MUST-2030 STRATEGIC PLAN

LEADING DIRECTIONS –1: CURRICULUM INNOVATION AND CAREER DEVELOPMENT

Goal: To train a new generation of engineers and leaders who are humane, compassionate, and creative.

№	Objectives	Implementation strategy	Measuring progress indicator
1.1	Establish a research and training environment and infrastructure grounded in educational quality.	1. Ensure the availability and safety of training equipment and materials. 2. Establish modern teaching laboratories. 3. Enhance the quality, accessibility, and management of library operations and services to meet global standards. 4. Develop sports facilities and halls that meet international standards. 5. Create an environment to cater to the needs of special education.	• Satisfaction with the learning environment and infrastructure (students + guardians) • Library investment (1% of total income) • Types and categories of books per student • Environment for people with disabilities (percentage of total area)
1.2	Talented recruits will be attracted and concentrated	1. Create a social, economic and legal environment to attract and study the best domestic and foreign students and receive state support in the form of scholarships. 2. Create academic scholarship programs with diverse funding sources and attract the best international students. 3. Counseling services will be provided to support the adaptation and activation of new entrants. 4. Qualified masters and doctoral students will be employed as assistant teachers.	• Enrollment rate, • An increase in the threshold score for entrants • Proportion of foreign students, • Percentage of students who received scholarships to the total number of students
1.3	Innovation will be introduced in the educational activities.	1. Develop a flexible system that updates and implements the curriculum in accordance with the demand for professional skills and future trends. 2. Programs will be internationally accredited. 3. Improve the quality of advanced education and conduct the majority of programs in English. 4. Flexible forms of education (time, payment, etc.) will be offered to students, institutions and students. 5. Prepare specialists (in the fields of Internet of Things, Mobile equipment, Cloud technology, Big data, Blockchain) to work in the era of the IV industrial revolution. 6. Improve students' English language skills and evaluate their level with internationally recognized test scores.	• Percentage of enrollments that choose the program • Employment rate of graduates • Graduation rate (based on initial enrollment rate and by undergraduate students) • Advanced percentage of graduates, • Leaving in English percentage of advanced programs, • Proportion of internationally accredited programs in total programs • Number of joint training programs with foreign universities share of the total program • Number of joint advanced degree programs with foreign universities

			• Number of credits per student sent/arrived to domestic/foreign universities • Percentage of students who passed the IELTS, TOEFL, TOE-IC exams
1.4	Intensify research and results-based learning.	1. Use advanced technologies such as e-learning, blended learning, and MOOCs to update and develop courses. 2. Creative thinking, soft skills development, and entrepreneurship education courses will be included in the program. 3. The study season and package time will be changed to meet the standards of the world's best universities. 4. Establish a career development center and develop a career development program for students. 5. Develop and implement a career orientation program.	• Teacher and student ratio • Digital training of teacher and student ratio • Student activity, participation • Student GPA amount • A spirit of learning satisfaction level • Electronic, online number of courses
1.5	A system will be created to support teachers and researchers in continuous self-development.	1. New advanced teaching methods, technologies, and professional skills improvement programs will be offered. 2. Improve the English language skills of teachers and researchers and assess their level with internationally recognized test scores. 3. Support professors to conduct advanced level programs in English. 4. The practical experience of young teachers and researchers will be developed in the form of outsourcing.	• Percentage of teachers with doctorate degrees, • Amount of funding for teacher development • The number of teachers with doctorate in top 300 universities • Percentage of teachers who have taken IELTS, TOEFL, TOE-IC exams

LEADING DIRECTIONS– 2: RESEARCH DEVELOPMENT

Goal: To develop research that can solve the problems facing Mongolia and internationally.

