the possible use of premises and areas as the faculty workplace.
- Provide two departmental rooms for online exams, state final exams, dissertation defenses, admission interviews, etc.
- Equip departmental classrooms for online teaching and testing.
- Develop a plan for the expected upgrade of laboratory instruments and equipment for the years 2021–2024–2027 in connection with the implementation of research programs, teaching and the programming period 2021–2027.
- Modernization of the Uni.Lab laboratory in connection with the electro mobility.
- Implementation of a joint laboratory with the company Zeiss.
- Equip the faculty workplace with 10 SW Patent Inspiration licenses.

FINANCIAL RESOURCES

- Contribution from the state budget
- Subsidies from the state budget
- Investment program for the development of university infrastructure of the Ministry of Education, Youth and Sports of the Czech Republic
- Institutional development programs of the Ministry of Education, Youth and Sports of the Czech Republic
- Subsidy programs of regions and Prague
- Projects AV ČR, GA ČR, TA ČR, MPO ČR, MV ČR, MZE ČR etc.
- EU Operational programs
- Horizon Europa according to current challenges
- International cooperation programs in research and development
- Projects of cross-border cooperation
- Programs to support the mobility of university students and academics
- Own resources FME TUL
- Contract research
- Supplementary activities
- Other sources