

TRƯỜNG ĐẠI HỌC BÁCH KHOA HÀ NỘI HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

# ANNUAL REPORT 2021

ONE LOVE. ONE FUTURE.



ONE LOVE. ONE FUTURE.



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13
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16
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18
20
22
24
26
27
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Associate Professor Huynh Quyet Thang President

# HUST

In the context of Covid-19 pandemic with its adverse influence, Hanoi University of Science and Technology (HUST) has been steadfastly in pursuit of the motto "Innovation -Breakthrough", developing sustainably on the basis of digital transformation, improving the reputation and impact in the country and abroad. Nine key missions of 2021 are mainly achieved including : (i) transforming the organizational model, building an autonomous and modern model of Hanoi University of Science and Technology; (ii) improving working conditions and the capacity for leaders and falcuty members; (iii) reforming admissions activities; (iv) reforming education content and pedagogy; (v) promoting favorable conditions for learning, teaching and supporting learners; (vi) developing human resources and infrastructure, boosting research capacity; (vii) strengthening cooperation with the industry and international collaboration; (viii) accelerating the digital transformation process; and (ix) formulating an integrated and professional communication system.

HUST has made a clear and positive change through the following highlights: Firstly, the three Schools of Mechanical Engineering, Information and Communication Technology, and Electrical and Electronic Engineering have been established, marking the first and crucial step forward in the process of reforming the governance model and transforming into the "Đại học" model. Secondly, the eHUST Online University Governance system has been put into use, which is an important milestone in the digital transformation process towards becoming a "Digital University". Thirdly, the conditions for learning, teaching and working on digital platforms have consistently been improved; training laboratories from new investment sources have been put into use; more than 30 classrooms have been upgraded and refurbished: a number of shared facilities have also been renovated with sponsorship on the occasion of the 65th anniversary of the University.

The university's position and influence have been enhanced domestically and nationally: the Quacquarelli Symonds Subjects Rankings published in April 2022 has ranked all 5 major disciplines of HUST. All of the subjects ranked have risen to #1 of Vietnam, in the 301 to 450 best positions in the world, making the University ranked 360 worldwide in the field of Engineering and Technology. Education indicators such as graduate employment rate and research and innovation, number of citations, and income from business and international cooperation activities have shown a sustained growth.

In 2022, HUST will continue to persevere in the innovation process, successfully transform the organization model into the "Đại học" model, ensuring the philosophy of "one HUST". The University has developed an advanced, digital embedded leadership and goverance model. HUST also places an important emphasis on developing quality human resources and promoting a collaborative mindset towards improving quality academic activities as well as creating a force for innovation and development.

The university strong renovation process is without numerous difficulties and challenges ahead. However, our leaders, faculty members, staff, and students firmly believe that we can definitely turn difficulties into motivation for development and transform challenges into opportunities. We determine to succesfully fulfill 8 Eight key missions in 2022, with 32 key indicators (KPIs).

President

Associate Professor Huynh Quyet Thang





#### Professor Le Anh Tuan Chairman of the University Council

2021 marks the 65th anniversary of Hanoi University of Science and Technology (HUST), 15/10/1956 – 15/10/2021. 65 years of establishment and development with glorious traditions, HUST has always committed to the mission of "human development, high-quality education, scientific research, technological innovation and knowledge transfer for the betterment of our nation and society", the vision to "become the leading research university in which engineering, and technology are at the core of the university". Inheriting the traditions and the fundamental success in building the autonomous university model, 2021 has witnessed the accomplishment of action plans and key performance indicators, pursuing the goals in The Development Strategy for period 2017-2025.

Although facing another year of complicated Covid-19, which causes disruptions to activities of each cadre, faculty, student and the whole society, HUST has overcome difficulties with determination, unity, innovation and prompt adaptation to the pandemic developments. All plans and performance indicators have been largely completed and fulfilled, 10 missions and key solutions to implement The Development Strategy for the 2021-2025 period established, financial stability assured and organizational structure continuing to be optimized and streamlined together with higher level of decentralization, which is marked by the Resolution to establish 3 schools within HUST and the project to transform into the "Đai hoc" model submitted to the Ministry of Education and Training. Prime attention has also been paid to the University infrastructure with the milestones of the



construction of Building C1 within the scope of the Support for Autonomous Higher Education Project (SAHEP), the launch of Online University Governance System (eHUST) and the promulgation of medium term invesment portfolio from legitimate income sources of HUST for the period 2021-2025.

In 2022, HUST further implements the activities in alignment with the Development Strategy for the period 2017-2025 and the philosophy "the University is the foundation, the teachers are the subject and motivation for development, the learners are the center". The focus will be on restructuring activities towards an autonomous and modern HUST model; accelerating the digital transformation process; renovating and upgrading the infrastructure and campus; internationalizing accreditation for programs; boosting research, innovation and entrepreneurship activities; promoting a high-quality and active learning and research environment; sustaining the image of the human of Back khoa (HUST) with "Excellence, Integrity, and Responsibility".

Chairman of the University Council



Professor Le Anh Tuan

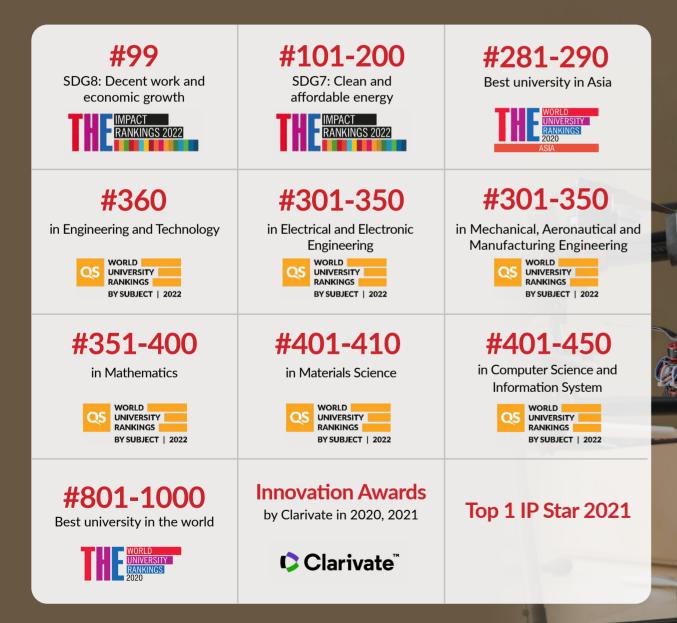
HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

# MISSION

# VISION

society

We commit to human development, We strive to become the leading high-quality education, scientific research university in which research, technological innovation engineering, and technology are and knowledge transfer for the at the core of the university and betterment of our nation and to contribute to the development of the knowledge economy, peace and security, and Vietnam's higher education.



