

 Transformation
Towards the Ultimate

2021
University
Profile

USU

Universitas Sumatera Utara



Medan
North Sumatra
Indonesia



Transformation Towards the Ultimate

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Ability in Transforming and Adopting

USU must be able to transform and adapt. Especially in responding to disruption and hyper-competition in the global world. Facing 4.0 Industry Competition, USU has currently prepared strategic programs in the context of this transformation.

After being sworn in as Rector of USU, Dr. Muryanto Amin, S.Sos., M.Si. rolled out six priority programs: Institutional & Adaptive Governance, Adaptation of Tri Dharma Tasks, Infrastructure Arrangement, Campus Digitalization, Campus Enterprise and Cooperation. These six programs are expected to accelerate USU to realize the ideal design that has been targeted. USU's planning target is in line with the Ministry of Education, Culture, Research, and Technology development program, which targets that six universities in Indonesia will be included in the Top 500 WUR (World University Rank) by the end of 2024. To meet this target, USU is one of the six universities prepared to enter the Top 500 WUR ranks. As a basis for attitude, the entire USU academic community must change the usual work pattern (business as usual) towards the top (Transformation toward the Ultimate).



INTRODUCTION

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This is who we are

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Principal Officers

This is **WHO WE ARE**

16

Faculty/School

60,088

Student

71%

Bachelor

12%

Master

8%

Profession and Specialist

8%

Diploma

Currently, USU has two milestones that are close together. The first is the second phase implementation of the planning document, namely the USU Strategic Plan 2020-2024 and the second is the leadership period of Dr. Muryanto Amin S.Sos., M.Si as USU Rector for the period 2021-2026. Based on the mandate of the Strategic Plan phase II, the ideal design for USU's development is **"to become an international standard university characterized by local excellence"**.

It shows that there is an effort to internationalize USU while retaining the characteristics of local excellence. A measurable indicator of this internationalization is being included in the top 500 World University Rank (WUR) or commonly referred to as World Class University. This period's success will be measured by the inclusion of USU in the Top 500 of the world's best universities by the end of 2024.

Currently, there are several WUR rankings that are well known to the world, namely QS-Rank and THE Rank. Although it has a slightly different method, the parameters used can be summarized on Academic Reputation, Graduate Reputation, Teaching Quality (expressed by the ratio of students to lecturers), International Students and International Lecturers. Apart from these parameters, THE added another world ranking criteria known as THE IMPACT which aims to measure how much a university contributes to the Sustainable Development Goals (SDGs).

VISION Becoming an Informative and Professional
Information and Documentation
Management Center

MISSION Improving the Service and Management
of Good Public Information and
Documentation.
Improving a Transparent and Professional
Public Information Service System.
Becoming a means of liaison between
the community and Universitas Sumatera
Utara.

Universitas Sumatera Utara has more than enough potential to be included in the Top 500 of the world's best universities. Human resources for lecturers and students have a quite good potential that can still be developed. In the health sector, this area has the potential to develop research into Tropical Science and Medicine, Agroindustry, Local Wisdom, Energy (sustainable), Natural Resources, Technology and Arts. This potential if developed can provide strong capital to build a center of excellence so that it becomes an academic excellence and brings USU to be known internationally.

In order for this potential to be developed optimally, an effective management transformation is needed. On this basis, the Rector of USU launched the spirit of Transformation Towards Ultimate (change towards the best) so that USU could demonstrate its existence at the global level. This program has been launched by the Rector Dr. Muryanto Amin, S.Sos., M.Si. become the spirit of work towards World Class University. A number of programs have been designed towards the internationalization of USU.

523

IPR

166

Professor

657

Associate Professor

547

Assistant Professor

217

Instructor

130

Education Staff



**Dr. Muryanto Amin, S.Sos., M.Si.
Rector USU for the period 2021-2026**

PRINCIPAL OFFICERS

Period 2021 - 2026



Mr. Dr. Edy Ikhsan, SH, MA
Vice Rector I of USU (Academic, Student Affairs, and Alumni)



Mr. Muhammad Arifin Nasution, S.Sos, MSP
Vice Rector II of USU (Human Resources and Finance)



Mrs. Prof. Dr. apt. Poppy Anjelisa Zaitun Hasibuan, M.Si.
Vice Rector III of USU (Research, Community Service, and Cooperation)



Mr. Prof. Dr. Opim Salim Sitompul, M.Sc.
Vice Rector IV of USU (Information, Planning and Development)



Mr. Ir. Luhut Sihombing, MP
Vice Rector V of USU (Asset and Business Management)



Mr. Prof. Dr. dr. Muhammad Fidel Ganis Siregar M.Ked (OG), Sp. OG(K)-FER
Secretary of University USU

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Community Dedication

OUR LOCATION



Medan city is the gateway to Indonesia in the Western part. Supported by the Belawan Port and Kuala Namu International Airport, which is the second largest airport in Indonesia. Accessibilities from the city center to the port and airport are integrated by toll roads and trains. Medan is the first city in Indonesia to integrate an airport with a train. The distance from Medan City Center to the port is 24 km and to the airport is 26 km. Bordering the Straits of Malacca, Medan is a very important trade, industry and business city in Indonesia.



TEACHING LOCATION

CAMPUS 1

The campus is located in Padang Bulan, a green and leafy area of 120 ha located in the center of Medan City. The 90 ha academic zone accommodates almost all student lectures and practicum activities. The learning system is supported by library facilities and more than 200 laboratories. The library provides various types of learning resources both in print and electronic form. In the future, this campus will be used for magister and doctoral programs, and bachelor program will move to campus 3.



TEACHING LOCATION

CAMPUS 2

The Tambunan campus of Universitas Sumatera Utara has an area of 621.98 hectares. Located in the Tambunan plantation village, Salapian District, Langkat Regency, North Sumatra Province. It is 70km from the center of Medan City. The facilities available are lecture buildings, laboratories, libraries, pavilions, employee and staff homes, student dormitories, polyclinics, greenhouse mosques, screen houses, rubber post-harvest laboratories, tapioca processing buildings, palm sugar and cocoa, seed purification buildings, palm fruit storage warehouse., and mini palm oil mill



TEACHING LOCATION

CAMPUS 3

A new 300 ha campus located in Kwala Bekala, 15 km from the Padang Bulan Campus is being developed, which is currently being used to support various research and experiments in agriculture, forestry, plantations, and animal husbandry. In aims to be a wide-reaching university, USU manages an Experimental Garden covering an area of approximately 550 ha in Langkat. USU has also obtained a permit to develop a 10,000 ha demonstration forest in Mandailing Natal



A DIVERSE APPROACH

The Research Development Master Plan which is a policy direction for research management for a period of 5 years (2021-2025) has taken into account the development needs, USU's 2015-2039 Long-Term Development Plan, and the direction of national research policies.

Competitive and superior innovation products are expected to be created from the creativity of the nation's children through increasing the mastery and utilization of science and technology (science and technology) through research, development, and application towards sustainable innovation.

In the industrial era 4.0, the rapid development of science and technology affects various aspects including the economy, energy, environment, ecology, and education. Therefore, human resources (HR) who have the ability to implement attributes such as trust (confidence), responsibility, creativity, the ability to cooperate and teamwork (collaborative), honest, hard work, open-minded, the ability to reflect (reflective), and innovative are needed. These human resources are expected to be prepared to contribute to national development.

Research in the leading fields of Universitas Sumatera Utara is packaged in TALENTA.