№	Objectives	Implementation strategy	Measuring progress indicator
2.1	Create a concentration of internationally recognized scientists and develop young scientists and researchers.	1. State support for the introduction of a selection system for teacher researchers (tenure), attracting internationally recognized scientists (post-doctoral and advanced level researchers) and stable employment. 2. Sign a research agreement with teachers and researchers. 3. Improve the evaluation and reward system for the work of teachers and researchers.	• Assessment of satisfaction of teachers and researchers • Teacher researcher named in World University Rankings • Number of researchers enrolled in post-doctoral programs • The share of foreign teachers in the total number of main teachers • Percentage of researchers who have completed research, analysis, and project work among the total number of teachers
2.2	A suitable research environment will be created in accordance with the standards of the world's best universities.	1. Nationally and internationally accredited interdisciplinary research centers, institutes and laboratories will be developed, use and cooperation will be improved. 2. Funding sources for research will be formed with the participation of the government and the private sector in accordance with the government policy. 3. Cultivate a culture of conducting advanced research at an international level (including full-time research). 4. Funds for research will be regularly increased and research funds (grants) will be provided to teachers and researchers.	• Number of open, interdisciplinary, accredited laboratories • Increase in research funding (grants) • Proportion of faculty members who have received international and national research grants
2.3	Create and introduce interdisciplinary solutions to the pressing issues of the country's development.	1. Research priorities will be defined in accordance with the needs of the 4th industrial revolution, a unified platform will be developed, and related research will be supported. 2. Develop research collaborations, support and increase custom projects. 3. Improve the quality of research by introducing a system of evaluation and reward for research results and performance.	• Joint research works registered in the international works database (Scopus, web of science...) • Assessment of researchers satisfaction • The number of research projects that received grants • Share of academic expenses in total expenses
2.4	The intellectual property storage and protection mechanism of the university will be improved and a unified database of research and works will be created.	1. The intellectual property protection mechanism will be made electronic. 2. Implement and use the program that checks the reproduction of works. 3. The process of international publication of scientific works	• The number of works published in professional journals with a high impact factor per teacher, • The number of citations per main teacher from works published in

		activate, create a unified reference database and develop it as a component of the Electronic Library of MUST. 4. Support for improving the publication quality of internationally registered journals.	professional journals with a high impact factor • Fund of scientific works • The number of academic journals included in the International Registry (SCI) • Use of the copy checking program for the publication of research results • Number of books, textbooks, own works, translated works, e-courses and open courses

LEADING DIRECTIONS– 3: INNOVATION AND TECHNOLOGY COMMERCIALIZATION

Goal: Develop into a technology and value-creating innovation cluster.

№	Objectives	Implementation strategy	Measuring progress indicator
3.1	Cultivating innovation culture and entrepreneurial spirit and concentrating the best innovators.	1. Dissemination of knowledge and understanding of innovation at the level of SHUTIS will develop the methodology and culture of intellectual property development, use, and technology transfer. 2. Licensed software is used. 3. Provide entrepreneurial education to professors and teachers and develop their business thinking. 4. To invite skilled foreign entrepreneurs to work and create a system for joint research and innovation.	• Number of intellectual property owned by MUST • Number of national and international active patents • The percentage of foreign teachers in the total number of teachers
3.2	Create an innovation ecosystem.	1. Continuous support of innovative activities (venture investment fund) will have a diverse source of financing 2. Establish innovation-friendly units (technology transfer, incubator, joint office). 3. Develop innovation cooperation and partnership /state, private sector, investors, professional associations/.	• The amount of funding received from the venture fund, • Number of successful startups • Number of infrastructure units supporting innovation • Number of cooperating organizations
3.3	Create competitive products, services, and innovations through the circulation of intellectual creations.	1. Start-up companies based on intellectual property will be established through the sale of economically beneficial intellectual works, technology transfer, and licensing agreements. 2. Localize foreign high technology and then absorb knowledge and create new products and services aimed at substituting imports. 3. Increase income from intellectual property royalties, license agreements, and start-up dividends.	• Number of license agreements • Number of independent companies • The number of technologies introduced into production • Amount of intellectual property royalty income

LEADING DIRECTIONS– 4: SOCIAL RESPONSIBILITY

Goal: To establish the university as a leader in promoting awareness and commitment to social responsibility.