# NE LOVE. ONE FUTURE.

# 1. University's 65th Anniversary

On October 15, 2021, HUST solemnly celebrated the 65th anniversary of the establishment of the University. During the past 65 years, humans of HUST – the faculties and students have always been sincerely working with respect for individuals, and solidarity, with the spirit of dedication, commitment, aspirations for innovation and breakthroughs. HUST always focuses on training to meet the human resource requirements for the construction and development of the country.

The University has always been a pioneer in innovation: Carrying out research and experimentation in governance to always ensure an effective governance model, a lean organizational structure, and a driving force for creativity and development. In parallel, the University is highly committed to education innovation to improve the quality and international integration; reform science and technology activities, build and develop new research directions for regional and world integration; Promote innovation of the students



and faculties, focusing on research with high scientific content; forming "Vietnamese technological knowhows" to develop spin-off and start-up businesses. The connection, joining hands, working together towards "Beloved HUST Family" of "humans of HUST" around the world will continue to develop the brand, values and culture of HUST.



# 2. Establishment of 3 Schools under HUST

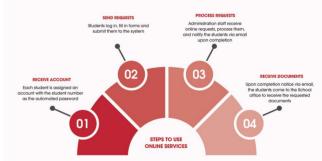
On October 8, 2022, the University Council issued Resolutions to establish 3 schools: School of Mechanical Engineering on the basis of bringing three schools together, School of Electrical and Electronic Engineering on the basis of bringing two schools and one research institute together, and School of Information and Communication Technology on the basis of reorganizing itself. This is an important milestone in the renovation and development of the University and in alignment with the philosophy of "One HUST" to reform organizational structure, formulate an advanced governance model and motivate innovation and development.





# 3. eHUST launch

On September 22, 2021, HUST launched the Online University Governance System, eHUST. This is a remarkable step in the digital transformation process of the University. eHUST is operated on an application that allows the students and faculties to access and to conduct teaching, learning and administrative tasks in a more convenient and effective manner.





# 4. Groundbreaking for the construction of C7 Building under SAHEP project

The Groundbreaking ceremony for C7 Building under the Support for Autonomous Higher Education Project (SAHEP) was held in March, 2021. 15 training laboratories in the field of Electrical engineering, Electronics, Mechatronics, and Materials Sciences have been put into use for the academic year 2021-2022. 15 research laboratories have been set up for operation in 2022.

# 5. Research and development products related to the Covid-19 pandemic

In collaboration with the industry, HUST faculties have researched and manufactured the BKVM-HF1 highflow oxygen machine to serve the prevention and control of the Covid-19 pandemic and most recently, the portable oxygen-generating container and medical compressed air (NOVAO2 Mobile System) to support the field hospitals to treat Covid-19 patients. The products are highly appreciated and ordered by the Ministry of Health to help the southern provinces in the prevention and control of the pandemic.

In addition, HUST students have also invented a number of products to support the prevention of Covid-19 such as automatic infusion monitoring device and Cold Water Circulating Cooling Vests - a solution to combat heat for doctors and nurses who have to wear protective suits and for those who frequently work and travel in hot outdoor environment.



# 6. Student support activities and the establishment of Tran Dai Nghia scholarship

Amid the complicated evolution of the Covid-19 epidemic, the University and its alumni network have provided basic necessities for thousands of students stranded in Hanoi due to the Covid-19 lockdowns. Those are the meaningful support of the university, showing the necessary and timely reaction to students in need during the pandemic.

Also in 2021, HUST established Tran Dai Nghia Scholarship. The scholarship, named after the first President of the University, clearly demonstrates the implementation of the University's responsibility towards society in educating high-quality human resources to serve the industrialization and modernization process of the country. In particular, the scholarship directly supports disadvantaged students with high motivation in study to gain access to higher education and create a favorable condition for excellent students to study at the University.







# 7. Social responsibilities

HUST always shares community responsibilities with the local authorities. From July 2021, the University has cooperated with the Health Center of Hai Ba Trung District and Bach Khoa Ward to organize vaccination points for people in the area and for the staff and students of the University. In response to the campaign of the Central Committee of the Vietnam Fatherland Front, the Party Committee, the Board of Presidency, and the Executive Committee of the Trade Union of HUST have called on all staff to contribute a part of their income to support the Covid-19 Prevention Fund. From May 29 to June 5, 2021, the University received a donation amount of 952,213,125 VND. The University has transferred all the above donations to the Vietnam Education Trade Union following the calls of the Ministry of Education and Training, the Covid-19 Prevention Fund of Hanoi City, and the Vietnam's National Covid-19 Vaccine Fund.



# **2021 HIGHLIGHTS**

# 8. Annual Report, Newsletter and internal communications

The Annual Report is one of the documents showing the responsibility of Hanoi University of Science and Technology in promoting publicity and transparency in governance activities during the year. It also offers a chanel into presenting commplished activities which are align with strategic goals, strategic plans, and the approved annual plan.

Newsletters with information about the main activities of the University on a quarterly basis are for informing international partners, businesses, and alumni as well as receiving numerous feedback for constant improvements.

Internal communication activities are carried out regularly through websites, internal newsletters (HUST special issue, bulletin...) and official channels such as Microsoft Teams and email (for staff), Yammer and email (for students), Facebook and LinkedIn (for alumni) to convey timely and accurate information to the right audience.