TALENTA is an abbreviation of:

- Tropical Science and Medicine
- Agroindustry
- Local Wisdom
- Energy (sustainable)
- Natural Resources (biodiversity, forest, marine, mine, tourism)
- Technology (appropriate)
- Arts (ethnic)

FEATURED RESEARCH

TROPICAL MEDICINE; qualified education related to EBM & EBP

As an effort to make the tropical medical study program as a scientific center in the field of tropical medicine with international standards in Indonesia, USU provides qualified education in tropical medicine studies related to Evidence Based Medicine (EBM) and Evidence Based Practice (EBP), conducts research in tropical medical studies related to the latest developments in medical science and technology, collaborates with various domestic and foreign institutions related to the development of tropical medical science, and organizing services that are beneficial and have a direct impact on the community in terms of dealing with tropical diseases.



ETHNOMUSICOLOGY; the study of music in its social & cultural context

USU is the first university to establish an ethnomusicology study program in Indonesia. Ethnomusicology is the study of music in its social and cultural contexts. Ethnomusicologists examine music as a social process in order to understand not only what music is but what it means to its practitioners and audiences. Ethnomusicology is highly interdisciplinary. Individuals working in the field may have training in music, cultural anthropology, folklore, performance studies, dance, area studies, cultural studies, gender studies, race or ethnic studies, or other fields in the humanities and social sciences.



FEATURED RESEARCH

MANGROVE CONSERVATION

One of the featured researches of Universitas Sumatera Utara is mangrove conservation. Professor Mohammad Basyuni is one of the lecturers at USU who has conducted a lot of researches related to mangrove conservation. Some of the research titles are about polyprenol reductase synthase, long chain polyisoprenoids in mangrove forests, polyisoprenoid genes, mangrove plant *Kandelia candel*, fish, crabs and mollusks in the mangrove forest of North Sumatra, mangrove restoration in Indonesia, MOnitoring Mangrove ExtENT & Services (MOMENTS), blue carbon emissions generated by mangrove conversion to oil palm plantations, mangrove ecosystems, Southeast Asian mangroves, and Indo-Pacific mangroves vulnerable to climate change.

PEOPLE'S PALM OIL PLANTATION

The study focuses on achieving sustainable people's palm oil plantation. Sustainability requires inclusivity, equity, and the competence of planters. The study includes discussions on Good Agricultural Practices (GAP), efficiency, certification, business models, and sustainable landscapes. Specifically, the study accommodates the diversity of plasma planters, independent partners, and purely self-supporting groups with various forms such as cooperatives, associations, and farmer groups. This condition affects the competence of smallholders and their equal position horizontally with producers from the group of companies, as well as vertically with other actors along the palm oil supply chain.

FEATURED RESEARCH

ORANGUTAN CONSERVATION

Onrizal, a forestry researcher at USU, and other researchers scoured the historical record for any references to the Tapanuli orangutan (*Pongo tapanuliensis*), the most recently described orangutan species and also the most endangered great ape in the world. Today, fewer than 800 of the apes are known to inhabit a single site, the Batang Toru forest in North Sumatra. Their current habitat likely accounts for just 2.5% of the total range across which they were found up to 130 years ago, the researchers found. They estimate this range shrank from nearly 41,000 square kilometers (15,800 square miles) in the 1890s, to just 1,000 km² (400mi²) in 2016. The species continues to face the threats of hunting and conflict killing, as well as habitat loss from agriculture. New threats have also arisen: infrastructure building, gold mining, and the development of geothermal and hydroelectric plants. Indonesia's Ministry of Environment and Forestry says the hydropower project will not kill off the Tapanuli orangutan. It says there is still ample habitat and good forest cover throughout the landscape for the apes to continue breeding. The ministry also cites various government efforts to protect the orangutans, including regular monitoring and a permanent moratorium on permits to clear the primary and peatland forests that cover a significant part of the Tapanuli orangutan's habitat.



FEATURED RESEARCH

TRADITIONAL ARCHITECTURE; represents the building technique from the cultural tradition

Traditional architecture is a science that studies buildings whose structural forms, functions, decorations and ways of making them are passed down from generation to generation, and can be used to carry out life activities as well as possible. This architectural style is a representation of building techniques from the cultural tradition in accordance with the values and beliefs held by a certain ethnic tribes and cultures. Indonesia consists of many tribes and cultures. Especially in North Sumatra Province, there are eight indigenous tribes, namely Melayu, Batak Karo, Simalungun, Pak-pak/Dairi, Batak Toba, Mandailing, Pesisir and Nias tribes. USU is one of the universities that has done a lot of theoretical research related to the traditional architecture of the indigenous tribes in North Sumatra Province.



SMART FARMING; helping farmers make efficiency

Indonesia has long been known as an agricultural country, namely a country whose economic strength is supported by the agricultural sector. During the administration of President Joko Widodo, the agricultural sector was one of the main areas that received great attention and was known as the food security sector.



FEATURED RESEARCH

MINO KIT; robotic innovation is as easy as "Plug and Play"

MEDAN-USU Public Relations: Universitas Sumatera Utara (USU) through the start-up partner Instruments has created the Mino Kit, an innovative robotic basic learning device for junior high and high school students. The Mino Kit contains electronic modules and Arduino-based microcontroller devices, which have a puzzle-like concept and use sockets as connectors between modules and are "plug and code".



ARTSARI SOAP

Artsari is a solid soap/shampoo based on coconut oil. This soap/shampoo uses natural ingredients and does not use Sodium Lauryl Sulfate (SLS) which is often used as a detergent.

M3D PRINTER

M-3D printer is a 3-dimensional printing machine product that can print as desired (customize).