№	Objectives	Implementation strategy	Measuring progress indicator
4.1	Contribute to civic education and scientific enlightenment.	1. Activities will be carried out to implement the social responsibility policy of MUST, support civic education, and disseminate scientific and technological achievements to the public. 2. Support works that increase the reputation of MUST in the society. 3. Sustainable development and environmentally friendly green programs will be implemented. 4. Activities to protect art, culture, and cultural heritage outside of school will be supported and organized.	• Number of community-oriented projects, programs, and creative works • The number of prizes won by students at international academic conferences and competitions • Share of art, culture and cultural heritage protection costs in total costs
4.2	Equitable and accessible educational services will be provided.	1. Continuous and lifelong education system will be developed. 2. Support will be provided to applicants and students from vulnerable families who are below the subsistence level. 3. The gender balance of students will be maintained at an equal and appropriate level. 4. Provide necessary language, cultural, psychological and other support to teachers, staff and students.	• Continuing education of graduates • Percentage of students from households with incomes below the subsistence level • Gender ratio of students
4.3	Make a significant contribution to solving social problems.	1. Scientific training and seminars on social and economic issues will be provided and consulting services will be provided. 2. Support humanitarian and voluntary initiatives of teachers, staff and students. 3. Support three-way relations between School - Student - Parents and School - Employer - Graduates. 4. Establish an interdisciplinary center for policy research on pressing issues and concentrate think tanks for development. 5. Develop and implement a unified policy based on research to solve the social problems of students. 6. Graduates will be placed to work in rural areas.	• Number of student clubs and organizations • The capacity of the student accommodation should be able to fully accommodate new entrants • Percentage of social responsibility expenses in total income, • Goodwill assistance
4.4	Increase access to professional services and social efficiency.	1. Work together to improve the quality of education in elementary schools. 2. Establish a structure with the functions of job and professional counseling and connect to the database related to the labor market. 3. Establish a joint professional service center of the State, NGOs, and MUST to advise	• Professional Services Agreement, • Evaluation of professional service satisfaction

		enterprises and citizens on the use of standards, norms, norms, rules, and methods. 4. Develop and evaluate the infrastructure for delivery, registration and collaboration of policy and legal advisory services. 5. Develop cooperation with professional organizations related to international standards and norms.	

LEADING DIRECTIONS– 5: GOVERNANCE AND MANAGEMENT REFORMS

Goal: Effective management for high productivity that is adaptive and responsive to rapid changes.

№	Objectives	Implementation strategy	Measuring progress indicator
5.1	Develop a governance and management structure that respects academic freedom.	1. A lobby group will be established to increase the university's participation in the implementation of government policies and programs and to strengthen the triad of public-private sector-university. 2. Take the initiative to create a legal framework for academic freedom. 3. To implement the strategic plan, to form a compact and efficient structure in line with the process re-engineering conditions, and to optimize the distribution of powers and responsibilities. 4. Develop organizational values, culture and ethics at all levels of the university. 5. E-governance system will be introduced in all activities of the university in order to speed up decision-making, improve access to information, transparency, and collective participation.	• The level of execution of the strategic plan • Level of cross monitoring and evaluation • Revenue efficiency • Teacher-staff ratio, • Speed of decision-making • Ensuring participation of interested parties in decision-making
5.2	Various sources of financing will be established.	1. Increase state budget funding support. 2. Create legal regulations for investment with operating income. 3. Cooperate in increasing funding sources for graduates, individuals, private sector, international and non-governmental organizations. 4. Establish a university-based endowment fund. 5. Introduce and improve a flexible cost management system.	• Increase in funding (by source) • Increase in donations, grants, grants and support • Financial independence • Percentage of tuition fees in total income • Growth of endowment funds
5.3	Re-engineering of process for becoming a research university	1. Analyze current processes and prepare for process re-engineering. 2. Update policy documents, rules and regulations in a coherent and PDCA manner and introduce a system approach. 3. Monitoring, evaluation and improvement of evidence-based governance.	• Efficiency of the university • Risk indicators • Quality indicators • Updated percentage of rules and regulations