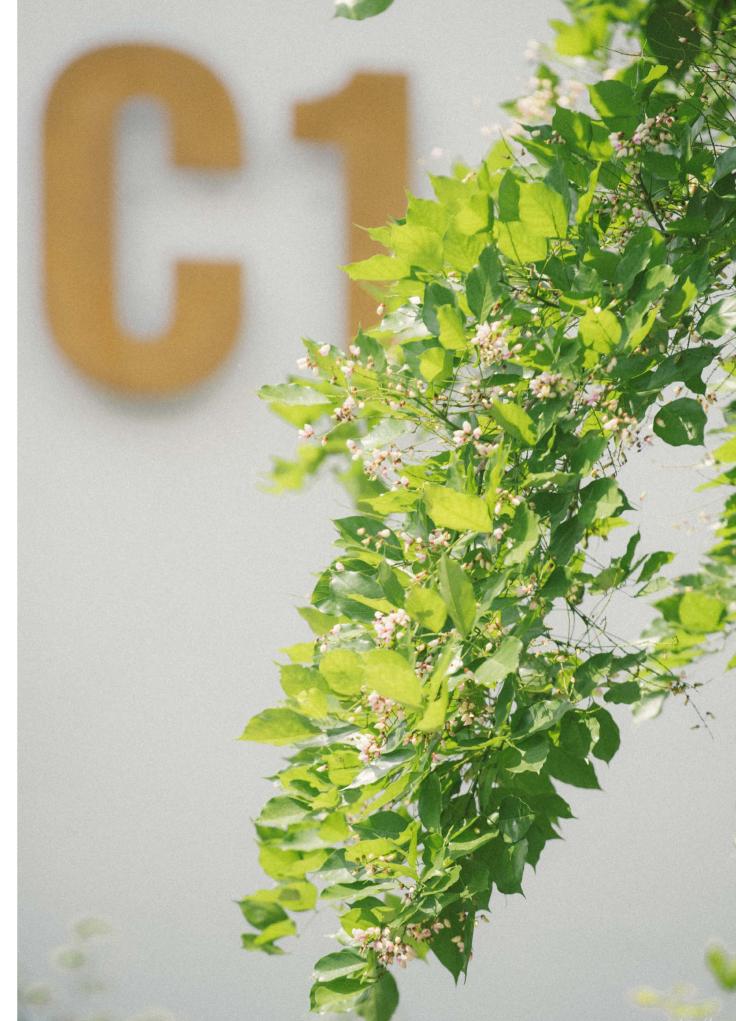


# 9. Innovation and entrepreneurship ecosystem

On September 21, 2021, Clarivate announced the 2021 Innovation Award. HUST remains to be the only university in Vietnam honored in the category of Higher Education Institutions. This is one of the demonstrations of the efforts and achievements in research and innovation of HUST faculties and students.

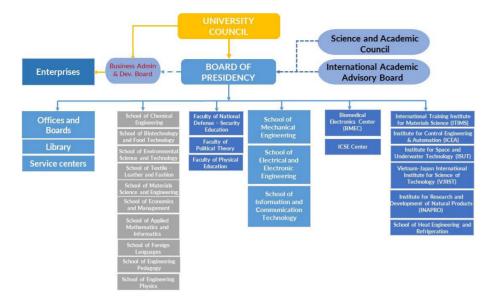
In 2021, in the category of research institutes and universities, the top 1 IP Star goes to HUST. The award aims to recognize the contributions of the IP owners who are individuals, research institutes, universities and enterprises by considering the number of granted patents.

On October 15, 2021, HUST officially signed a cooperation agreement with the National Innovation Center (NIC) to promote innovation and technology transfer. The cooperation agreement is on three domains: developing an innovation and start-up ecosystem; cooperating to support businesses; and developing human resources. Also in 2021, 02 university spinoffs were founded to bring research results to life.



#### HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

# 1. Organization and governance



The Project "Model transformation of HUST" from "Trường Đại học" to "Đại học" has been built, completed, and submitted to the Ministry of Education and Training for appraisal from relevant governing bodies and submission to the Government soon. In October 2022, the University Council issued Resolutions to establish 3 schools and merge AIST into ITIMS.

The University has developed and approved 10 main solutions, 32 performance evaluation indicators for the period of 2021-2025 to step by step achieve the five goals set out in the "Development strategy of HUST in the period of 2017-2025".

With proper implementation of development strategy on governance and financial management, wellorganized training and research activities, innovation and services, and efficient collaboration with industry, the income of the University has experienced a comprehensive growth in all areas of operation, contributing to the sustainability in revenue growth, reaching the growth rate of 18.3% compared to 2020, and 37.1% compared to 2019.

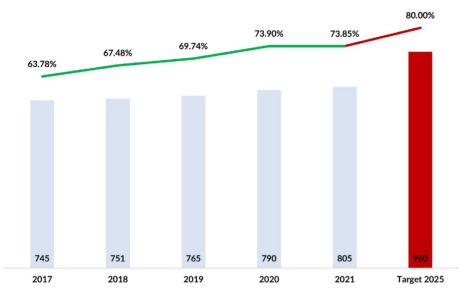


Strategic goals 2017-2025	A multidiscip university in w technology and	DAL 1 linary research hich engineering, innovation are at core	GOAL A comprehensive university with advan model, robust financia campus and infrastru comparable to the re	autonom Iced gove I system, Icture wh	ernance modern iich are	A creati internatior	GOAL 3 ive, open and nalized academic ironment	GOAL Advanced prog are accredited re internatic	rams which gionally and	GO/ An excellent t innovatio	•
Mission and key solutions for the period 2021-2025	Proactively implement the digital transformation process and develop HUST into a shared digital university model	Strategically plan academic fields for teaching and research at HUST to ensure modernity and sustainable development	Transform the governance model, develop the "Đại học" model with the philosophy of "one HUST", reform the organizational structure, formulate an advanced governance model, motivating innovation and devlopment	Develop a robust financial system	Develop a modern campus and infrastructure	Utilize and promote the capacity of human resources, attract excellent academics and researchers	Utilize the strengths of the University in education, research and technology transfer, to contribute more to the development of higher education, of Hanoi capital and of the country; promote collaboration with the industry and international partners, affirming the position of HUST in the region and the world	Reform programs and pedagogy drastically in response to the need for high-quality human resources and nurturing the gifted, expanding high-quality education in the direction of internationaliz- ation	Improve the quality and effectiveness of student support activities, ensuring fairness for learners	effectivenes technology innovation act the developm Bach khoa prod affirming and prestige of spin-offs, s	e quality and as of research, transfer and ivities; promote ment of Make in ucts in key fields d elevating the of HUST in tart-ups and n activities