USU's

RESEARCH INSTITUTE



Patent

273

Number of Patent
Registered

153

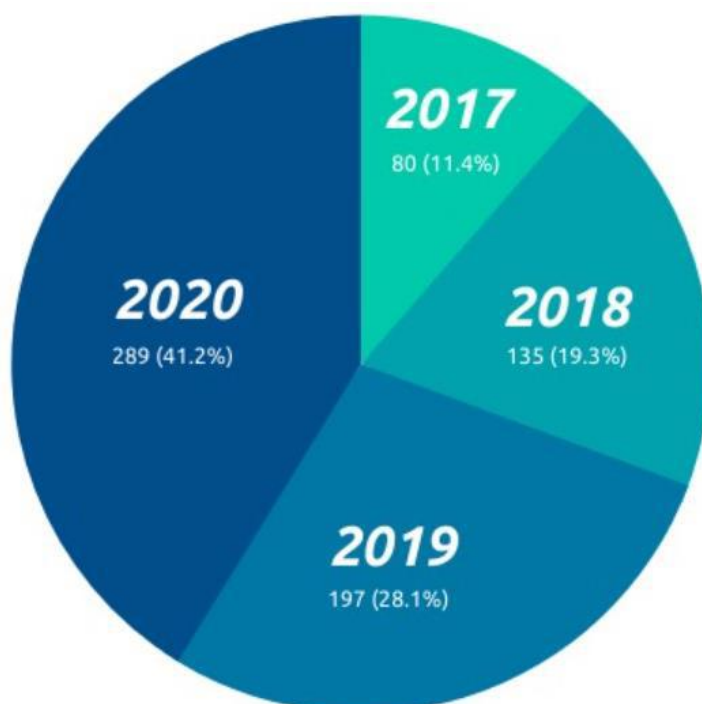
Granted Patent

84

In Process

Acquisition of USU Intellectual Property Rights

The 2021 Patent Acquisition is predicted based on the 2020 Patent registration



Copyright

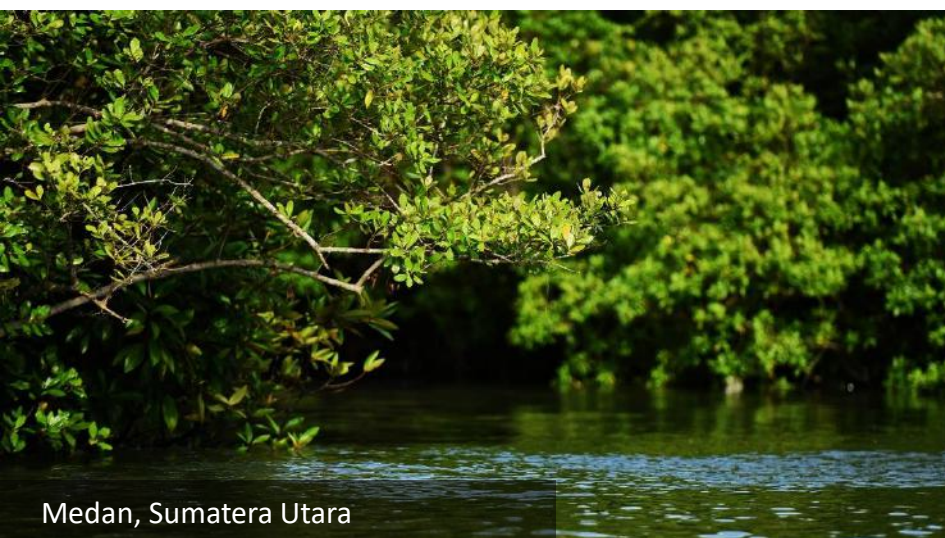
RESEARCH SUBJECTS

Currently, USU has 50 categories of research subjects, namely:

Tropical Medicine	Ethnomusicology	Mangrove Conservation	FEATURED RESEARCH
People's Palm Oil Plantation	Orangutan Conservation	Traditional Architecture	
Smart Farming	Mino Kit	Artsari Soap	
		M3D Printer	
		Medical Science	MEDICAL SCHOOL
		Law	FACULTY OF LAW
Agribusiness	Agricultural Technology	Waters Resources Management	FACULTY OF AGRICULTURE
		Food Technology and Science	
Industrial Engineering	Civil Engineering	Architecture	FACULTY OF ENGINEERING
Mechanical Engineering	Electrical Engineering	Chemical Engineering	
		Environmental Engineering	
Economic Development	Management	Accounting	FACULTY OF ECONOMIC & BUSINESS
		Dentistry	DENTISTRY SCHOOL
Ethnomusicology	Indonesian Literature	Chinese Literature	FACULTY OF CULTURAL SCIENCE
Arabic Literature	English Literature	Japanese Literature	
Malay Literature	Batak Literature	Library Science	
		History	
Physics	Chemistry	Biology	FACULTY OF MATHEMATIC & NATURAL SCIENCE
		Mathematics	
Social Welfare Science	Social Anthropology	Business Administration	FACULTY OF SOCIAL & POLITICAL SCIENCE
Sociology	Political Science	Government Administration	
		Communication	
		Public Health	FACULTY OF PUBLIC HEALTH
		Pharmacy	FACULTY OF PHARMACY
		Psychology	FACULTY OF PSYCHOLOGY
		Nursing	FACULTY OF NURSING
	Computer Science	Information Technology	FACULTY OF COMPUTER SCIENCE & INFORMATION TECHNOLOGY
		Forestry	FACULTY OF FORESTRY

COMMUNITY DEDICATION

Community empowerment and learning program in solving problems, focusing on applying the results of community service to improve skills and understanding in the community.



Medan, Sumatera Utara

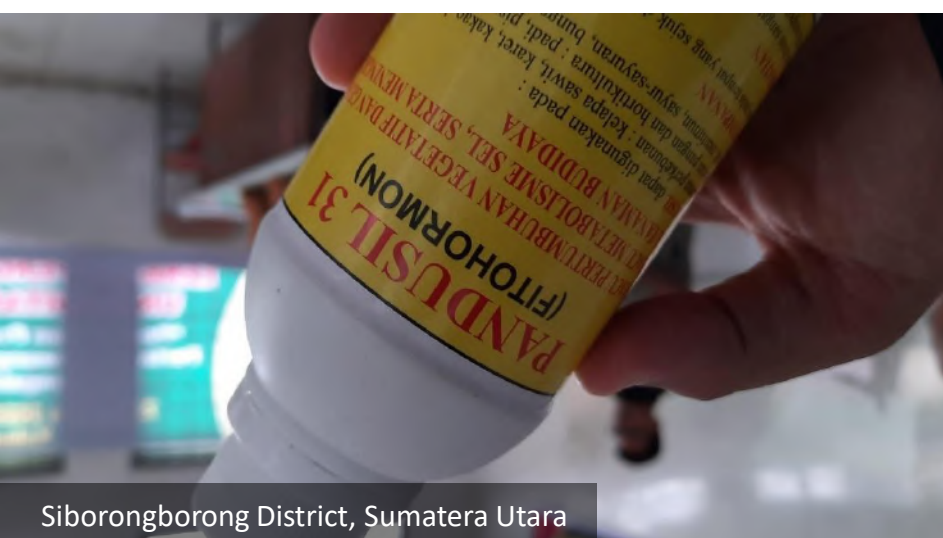
Indonesia is listed as a country that has the largest mangrove in the world (Hamilton & Casey, 2016). However, Indonesia is also the largest contributor to the loss and destruction of the world's mangrove forests. Universitas Sumatera Utara seeks to provide real solutions through community service activities by cooperating with the USU Community Dedication Institute. One of them through mangrove restoration activities with the fishermen in Seberang Fisherman Village. It was carried out in July – November 2020. A total of 5,000 mangrove seedlings were planted during the activity process which was the result of a series of activities to prepare skilled workers in nurseries, planting, and maintaining mangroves.



Medan, Sumatera Utara

North Sumatra Province actually has a large enough potencies to gain achievements in the field of rowing sports, given the many water locations in this province. Likewise, the seeds of rowing athletes are scattered in settlements around the waters, both seas, lakes, and rivers. Realizing this, Universitas Sumatera Utara through its team of lecturers carried out community service activities in the Seberang Fisherman Village, Medan Belawan District, which is a marine area. The activity realized the construction of the Rowing Athlete Youth House which was used for coaching the children in that village. The activity which lasted for 6 months used USU's 2020 non-PNBP funding sources which were part of the Assisted Village Program funds. The program built this athlete's house consisting of building foundations and concrete slabs.

COMMUNITY DEDICATION



Siborongborong District, Sumatera Utara

Shallot is one of the prima donna commodities in agriculture in North Sumatra Province. Besides as a seasoning, shallot also plays a role as a source of income and job opportunities that contributes quite high to the economic development of the local area. Unfortunately, the shallot farmers often experience various obstacles to increase the productivity of their agricultural products, which are caused by various things, such as limitations in terms of technical knowledge of cultivation, etc. In responding to it, Universitas Sumatera Utara provided technology assistance to farmers in one of the horticulture center areas of North Sumatra Province, namely Siborongborong District, Tapanuli Utara. Its function is to assist farmers in increasing shallot production in the area. The technology used is in the form of growth hormone application and nursery business to farmers in the area.