5.4	Human resources with talents and skills to adapt to changes will be concentrated.	1. Human resource planning will be carried out in accordance with the standards of the world research university. 2. Determine the human resources necessary for the efficient implementation of the operation and conduct accessible selection. 3. Determine and continuously improve the business, English, IT and professional (BEIT+P) skills of human resources. 4. Create an optimal system of performance and competency-based evaluation, salary incentives, and career development.	• Teacher-staff ratio, • Competency level • Years of stable work of skilled employees • Evaluation of human resource satisfaction • Percentage of actual increase in wages and bonuses
5.5	A suitable environment for work, study and research, sub form the structure and keep it normal.	1. Improve the environment and infrastructure for working, studying, researching, and providing services, and improve usage management. 2. Define and develop a model for management information systems in conjunction with process re-engineering. 3. Other information systems will be further refined and comprehensively developed and introduced. 4. Ensure information security and protection.	• Indicators of school building use (main classrooms: support classroom: research laboratory area) • Data, database • The number of accesses in the electronic environment • Percentage of paper consumption • Information transparency
5.6	Establish a system for continuous quality assessment and improvement.	1. Introduce, confirm and continuously improve the quality management system. 2. Continuously evaluate stakeholder satisfaction and improve results. 3. Dissemination of quality culture and improvement methods will be implemented throughout the organization. 4. Develop and implement a results-based monitoring and evaluation system. 5. New human-nature-friendly standards will be implemented and confirmed	• Stakeholder satisfaction level • Number of complaints • ISO standard certificate and its validity
5.7	Develop mutually beneficial cooperation.	1. An electronic platform for the development of state-business-university cooperation will be developed and put into regular use. 2. Improve access to university collaboration, provide performance feedback, and improve productivity and effectiveness. 3. Increase internal cooperation, create conditions for open exchange of knowledge and experience, and keep conflicts of interest free. 4. Strengthen the coordination of organizations with alumni and supporters' associations and other similar activities.	• Local and foreign organizations and schools with cooperation, • Partnership agreement and its implementation
5.8	Increase the international competitiveness and reputation of MUST.	1. To instill in students a desire to participate and contribute to solving problems at the international level. 2. Increase the number of foreign and domestic students by creating opportunities to help each other, share knowledge, experience, and culture.	• Amount of academic scholarship • Percentage of foreign students • Foreign exchange students

		3. Develop strategic partnerships with the best foreign universities to improve the quality, scope and effectiveness of teaching and research. 4. Implement international exchange programs and increase access. 5. Improve cooperation with international professional associations of higher education and raise the reputation of the SHUTIS brand on the foreign market. 6. Teachers and researchers are encouraged to participate in international conferences, seminars, forums, workshops, and symposia.	• Students sent abroad on exchange • Joint program • Number and results of participation in international conferences, seminars, forums, workshops and symposia

ROAD MAP TO ACHIEVE KEY OBJECTIVES- KPI

MEASURING INDICATORS		BASIC LEVEL 2019	RESULTS TO BE ACHIEVED		
			2022	2025	2030
Percentage of foreign students (including the number of exchange students) to total students	2, 3, 4	<0.2%	0.5%	2%	5%
Percentage of foreign teachers in the overall teaching staff	2, 3, 4	<0.02%	4%	9%	12%
Percentage of scholarships awarded to students in total income	1, 2, 3	<0.1%	0.1%	0.3%	0.4%
Number of undergraduate study programs in foreign languages	1, 2, 3	0	10	12	14
Percentage of teachers holding a doctoral degree	1,2	38%	47%	60%	70%
Number of works registered in the international scientific database per teacher	1,2,3	0.6	2	5	7
Number of intellectual properties owned by MUST	2,3	12	150	300	500
Number of active national and international patents	2,3	3	10	30	50
License agreement number	3	0	2	6	10
Number of startup businesses	3	2	5	15	30
Research and innovation income share in total income	2,3	12%	25%	40%	60%
Share of expenditure spent on research and innovation in total expenditure	2,3	8.2%	20%	30%	50%
Evaluation of executive governance (level of profitability)	5	-	%	%	%
Number of foreign universities with cooperation (in the first 500 in international ranking)	5	<28	40	50	65%
Satisfaction level of stakeholders (students, foreign students, teachers, graduates, parents, employers)	1-5	-	3.0<	4.0<	4.5<
Number ratio of bachelor and master's and doctoral students	1,2	9:1	9:2	9:4	9:6

Rate of employment of graduates	1,2,3	<40%	50%	60%	65%
Ratio of the number of teachers and students	1,2,3,5	1:16	1:15	1:14	1:13
Percentage of students educating from families with income below the standard of living	4	3%	4%	5%	6%
Calculating student accommodation capacity to be equal to the number of new enrollments	4,5	24.5%	30%	40%	50%