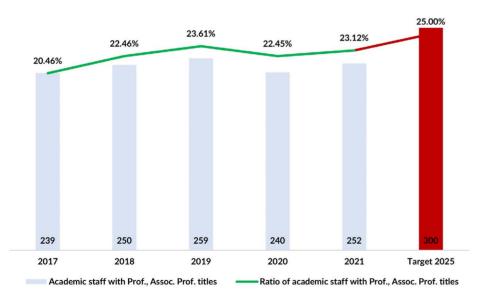
# 2. Human resources development

The number of academic staff with PhD makes up 75.4%, increasing by 1.5% compared to 2020, which is at the top among Vietnam higher education institutions. Recruiting high-quality staff and enhancing capacity building for staff have been the top priorities in the 2017-2025 development strategy, aiming at 80% of academic staff holding a PhD, 25% with Professor and Associate Professor titles in 2025.

#### THE NUMBER AND RATIO OF ACADEMIC STAFF WITH A PHD



THE NUMBER AND RATIO OF ACADEMIC STAFF WITH PROFESSOR AND ASSOCIATE PROFESSOR TITLES



The project "Attracting and recruiting excellent lecturers in the period of 2021-2025" has been issued. After launching the project, the University has recruited 2 excellent lecturers for School of Engineering Physics and School of Chemical Engineering and is considering 1 candidate for School of Chemical Engineering.

The draft of the Project "Attracting excellent local and foreign experts and scientists to collaborate and work with the University" has been completed. However, the implementation of the project has been behind schedule.



# 3. Campus and infrastructure

The

project

scientific research

Digital Factory Lab" serving

interdisciplinary education and

Mechanics, Electrical, Electronics

Economics and management in

the field of Industry 4.0 with a

Telecommunications.

For a favorable work environment for the staff, the University has upgraded the lecture rooms, laboratories, and offices:

+ renovating more than 30 lecture rooms to meet the demands of teaching and learning in different modes (B-learning, big and small lecture halls)

+ installing Wifi systems for lecture areas and classrooms; renovating D7 lecture halls, laboratories at Building T, and Buildings T1, D8.

+ upgrading facilities at Admission Office, School of Chemical Engineering, Center for Languages and Academic Exchange Services, School of Information and Communication Technology, School of Materials Science and Technology, School of Transport Mechanical Engineering, and School of Mechanical Engineering.

#### **Highlighted Projects**

Increase Research Capacity in welding field for Hanoi University of Science and Technology -Vietnam (using non-refundable ODA from the Japanese Government)

- Intelligent Digital Technology and Artificial Intelligence Laboratory for the Industrialization and modernization of the country
- Developing In-depth Innovation in Priority Technologies of the 4th Industrial Revolution (using World Bank concessional loans)
- Project for Innovation of Science and Technology on Natural Rubber for Global Carbon Process (Japan's non-refundable ODA)
- Improve the capacity of training welding engineers at HUST (Aid from OSAKA University through JICA Japan)
- The project to establish an English Assessment Center using the Vietnamese 6-level Foreign Language **Proficiency Assessment Framework**
- The Autonomy in National Defense Security Education project.

total investment of 24 billion dong, has been completed.

On the 65th anniversary of the University, different organizations and corporations sponsored the renovation and upgrading of facilities with a total cost of nearly 14 billion VND.



"Intelligent

including

and



HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY









# 4. Admission and education

With improved admissions methods, the University has exceeded the university enrollment target in 2021, reaching 104.4%. The quantity and quality of enrolled students has increased sharply.

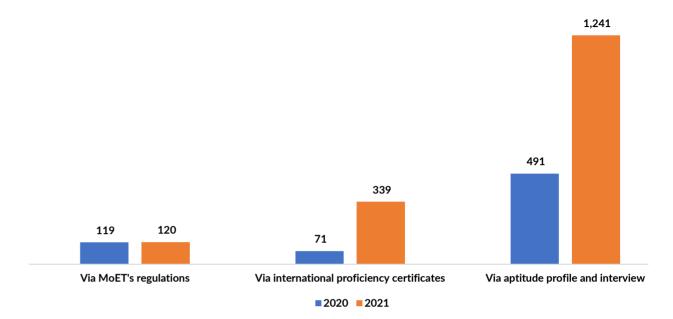
Postgraduate admissions has witnessed positive changes compared to 2020 but has not yet met the expectations. The main reason are still the low need for further study of students and the restricted source of graduate admissions. In addition, the Ministry of Education and Training has issued new policies on postgraduate admissions and education with stricter conditions and standards. The new standard Bachelor-Engineer Specialized training model and programs have been widely notified by the University and the Schools to all K65, K66 students. The new model has been officially applied to K65.

The projects to enhance autonomy in education in terms of education content, pedagogy and infrastructure directly serving education activities, have been comprehensively implemented in order to meet the requirements of effective legislations of the Ministry of Education and Training and Ministry of National Defense, including: The National Defense -Security Education reform project, and the project to establish an

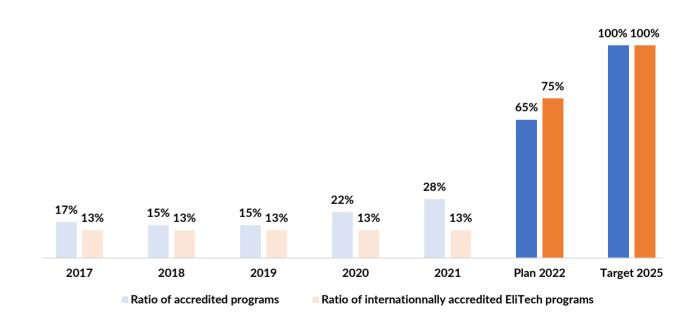
English Assessment Center using the Vietnamese 6-level Foreign Language Proficiency Assessment Framework (VSTEP).