Humbahas, Sumatera Utara

The development of Food Estate in the North Sumatra Province continues to be encouraged by the central government together with the local government by cooperating with the campus. The central government, through the Directorate General of Horticulture, Ministry of Agriculture, cooperates with the Provincial Government of North Sumatra, Universitas Sumatera Utara, and Del Institute of Technology to boost the success of the program. The real form of USU's contribution is to send two of its best professors to join the master plan team from Food Estate. With the presence and cooperation of USU and Del IT, the process of seeding, cultivation, harvesting, and marketing can be well facilitated. It has an impact on the farmers' welfare. As a result, the empowerment of the surrounding community can be carried out and has a real impact.



AN ENVIRONMENT OF SUCCESS

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Campus Master Plan

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CAMPUS MASTER PLAN



Planning for the future master plan is rejuvenating and adding research laboratories. This is necessary in order to support better research so as to provide increased impact and reputation.

STUDENT ACCOMMODATION

01 STUDENT DORMITORIES are located in two places. The female dormitory is located on Universitas Street and the male dormitory is located on Dr. T. Mansur Street. These dormitories are intended to make it easier for students to carry out daily activities because their locations are on campus. This dormitory facility is prioritized for new students and students who are recipients of affirmation scholarships and *bidikmisi*. USU student dormitories are often also used as temporary residences for students who are members of student exchanges or become participants in competitions at USU.

02 USU BUS (LINUS) is a transit service for around the USU Padang Bulan Campus area. Buses operate regularly at set times and tracks. The LINUS program was launched on March 9, 2013. This service is provided free of charge to the USU academic community. LINUS operating hours are Monday-Friday from 08.00 - 17.00 WIB.

03 USU BICYCLE is an alternative transportation service that can be used by the academic community within the USU Padang Bulan Campus area for free every Monday-Friday by showing a USU identity card.



01



02



03

FACILITIES

FACILITIES

01 USU HOSPITAL is an entity of the Ministry of Education and Culture/Dikti whose management is carried out by Universitas Sumatera Utara. Located on Dr. Mansyur Street, Medan, campus area, the USU Hospital was established in 2011. USU Hospital is designed to accommodate outpatient services in several specialist clinics / sub-specialist, inpatient services with a capacity of 400 beds, an emergency department with 24-hour services, operating rooms, delivery rooms, intensive care, hemodialysis, and medical rehabilitation services. Various radio-diagnostic/imaging equipment, clinical laboratories, and other service facilities/equipment are equipped to carry out hospital functions.



FACILITIES

FACILITIES



02



03



04

02 USU AUDITORIUM is the largest building on the Padang Bulan Campus. This building has a capacity of more than 1,500 people. The auditorium is usually used for the graduation ceremony for USU graduates which is held four times a year. In addition, the Auditorium is also used for ceremonial activities such as the commemoration of USU's Dies Natalis, scientific orations, etc. This building is also often used by non-USU (general) parties to carry out graduation activities for certain school graduates.

03 PARK is located in front of the USU Central Administration Bureau Building. USU Park is crowded in the afternoon, especially on Saturdays and Sundays. Besides being used by the academic community, this park is also visited by the general public who want to just relax, have fun, or exercise. This park has several animals that are kept such as deer and several types of birds. In addition, a fountain located in the middle of the park adds to the beauty of the park.

04 PANCASILA BUILDING USU is a student center to do activities. This building is surrounded by trees which makes it a comfortable and beautiful area. As the name implies, this building has five corners as a reflection of Pancasila.

FACILITIES

FACILITIES



05



06



07

05 USU EDUCATION AND TRAINING CENTER is a facility in the form of a hall that is used to carry out various educational programs and skills training for USU students. Pusklat is under the auspices of the Institute for Community Service (LPPM) which is in charge of organizing community service activities and participating in seeking the necessary resources.

06 USU RESEARCH INSTITUTE, as one of the units at Universitas Sumatera Utara, has the responsibility to empower and develop research following USU's autonomy principle.

07 USU POLYCLINIC is a clinic provided by USU for its students or non-students who want to seek treatment. Unlike the USU Hospital, at the USU polyclinic, the students can get treatment for free. The only requirement is to bring an active USU student ID card.

FACILITIES

FACILITIES



08



09

08 MOOT COURT BUILDING is a building that is used for various law activities. On the first floor, several rooms that are intended for the implementation of judicial practice which is held for sixth-semester students. While on the second floor there is a hall that is used to hold seminars, discussions, workshops, and conduct Video Conferences in cooperation with the Constitutional Court.

09 STUDENT CENTER is an indoor facility as a gathering place for students. This building supports student activities from all faculties, be it deliberation activities, seminars, and even art performances

FACILITIES

FACILITIES

10 USU DENTAL HOSPITAL. The presence of the USU Dental and Oral Hospital as an educational center is intended to make it easier for students who have been living in other hospitals. Currently, USU's RSGM has also served BPJS patients, in line with the demands of the community. However, RSGM has also provided executive facilities. USU's RSGM was inaugurated again after undergoing a renovation process on September 9, 2020. USU's RSGM consisted of eight clinics; Orthodontic Clinic, Oral Surgery Clinic, Prosthodontics Clinic, Dental Conservation Clinic, Oral Disease Clinic, Periodontics Clinic, Pedodontics Clinic, and DHE Clinic / Department of Public Dental Health.



10

FACILITIES

FACILITIES

11 WISMA USU is a lodging facility owned by Universitas Sumatera Utara. This USU guest house has about 25 bedroom units that are rented out for guests who want to spend the night in the campus area. The rooms provided at Wisma USU consist of 2 types, namely 13 units of Economy Standard type rooms and 12 units of International Standard type rooms. Economy Standard Rooms are still divided into 4 types, including Economy Standard Single, Double, Twin, and Triple. The Economy Standard rooms are equipped with facilities such as AC, living room, TV, and standard bathroom. Meanwhile, International Standard rooms are divided into Standard, Superior, and Suite types. Each International Standard room is equipped with AC, TV, mini bar, cold and hot water, bathtub, and living room. Especially for the Suite type, a kitchen and dining room have been provided. Not only rooms to stay, but at Wisma USU also provides 5 units of multipurpose rooms that you can rent for various events.