The project on teaching and learning methods reform using Blended Learning for the period of 2019-2021 was concluded in May 2021. The project on teaching methods reform for the period of 2021-2025 has been completed and approved. The Pedagogy Reform Facilitation Board has been established, come into operation and achieved initial success.

#### ENROLLMENT BY MEANS OF DIRECT ADMISSION



THE RATIO OF ACCREDITED PROGRAMS AND INTERNATIONALLY ACCREDITED ELITECH PROGRAMS



The number of courses taught in B-learning mode increases by 73% 4 new programs have been introduced, 19 programs have been accredited The number of students admitted to International, talented and high-quality programs (ELiTech)

## increases by 25%

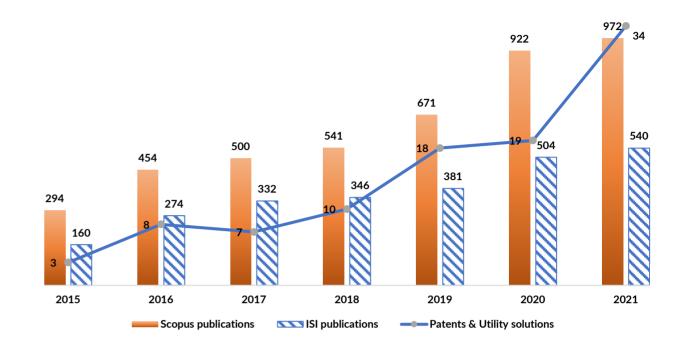


22 ANNUAL REPORT 2021

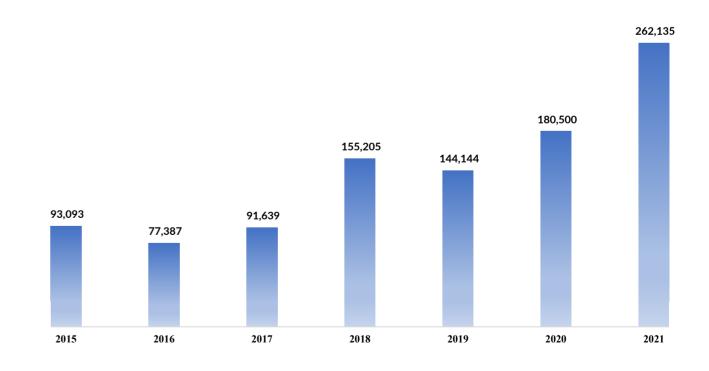


#### HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

#### PUBLICATION AND PATENTS



#### INCOME FROM RESEARCH ACTIVTIES (UNIT: MILLION VND)



# 5. Research impact

#### Overall planning of research fields

+ The University has approved the planning of 22 research laboratories belonging to the Schools of Chemical Engineering, Biotechnology & Food Technology, Electronic and Electrical Engineering. The planning project of laboratories according to four thematic groups, including Food-Biochemistry, Food – Environment - Natural Compounds, Electrical - Electronics, Mechanical – Transportation Mechanical – Thermo - Refrigeration, and Physics – Materials, is being appraised by committees.

+ HUST has paid more attention to high-quality publications. Several Schools and Research Institutes have exceeded their publication targets.

+ The Journal of Science and Technology of Technical Universities is gradually reformed towards international integration. The Advisory Board and the International Editorial Board of two sub-committees were established and put into operation. The Draft Regulation on the establishment of the International Scientific Advisory Council of the Journal has been edited.

+ The innovation and entrepreneurship ecosystem has been established to gradually improve the quality of students' scientific research activities

+ The Draft Regulations on Intellectual Property Management and Technology Transfer Support and the Project on Establishment of a Technology Transfer Support Center (BK-TTO) have been completed and submitted to the Board of Presidency for approval.

+ Investors of BK-Fund has raised the fund's size to 35 billion VND and has planned to invest from 1 to 3 billion VND for each selected project. In 2021, BK-Fund decided to invest in 05 start-ups (of which 3/5 projects have been disbursed). Besides, BK-Fund also co-organized the Lab2market incubation program which is incubating 12 scientific research groups and enterprises.

+ Research activities of students and the Annual Research Conference for Student are held online. The quantity and quality of participation tend to increase. Research topics are humane, practical, and associated with current social issues. The academic quality of these projects have also enhanced.

+ The draft proposal to support students in research and creativity towards entrepreneurship has been completed. A set of indicators to evaluate scientific research activities of students and schools has been developed, serving as a basis for allocating funding sources and supporting research and creativity activities for students at schools.

+ The draft proposal of policy on reward for students with outstanding publications and research results has been developed with amendments to current regulations in order to promote publications of high quality and attract research funding

# Research and technology transfer in cooperation with the industry

Some of the most outstanding research and technology transfer projects with great social impact can be named: 04 research projects ordered by Power Generation Corporation 1 of Vietnam Electricity Group were implemented at the School of Electrical Engineering, School of Chemical Engineering and School of Heat Engineering and Refrigeration; 01 project in collaboration with VMED Group to research and manufacture highflow oxygen ventilators (HFNC); 01 research project ordered by the Vietnam Oil and Gas Power Corporation (PV POWER) was implemented at the School of Engineering Physics.

## 6. Student support

+ Extracurricular activities of students such as civic and reach to the right subjects. The scholarship and traditions, career guidance activities, soft skills training, online races, and volunteering were organized online to adhere with the epidemic technology. prevention situation.

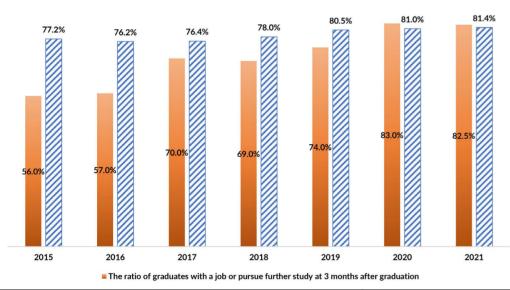
+ The student data information system has been improved significantly compared to 2020, including: the numbers of participations in extracurricular activities; student's life situation; epidemic prevention and control; need for support and counseling about learning, mental health; difficulties in student life: awareness of laws, etc., thereby allowing the University to timely assess the situation of students.