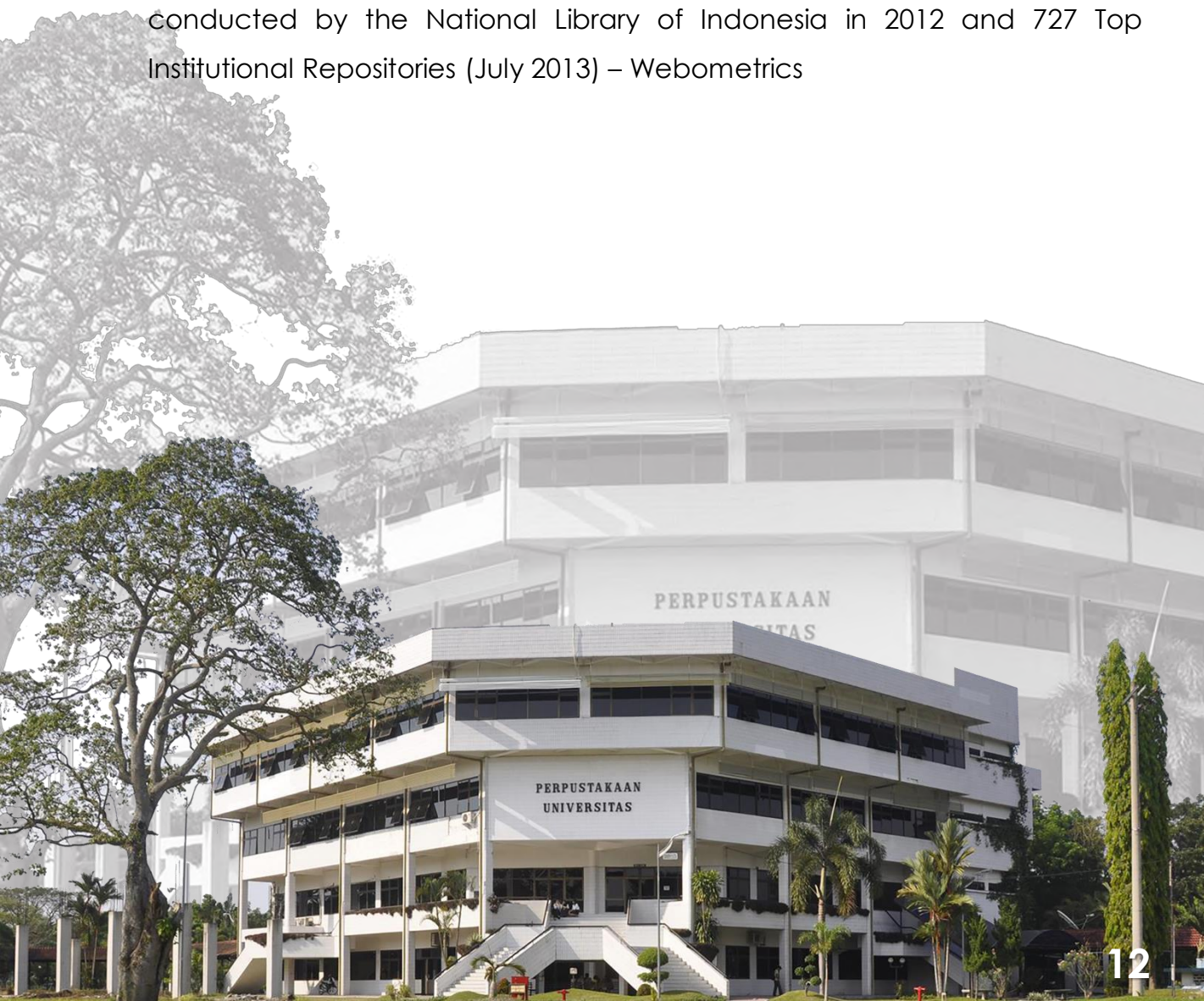


11

FACILITIES

FACILITIES

12 LIBRARY. The library provides membership administration services. Library members consist of all USU students, lecturers, education staff, and guests. The university library is equipped with several facilities such as Lobby, Lockers, Information, and Membership Counters, Circulation Service Counters, Closed Reading Areas, Open Reading Areas, Conference Rooms, Information Literacy Rooms, Meeting Rooms, Lecturers and Researchers Rooms, Photocopying, Wifi, Canteen, Mushalla, Parking area. USU's library is one of the best in Indonesia today. It has received several awards, both nationally and internationally. Among them are Library Predicate with Accreditation Category "A" based on library accreditation conducted by the National Library of Indonesia in 2012 and 727 Top Institutional Repositories (July 2013) – Webometrics



12

FACILITIES

FACILITIES

13 SPORTS FACILITIES include USU Mini Stadium, FISIP Football Field, Field Futsal Arena, Selayang Swimming Pool, 5 Basketball Courts, Tennis Courts, Fitness Facilities, Baseball Fields, and Volleyball Fields



FINDING WHY, ONE STUDENT AT A TIME

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Our Faculties

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Our Laboratories

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Diversification & Outreach

OUR FACULTIES

Universitas Sumatera Utara currently consists of 16 faculties/schools, including Economics and Business, Pharmacy, Law, Cultural Sciences, Computer Science and Information Technology, Social and Political Sciences, Medicine, Dentistry, Forestry, Nursing, Public Health, Mathematics and Natural Sciences, Agriculture, Psychology, Engineering, Post graduated School.

VISION

Faculty of Medicine as an institution providing quality medical education and leading to a center of excellence for tropical medicine and oncology in Indonesia

OUR SCHOOL

SPECIALIST

- Pediatric
- Surgery
- Internal medicine
- Obstetric and gynecology
- Ear, Nose and Throat
- Dermatology and Venerology
- Ophthalmology
- Pulmunology
- Anesthesiology
- Forensic and Medicolegal
- Anatomy Pathologic
- Cardiovascular
- Neurosurgery
- Orthopedic
- Clinical pathologic
- Neurology
- Psychiatry
- Radiology

BACHELOR

- Doctor Education

DOCTORAL

- Medical Science

MASTER

- Biomedic Science
- Clinical Medicine
- Tropical Medical Science

PROFESSIONALSCHOOL

- Doctor

RESEARCH

There are 19 Research
3 of them :

- Relations between Clinical Manifestations and Outcomes in Children with COVID-19 in North Sumatra
- Effect of upper arm exercises and breathing exercises on patients Severe Covid-19 at H. Adam Malik Hospital Medan
- Prevalence of SARS-CoV-2 antibodies in the general public in Medan City



VISION

To become a leading Faculty of Law, which produces quality, moral, professional graduates and has a competitive advantage, both at the national and international levels.

OUR SCHOOL

BACHELOR

- State Administrative Law
- Economic Law
- International law
- Civil Law
- Criminal law
- Constitutional law

MASTER

- Science of Law
- Notary

DOCTORAL

- Science of Law

RESEARCH

There are 111 Research

3 latest of them:

- Shift in Social Functions in Foundation Management in Medan City
- Coastal Fishermen Legal Protection East North Sumatra in the form of compensation Against Consequence Pollution Tanker Ship Accident in the Straits Malacca
- MSME Empowerment Through Granting of Credit with Guaranteed Objects Moving in Medan City

02

FACULTY OF LAW



VISION

To become a leading agricultural higher education institution in the development of science, technology, and human resources with the main competence of plantations to support national food sovereignty which includes the fields of food crop agriculture, animal husbandry, and fisheries in the global order by 2039.

OUR SCHOOL

BACHELOR

- Agroecotechnology
- Agribusiness
- Food Science and Technology
- Farm
- Agricultural Engineering
- Water Resources Management

MASTER

- Agroecotechnology
- Agribusiness
- Farm
- Food Science

DOCTORAL

- Agricultural Science

RESEARCH

Of the 143 research titles that have been carried out over the last four years, 283 lecturers have involved, which means this is an improvement. The average lecturer who researched $283/4 = 71$ lecturers/year.

03

FACULTY OF AGRICULTURE



VISION

To become an excellent and globally competitive Engineering Faculty in the development of science and technology and applied research.

OUR SCHOOL

BACHELOR

- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Industrial Engineering
- Chemical Engineering
- Architecture
- Environmental Engineering

MASTER

- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Industrial Engineering
- Chemical Engineering
- Architecture and Urban Science

DOCTORAL

- Civil Engineering
- Mechanical Engineering
- Industrial Engineering
- Chemical Engineering
- Architecture and Urban Science

PROFESSIONAL SCHOOL

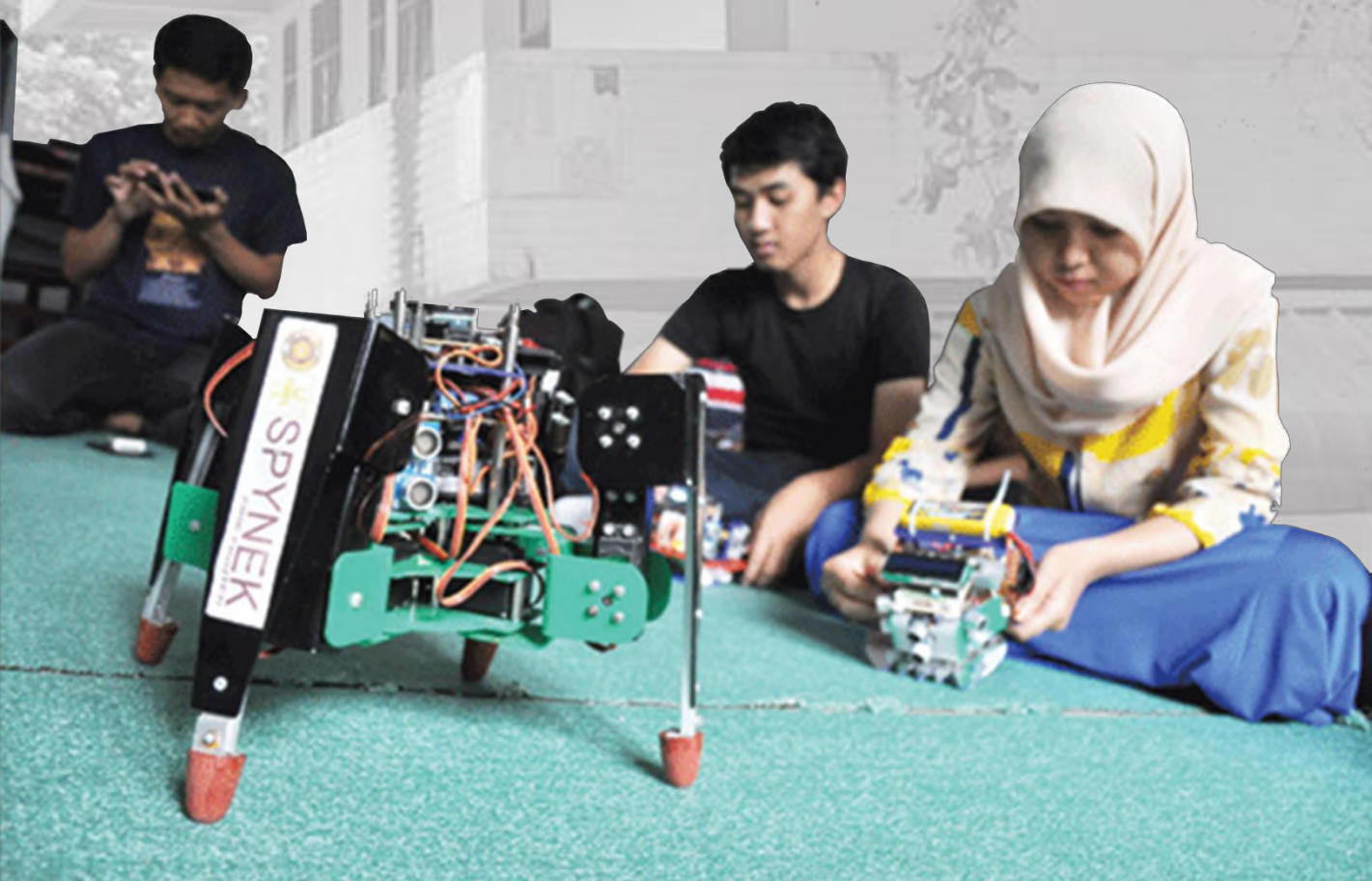
- Architect
- Engineer

RESEARCH

- Analysis of Recovery Characteristics of PP-PS-ABS Waste Polymer Through Impact Test -Composite Fracture Image Using SEM-EDS
- Composting empty palm oil bunches mixed with active organic liquid fertilizer
- Industrialization of liquid smoke based on palm oil solid waste

04

FACULTY OF ENGINEERING



VISION

To become a leading Faculty of Economics and Business which is known to be superior and able to meet market needs in global competition.

OUR SCHOOL

BACHELOR

- Accounting
- Economic Development
- Management

DIPLOMA

- Finance
- Secretariat

MASTER

- Economics
- Management Science
- Accounting Science

DOCTORAL

- Economics
- Management Science
- Accounting Science

RESEARCH

There are at least 24 research.

3 latest of them

- Batik Development Strategy in Medan City
- Optimization of Banking Financial Accessibility on the Performance of Traditional Market Traders in Berastagi, North Sumatra
- Employee Participation Affects Managerial Performance In Budgeting With Organizational Commitment And Rewards As Moderating Variables At RSU DR. Pirngadi Medan

VISION

Faculty of Dentistry to become a leading Faculty of Dentistry that has global competitiveness is professional and has an entrepreneurial spirit, supporting the vision of the University of North Sumatra, namely The University for Industry.

OUR SCHOOL

BACHELOR

- Dentistry

SPECIALIST

- Prosthodontics
- Dental Conservation
- Periodorisia
- Orthodontics

MASTER

- Dentistry

DOCTORAL

- Dentistry

RESEARCH

- Development of Composite Technology From Hybrid Nanoparticles Horseshoe Crab Shell (*Tachypleus gigas*) with Ig-Y (Hen-Egg Yolk Antibody) and Apatite Silica as Direct Dental Restorative Material.
- Nano-Particles Watermelon frost Containing Calcium Enriched as Biomaterial in Regenerative Pulp Tissue.
- Technology Development of Watermelon (*Citrullus Vulgaris*) In the regeneration of pulp tissue in teeth with reversible pulpitis caused by mechanical trauma .
- Technology Development of Watermelon (*Citrullus Vulgaris*) In the regeneration of pulp tissue in teeth, reversible pulpitis caused by mechanical trauma (in vivo)

06

DENTISTRY SCHOOL



VISION

The Faculty of Cultural Sciences, Universitas Sumatera Utara has become an educational, research and community service institution in the field of culture that is superior and prominent regionally, nationally and internationally and has an insight into the nation's cultural values.

OUR SCHOOL

BACHELOR

- Indonesian literature
- English literature
- History
- Malay Literature
- Batak Literature
- Ethnomusicology
- Arabic
- Japanese Literature
- Library Science
- Chinese Literature

DIPLOMA

- Japanese language
- English
- Tourism
- Library Science

MASTER

- Linguistics
- Art creation and study
- History science
- English

DOCTORAL

- Linguistics



VISION

Organize high-quality education in the fields of basic science and technology that is able to compete globally. Develop superior research by utilizing local potential to produce technology with global competitiveness. Applying science and technology in community service activities in order to produce a scientific community that is able to compete globally.