+ The consideration of Study Encouragement scholarships and sponsored scholarships are carried out in accordance with regulations, ensuring fairness

activities, learning of regulations, laws, culture consideration is held publicly, transparently, and without errors or complaints. The process is simplified through the application of information

> + The project "Strengthening academic and psychological advice and support for students" has been put into operation since June 2021. It has gradually formed the process, ways of supporting and advising students at the level of the University, Schools, and classes. Activities for class management lecturers have also been promoted, focusing on training, and sharing experiences for students to build appropriate study plans and have a strong learning motivation. The rate of satisfied students after consultation is over 90%, the number of students with academic progress is nearly 50%.

THE RATIO OF STUDENTS GRADUATING WITH AT LEAST GOOD DEGREE & THE RATIO OF GRADUATES WITH A JOB OR PURSUE FURTHER STUDY AT 3 MONTHS AFTER GRADUATION



INDICATORS	RESULTS
The times of student participation in extra-curricular activities	600.000 times
The number of students with improved Personal development and Social responsibility points in 2021 compared to 2020	Increased by 10%
The percentage of class management faculties receiving training	Above 80%
Student support expenditures	Increased by 30.1%

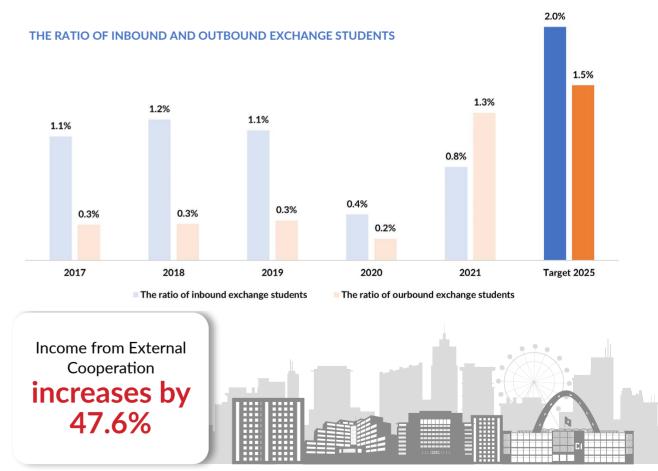
# 7. Communications – External affairs

+ The strategy to develop communications and external cooperation of HUST for the period of 2021-2025 has been issued. The system of regulatory documents to act as a legal corridor to implement the Strategy includes Regulations on credit recognition and conversion of equivalent course results: The Draft Regulation on management of external cooperation activities of HUST is continuing to be completed.

+ In 2021, HUST continues to implement cooperation agreements with prestigious academic partners and has signed cooperation agreements on training and research with 43 international universities, networks, and organizations, an increase of 53.6% compared to 2020. In addition, the University has actively supported and accepted international exchange students who follow the requirements of immigration and health safety.

+ The University continues to promote its role in international networks and organizations such as: UK-VN HEP. AUF. AUN/ SEED-Net. British Council. DAAD, Global Wales, UNDP, US Army, US Embassy, etc... and has received many sources of support for the University's activities such as: funding for establishing connections with technical universities in Europe; funding for research groups, experimental equipment or organization of conferences, seminars, the cadres and student exchange programs.

+ Regarding business cooperation, the University has signed MoUs with 33 strong enterprises in the VNR500<sup>1</sup> ranking, international enterprises (compared to 27 enterprises in 2020). In which, strategic cooperation agreements have been signed with Samsung Electronics, EVN, PVN, BIDV, Military Telecommunications Group (Viettel), FPT Corporation, and Vietnam National Coal and Mineral Group.



<sup>1</sup>VNR500 is a ranking table of 500 biggest businesses in Vietnam, published by Vietnam Report and VietnamNet newspaper



# I.Budget

1. Total revenue of 2021 Unit: Million VN					
	20	20	21	Changes	
No.	Funding sources	2020	Amount	Matching %	2020- 2021
1	Government Funding	47.289	48.328	3,4%	2,20%
2	Grant for SAHEP (ODA)	97.938	318.043	22,3%	224,74%
3	Operating revenue	870.717	974.826	68,4%	11,96%
3.1	Revenue from education and training	780.157	884.056	62,0%	13,32%
a)	Education and Training activities	749.044	846.312	59,4%	12,99%
b)	Other fees and charges	8.400	8.551	0,6%	1,80%
c)	Contractual training services	4.908	4.134	0,3%	-15,77%
d)	Sponsorship activities	17.805	25.059	1,8%	40,74%
3.2	Revenue from facilities utilisation and services	90.531	90.275	6,3%	-0,28%
3.3	Other revenues	30	495	~0%	1.550,00%
4	Research grants from local authorities and local funds	109.144	84.618	5,9%	-22,47%
	Total Revenue	1.125.088	1.425.815	100%	26,73%

# 2. Operating revenue 2021

No.	Items	Percentage/ total revenue (%)	Operating revenue 2021 (million VND)
1	Undergraduate Tuition Fees	54,41%	775.846
2	Other tuition fees and training service charges	5,83%	83.151
3	Sponsorship activities	1,76%	25.059
4	Facilities services	6,33%	90.275
5	Other activities	0,03%	495
	Total Operating Revenue	68,40%	974.826

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HANOI UNIVERSITY OF SCIENCE AND TECHNOLOGY

# II. Operating expenses

			Un	it: million VND
No.	Items	2020	2021	Changes 2020-2021
I	Manpower Expenses	500.078	596.411	19,26%
1.1	Staff and experts salary	466.580	564.223	20,93%
1.2	Salary reduction contributions	33.498	32.188	-3,91%
Ш	Learners support	43.839	45.878	4,65%
III	Facilities	78.475	77.982	-0,63%
IV	Services	36.737	26.939	-26,67%
V	Professional development	44.742	32.055	-28,36%
VI	Other expenses	19.821	19.792	-0,15%
	Total Operating Expenes	723.692	799.057	10,41%

# III. Funds

Unit: million VND

Code	Funds	Beginning balance	Fund increase	Planned expenses	Actual expenses	Ending balance
	Designated funds (scholarships, students support, support fund for disadvantaged students)					
353	2020	72.518	64.317	136.834	37.574	99.261
353	2021	99.261	87.341	186.602	28.592	158.010
	Changes 2020-2021	36,9%	35,8%	36,4%	-23,9%	59,2%
	Other funds (recognition, social welfare, operating activity development, performance-based income)					nent,
431	2020	279.389	386.569	665.958	276.136	389.822
	2021	389.822	481.149	870.971	341.994	528.977
	Changes 2020-2021	39,5%	24,5%	30,8%	23,8%	35,7%
	Total 2020	351.907	450.886	802.792	313.710	489.083
	Total 2021	489.083	568.490	1.057.573	370.586	686.987
Chan	ges 2020-2021	39,0%	26,1%	31,7%	18,1%	40,5%



Associate Professor Huynh Quyet Thang President



Associate Professor Nguyen Phong Dien Phó Hiệu trưởng



Associate Professor Huynh Dang Chinh Vice President



Associate Professor Tran Ngoc Khiem Vice President



HENGI UNIVERSITY OF SCIENCE

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A.	<b>Prof. Le Anh Tuan</b> Chairman	Assoc. Prof. Huynh Quyet Thang President	Mr. Pham Quang Hung Director of International Cooperation Department, Ministry of Education and Training
	<b>Dr. Bui Duc Hung</b> Vice Chairman Chairman of the Trade Union	Assoc. Prof. Nguyen Phong Dien Vice President	Dr. Nguyen Quan Former member of the Central Committee of the Communist Party Former Minister of Ministry of Science and Technology President of HUST Alumni Association
X	Assoc. Prof. Nguyen Viet Dung Secretary, Vice Dean of School of Mechanical Engineerning	Assoc. Prof. Huynh Dang Chinh Vice President	Mr. Ngo Son Hai Deputy General Director, Vietnam Electricity (EVN)
A	Assoc. Prof. Pho Thi Nguyet Hang Senior Lecturer, School of Engineering Physics	Assoc. Prof. Tran Ngoc Khiem Vice President	Mr. Le Tien Truong Chairman, Board of Directors, Vietnam National Textile and Garment Group
No.	Assoc. Prof. Nguyen Huy Phuong Vice Dean of School of Electrical and Electronic Engineering	Prof. Vu Van Yem Head of Personnel Office	Mr. Duong Manh Son General Director of PetroVietnam Gas
X	Assoc. Prof. Nguyen Danh Nguyen Dean of School of Economics and Management	MA. La Thu Thuy Head of Finance and Accounting Office	Mr. Pham Dinh Doan Chairman of Phu Thai Group
	Mr. Tran Anh Dung President of Students Association	Assoc. Prof. Dinh Van Hai Head of Student Affairs Office	Mr. Tran Manh Hung Former Chairman of Vietnam Posts and Telecommunications Group
4			Mr. Ngo Que Lam General Director of Hanoi Beverage Company (Habeco)
			<b>Ms. Dinh Hoai Giang</b> General Director of Secoin Building Material Corporation
		BAUN	
111	KALKAU		ANNUAL REPORT 2021 33

### I. SPONSORSHIP FOR INFRASTRUCTURE UPGRADE

Sponsors	Amount (VND)
Phenikaa Group	2,122,280,149
HABECO	2,065,000,000
Panasonic Vietnam	2,040,000,000
HUST Alumni Network (HUSTA)	2,000,000,000
Bach Khoa High Technology Transfer and Education JSC - HTC JSC	950,000,000
CETECH Investment JSC	890,000,000
Bank for Investment and Development of Vietnam (BIDV)	750,000,000
Yokogawa Vietnam Co.,Ltd	700,000,000
Mitsubishi Electric Vietnam Co.,Ltd	678,254,000
Kim Nguu Chemical and Equipment Import-Export JSC (VietChem)	560,000,000
Rang Dong Light Source & Vaccum Flask JSC	500,000,000
One Mount Group	100,000,000

### II. SPONSORSHIP FOR RESEARCH AND POSTGRADUATE PROGRAMS

Sponsors	Amount (VND)
Vingroup Innovation Foundation (VinIF)	9,050,000,000
Power Generation Corporation 1 - EVNGENCO1	7,934,000,000
German Academic Exchange Service (DAAD)	6,404,874,220
Naver Corporation	5,700,000,000
United States Agency for International Development (USAID)	4,978,000,000
Nagaoka University of Technology, Japan	4,572,400,000
Global Challenges Research Fund (UK)	2,974,757,930
The Education, Audiovisual and Culture Executive Agency (EACEA)	2,600,999,999
Korea International Cooperation Agency (KOICA)	2,378,073,400
VinBigData	2,000,000,000
British Council	1,167,446,781
Samsung	998,000,000
AUN/SEED-Net network	757,707,800
The Asahi Glass Foundation	440,000,000
Hitachi Global Foundation	300,000,000
United States Navy	230,000,000
National Science and Technology Development Fund	117,000,000
German Embassy	100,000,000
Sciences et Francophonie	87,409,713
VinGroup	70,000,000
Hoa Phat Dung Quat Steel JSC	50,000,000

## **III. SPONSORSHIP FOR UNDERGRADUATE PROGRAMS AND LEARNERS SUPPORT**

Sponsors	Amount (VND)
AIDEM JSC	2,100,000,000
Nissan Automotive Technology Vietnam	1,650,000,000
PetroVietNam Gas	1,300,000,000
Samsung Display Vietnam Co., Ltd	1,283,570,000