RESEARCH

There are 20 Research, 3 newest of them:

- Reaction of glucose to sorbitol in nanoporous pillari clay TiO_2/Ni with UV initiation
- Strong electric field technology design using sphere-gap and its testing on microbial electroporation processes
- Production of cellulose nanofiber-based bionanocomposites with graphene made from graphite from Lunto rice fields sawah West Sumatra as reinforcement

OUR SCHOOL:

BACHELOR

- Mathematics
- Chemistry
- Physics
- Biology

DIPLOMA

- Statistics
- Metrology And Instrumentation
- Chemistry
- Physics
- Technical Information

MASTER & DOCTORAL

- Mathematics
- Chemistry
- Physics
- Biology

08 FACULTY OF MATHEMATIC & NATURAL SCIENCE



VISION

Becoming a Faculty that Has Academic Excellence and Able to Compete in the Development of Applied Science and Research in Social and Political Public Policy at the Global Level in 2021”

OUR SCHOOL

BACHELOR

- Social Anthropology
- Business Administration
- Public Administration
- Communication Science
- Political Science
- Social Welfare
- Sociology

DIPLOMA

- Tax Administration

MASTER

- Communication Science
- Political Science
- Sociology
- Development Science

DOCTORAL

- Development Science

RESEARCH

There are 59 Research
3 Latest of them

- Media Literacy Model Based on Local Wisdom in North Sumatra
- Analysis of Adolescent Behavior in Using Social Media (Survey Study in Langkat Regency)
- Sustainable Management of Coffee Farms in Karo District

09 FACULTY OF SOCIAL & POLITICAL SCIENCE



VISION

To become an International Standard Faculty in Developing Public Health Sciences in the Tropics.

OUR SCHOOL

BACHELOR

- Public Health Science

MASTER

- Public Health Science

DOCTORAL

Public Health Science

RESEARCH

There are 66 Research .

3 latest of them

- Family Empowerment in Preventing Dengue Fever in Binjai City, North Sumatra
- A Study on the Existence of Anemia and Family Empowerment to Improve the Nutritional Status of Pregnant Women in Medan
- Analysis of Utilization of National Health Insurance in Hospitals and Private Hospitals in North Sumatra Province

10 FACULTY OF PUBLIC HEALTH



VISION

Based on the vision of the Faculty of Pharmacy, the vision of the Bachelor of Pharmacy Study Program of the Faculty of Pharmacy is "To become a pharmacy study program that excels in the field of pharmacy, science, technology and community clinical with an international perspective".

OUR SCHOOL

BACHELOR

- Pharmaceutical Science
- Pharmacist School

MASTER

- Pharmaceutical Science

DOCTORAL

- Pharmaceutical Science

RESEARCH

There are 102 Research
3 Latest of them

- Characterization of Extracts, Chemical Compound Profiles and Working Mechanisms of Extracts and Active Fractions of Shallots (*Allium cepa* L.) as Antimicrobials
- Identification of Chemical Compounds and Immunostimulator Effects of Ethanol Extract of Temu Mango (*Curcuma mango* Val.) Against Specific Immunity of Male Mice
- Profile of Antibiotic Use with a Doctor's Prescription at Pharmacies in Medan City

11

FACULTY OF PHARMACY



VISION

Become a Faculty of Psychology with academic excellence based on local wisdom and agro-industry that is able to compete in the global world level

OUR SCHOOL

BACHELOR

- Psychological Science

MASTER

- Psychological Science
- Psycolog

DOCTORAL

- Psychological Science

RESEARCH

There are 76 scientific articles/scientific works/artworks/books produced that can be seen in Makara Human behavior Studies in Asia, Procedia Case Studies and Psychological Interventions, Proceedings 5th ASEAN Region Union of Psychological Congress.

12 FACULTY OF PSYCHOLOGY



VISION

Become a Faculty of Psychology with academic excellence based on local wisdom and agro-industry that is able to compete in the global world level

OUR SCHOOL

BACHELOR

- Nursing Science
- Nurse School

MASTER

- Medical Surgical Nurse Program
- Administrative Nurse Program

RESEARCH

- Comparative Study of Nurses and Specialist Attitudes towards Nurse-Doctor Collaboration in Hospitals
- Caring Attributes for Undergraduate Nursing Education Program Students and Nurse Professional Education Program Students, Faculty of Nursing, University of North Sumatra

13

FACULTY OF NURSING



VISION

To become a research-based higher education provider in the field of computer science/informatics and information technology that is adaptive, collaborative, and creative, with international standards until 2022.

RESEARCH

There are 46 Research
3 latest of them

- Intelligent Real-Time Environmental Monitoring System with Advanced Machine Learning Optimization
- Use of Augmented and Virtual Reality for Routes and Locations of Historic Places in Medan City
- Parental Supervision of Students' Academic Activities Using the Fingerprint Cloud System Utilizing Arduino and Nano PI

OUR SCHOOL

BACHELOR

- Information Technology
- Computer Science

MASTER

- Data science and artificial intelligence
- Informatics

DOCTORAL

- Computer Science

VISION

To become a higher education institution that excels in the development of science, technology, and art in the forestry sector that supports sustainable forest management and utilization.

RESEARCH

There are 33 research

3 Latest of them

- Priority Index of Degraded Tropical Forest Landscape Restoration Sites in North Sumatra
- Utilization of Wood Waste from the Sawmill Industry as Raw Material for Structural Particle Board
- Mitigation Model for Reducing Emissions and Increasing Carbon Stocks through Community Forests Based on Community Rubber Agroforestry to Support the Red+ Program in North Sumatra

OUR SCHOOL

BACHELOR

- Forestry
(Forest Management, Forest Cultivation, and Forest Product Technology)

MASTER

- Forestry



15

FACULTY OF FORESTRY

VISION

To be a leading postgraduate program with the highest national accreditation and pioneering international recognition.

OUR SCHOOL

MASTER

- Regional and Rural Planning
- Natural Resources and Environment Management
- Management
- Property Management and Valuation

DOCTORAL

- Regional Planning
- Natural Resources and Environment Management

RESEARCH

3 Latest of them

- Analysis of the Implementation of the Trans Me Field Bus Rapid Transit (BRT) Policy in North Sumatra
- Factors Affecting the Existence of Sacred Forests in Samosir District
- Analysis of the Effect of Company Size, Asset Growth, and Capital Structure on the Intrinsic Value of Property and Real Estate Companies in Indonesia



16 POST GRADUATED SCHOOL

OUR

LABORATORIES

LABORATORIES

- Material Structural Characteristics Laboratory
- Chemical Properties Testing Laboratory
- Mechanical Properties Testing Laboratory
- Thermal Properties Testing Laboratory
- Renewable Energy Laboratory
- Molecular Materials Biology Laboratory

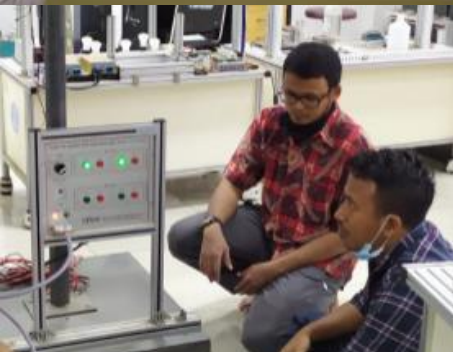
RESEARCH

- Green Concrete
- IoT/Internet of Things
- Utilization of Agricultural Waste
- Sodium Ion Battery
- Bio-Energy
- Microplastic and Heavy Metal
- Material Isolator
- Renewable Energy
- Agriculture, Functional Food and Bio-Molecular System

PATENT RIGHT

- Interlock bricks made of ash from the eruption of Mount Sinabung – 2019
- High Infiltration Water Pass Concrete Brick – 2020
- Concrete Brick (Paving Block) Volcanic Ash Aggregate and Its Mixture – 2020

This year, USU Integrated Research Laboratory is conducting research collaborations with the State Electricity Company (PLN) related to FaBa research.





DIVERSIFICATION & OUTREACH

INTERNATIONAL AFFAIRS OFFICE

International Affairs Office (IAO) Universitas Sumatera Utara is the division under the Vice Rector for Research, community service and cooperation, which provides expert support and guidance to the formal international relations of the Universitas Sumatera Utara. IAO contributes to the internationalization of the University through leadership and administrative support.

IAO facilitate international collaboration and coordinate activities designed to bring the university closer to our shared vision of USU being acclaimed internationally for its research, education and community service.

Some duties include the following :

- International University Cooperation Programs
- Advising and counseling of international students
- Providing support services and cultural and learning opportunities to international students.
- Advising USU students on studies abroad, including support in terms of scholarship research.

GLOBAL PRESENCE



ERASMUS + CBHE PROGRAM

ADVANCE

ADVANCE aims at promoting the modernization of financial management practices and income diversification strategies in higher education institutions (HEIs) at regional level, with a view to sustainably strengthen the higher education systems and maximize the social return on investment in higher education in Malaysia, Indonesia and Thailand.

UNITED (inspire dulu)

UNITED addresses the current lack of skilled labor in the area of automotive engineering with a view to increasing the positive impact of the automotive industry on regional development and internationalization. The UNITED partner countries Indonesia (ID), Malaysia (MY) and Thailand (TH) represent the largest automotive industries (considering the rise in number of units produced) in the Southeast Asian region and are highly important for global car production.

GLOBAL PRESENCE



INSPIRE

The project's aim is to promote the entrepreneurial mindset and innovation in partner country higher education institutions (HEIs) by strengthening the University-Business cooperation for better employability of social entrepreneurs and for increasing their relevance for the labour market and the society.



DS&AI-PARTNERSHIP

The DS&AI project gives the chance to top European HEIs, relevant ICT companies and an ICT educational network, to support their Asian peers in Thailand, Indonesia and Sri-Lanka, built their capacity, by developing specialised curricula on DS&AI.



SPIRIT

The SPIRIT project it is based on the premise that a healthy mind and a healthy body are essential for the wellbeing of the people and that the most appropriate time to start building them is at a young age. This the reason the project aims to develop academic programs and train teachers and coaches in physical education, sport science and nutrition who will join schools and clubs and put this new framework into action.

GLOBAL PRESENCE



Master Degree in Industry 4.0
610455-EPP-1-2019-1-MY-EPPKA2-CBHE-JP

IND 4.0- Erasmus+, KA2, Capacity-Building in the field of Higher Education

The aim of the project is to provide practical solution so as to help closing the gap between industry needs/expectations and educational system outputs, in relation Industry 4.0 in the target countries. It will propose a methodology for the design of MSc Curricula that promote a shift from degree focused qualification to competence based qualification.

ERASMUS+ MOBILITY PROGRAM

Erasmus+ agree to cooperate for the exchange of students and/or staff in the context of the Erasmus+ programme. they commit to respect the quality requirements of the Erasmus charter for higher Education in all aspects of the organization and management of the mobility, in particular the recognition of the credits (or equivalent) awarded to students by the partner institution. The institution also commit to sound and transparent management of funds allocated to them through Erasmus+

GLOBAL PRESENCE

INTERNATIONAL SCHOLARSHIP

- EAST-WEST CENTER
Colaboration,Expertise,Leadership
- DAAD (Deutscher Akademischer Austauschdienst German Academic Exchange Service)
- USAID (United States Agency for International Development)
- AMINEF (American Indonesian Exchange Foundation)
- Australian Government – AusAID
- Direktorat Jenderal Pendidikan Tinggi
- The ADB-Japan Scholarship
- Fullbright Scholarship
- Australia Awards Scholarships
- The Eiffel scholarships
- The Gates Cambridge Scholarship
- MEXT Scholarship
- The Chevening Scholarship
- The Endeavour Scholarship and Fellowships



WE STAND TOGETHER

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Our History

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Our Research Collaboration

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Our MoU Collaboration

OUR HOME



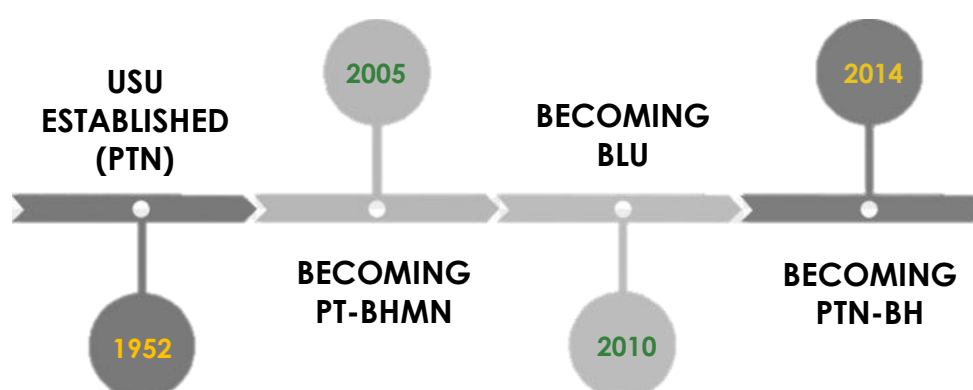
Universitas Sumatera Utara (USU) is a public university located in Medan, North Sumatra Province. Precisely on Dr. T. Mansur Street No. 9, Padang Bulan, Medan, North Sumatra, Indonesia. The history of this university begins with the establishment of the Universitas Sumatera Utara Foundation on June 4, 1952. The establishment of this foundation was pioneered by the Governor of North Sumatra to fulfill the wishes of the people of North Sumatra in particular and the Indonesian people in general.

This foundation was managed by a Leadership Council which was chaired directly by the Governor of North Sumatra at that time, namely Abdul Hakim. As a result of cooperation, moral and material assistance from all the people of North Sumatra which at that time also included the Special Region of Aceh, on August 20, 1952 the Medical School was successfully established.

In its development, several faculties within USU have become embryos for the establishment of three new state universities, namely Universitas Syiah Kuala in Banda Aceh (from the Faculty of Economics and the Faculty of Veterinary Medicine and Animal Husbandry), Medan State IKIP which has now changed to Universitas Negeri Medan (from the Faculty of Veterinary Medicine). Teaching and Educational Sciences), Politeknik Negeri Medan (from USU Polytechnic).

OUR HISTORY

Since its inception, USU has been prepared to become a center for higher education in the Western Region of Indonesia. When it was founded in 1952, USU was a foundation, then changed its status to National State University (**PTN**) in 1957. On August 20, 1952, the Medical School was successfully established. Then followed by the establishment of the Faculty of Law and Society Science (1954), the Faculty of Teacher Training and Education (1956), the Faculty of Agriculture (1956), and the Faculty of Dentistry which was founded on October 19, 1961. And so on. USU changed its status to a State-Owned Legal Entity University (**PT-BHMN**) in 2005, PP No. 66 of 2010 which states that USU has the status of **PT-BHMN** mentions that USU and several other universities in Indonesia implement the financial management system of public service agencies (**BLU**). And now the status has changed again to **PTN-BH** per PP No. 16 of 2014. USU in a vision to become a University for Industry (UfI)



From 2019 to 2021 usu has conducted many research collaborations with various cross-country universities

OUR RESEARCH COLLABORATION



Until 2021, 57 Memorandum of Understanding (MoU) have been signed with reputable universities in the world.

OUR


MoU

COLLABORATION



Universitas Sumatera Utara
Kantor Urusan Internasional - USU

 Dr. T. Mansur Street No. 9, Kampus USU, Padang Bulan,
Medan, 20155, Sumatera Utara

 +62 61 8215937

 iao@usu.ac.id

 <https://www.usu.ac.id> | <https://www.iao.usu.ac.id>