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Sekisho Co., Ltd	1,200,000,000
CC Foundation	1,000,000,000
AfterFIT Co., Ltd.	692,000,000
IBM Company, Vietnam	663,955,112
HUREDEE	650,000,000
One Mount Group	500,000,000
Southern Petroleum Construction J.S Company (AlphaECC)	500,000,000
Samsung Electronics Vietnam Co., Ltd	368,000,000
Honda Vietnam	360,000,000
Japan International Nuclear Energy Development Company	250,000,000
Nitori Manufacturer	241,300,000
Asia Fund from Merali Foundation	230,000,000
Military Telecommunications Technology Group - Viettel	230,000,000
TNG Investment and Trading JSC	228,280,000
Posco Vietnam Co., Ltd	227,500,000
Faculties, Alumni, and the Youth Union of SEEE	225,000,000
Airpay JSC	205,000,000
BKAV JSC	200,000,000
Sumitomo Group	200,000,000
Acecook JSC	184,000,000
Lotte Scholarship Fund, Korea	182,600,000
Faculties, Alumni, and partners of School of Foreign languages	152,930,000
ADG National Technology Development And Investment JSC	150,000,000
VNSTEEL	150,000,000
Lawrence S.Ting Community Support Fund	126,000,000
Dinh Thien Ly Community Support Fund	126,000,000
Duong Nhat Investment Construction and Environmental Technology Co., Ltd	105,000,000
WorldQuant Investment Software Vietnam LLC	105,000,000
Mr. Le Minh Tuan and Alumni of K34, School of Biotechnology and Food Technology	101,000,000
Nhat Minh Co.,Ltd	100,000,000
VNPT Technology JSC	100,000,000
Weldcom JSC	100,000,000
Techcombank	100,000,000
Hoa Phat Group	100,000,000
Luu Gia Group	100,000,000
Co-well Asia	100,000,000
Kumho Asiana-Vietnam Scholarship and Cultural Foundation	96,750,000
VAS Nghi Son JSC Scholarship Fund	84,000,000
Kurita Water and Environment Foundation (KWEF)	81,000,000
Minh Phu Steel JSC	80,000,000
FPT Software JSC	80,000,000
Graduate School of Global Environmental Studies (GSGES), Kyoto University	70,000,000
Daizo Tec Co.,Ltd	69,435,000
Toyota Vietnam	54,000,000
PetroVietnam Technical Services Corporation (PTSC)	50,000,000
SJ Tech Vietnam Co.,Ltd	50,000,000
Heligate Software	50,000,000
Information and Communications Technology Company of Vietnam Electricity	50,000,000
Avepoint Vietnam Co.,Ltd	50,000,000
SAPO	50,000,000

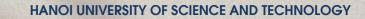
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DAC Vietnam Co.,Ltd	50,000,000
Tri Nam Group JSC	50,000,000
Gameloft Hanoi	50,000,000
VCCORP JSC	50,000,000
Misa JSC	50,000,000
Linagora Vietnam	50,000,000
Sun Asterisk	50,000,000
Center for Analysis and Environment (CAE)	45,000,000
Merro Scholarship Fund, Japan	40,000,000
Magicwave JSC	30,000,000
Northern Electrical Testing Company	30,000,000
Thu Do Investment and Traiding JSC	30,000,000
Tibco Orchestra Networks Vietnam Co.,Ltd	30,000,000
Vnext Software JSC	30,000,000
Tribal Media House Technology Lab Co.,Ltd	30,000,000
Luvina Software JSC	30,000,000
Cystack Vietnam JSC	30,000,000
Social network technology JSC	30,000,000
Openway Vietnam Co.,Ltd	30,000,000
Vinausteel	30,000,000
Yakult Co.,Ltd	30,000,000
Vietnam Petrol Chemical Trading and Invesment JSC (VNPETRO)	24,000,000
Brother Industries Vietnam Co.,Ltd	20,000,000
Coninco Company	20,000,000
TECOTEC Group JSC	20,000,000
Electricity grid project management and technical services JSC	20,000,000
Vietnam Energy Technology and Trading JSC	20,000,000
Thai Binh Science and Technology Materials Co., Ltd	20,000,000
Magenest JSC	20,000,000
Faculties at AIST	20,000,000
Ms. Dinh Hoai Giang - Alumni, K24, School of Engineering Physics	20,000,000
Ms. Hoang Ha - Alumni, K38, School of Biotechnology and Food Technology	20,000,000
Alumni of Petrochemical program at Petrolimex	15,000,000
Alumni of School of Foreign languages	14,000,000
Zeon Group	11,075,000
HTC International Telecommunications JSC	10,000,000
Vietnam Metrology Institute	10,000,000
Professor Nguyen Huu Lam, faculty at School of Engineering Physics	10,000,000
Dr. Tran Kim Tuan and other members at Nuclear Engineering Subject group	10,000,000
Grooo International JSC	10,000,000
Mr. Pham Ngoc Tu, Mr. Nguyen Kim Trung, Mr. Ngo Kien Cuong - Alumni of Food Machinery program	10,000,000
Major General - Dr. Nguyen Van Dung - Former Deputy Director of General Department of Logistics	10,000,000

## IV. FACILITIES, PRODUCTS AND SERVICES SPONSORSHIP

Sponsors	Facilities, products and services
Nagaoka Technology University, Japan	Research facilities at Rubber Center worth 200.000 USD
PetroVietNam Gas	Welding technology laboratory, worth 2.6 billion VND Business simulation, worth 2.6 billion VND
SMC Corporation Co.,Ltd	Automation laboratory, worth 2.1 billion VND
Ford Vietnam	Ford Ecosport 2016
Petrovietnam Fertilizer And Chemicals Corporation - JSC (PVFCCo)	Facilities for laboratories woth 1 billion VND
Vietnam Petro Chemical Trading and Investment JSC	Facilities worth 501 million VND
Vietnam National Textile & Garment Group (Vinatex)	Uniforms worth 330 miilion VND
Nam An Machanism and Environment JSC	Model of boiler to produce and use steam, worth at 300 million VND
Samsung Vina Electronics Co.,Ltd	VRV Aircondition system, woth 246 million VND
The World Bank	Teaching tools for Refrigeration and Air-Conditioning Engineering, worth 226 million VND
Daikin Air Conditioning Vietnam JSC	09 household airconditioner (12.000 BTU/h), worth 153 million VND
Quang Minh Equipment JSC	Hydraulic servo experimenting system
Alumni of Petrochemical program at Petrolimex	Equipment for simulation laboratoryof Petrochemical Refinery including 5 computers, 1 22-inch screen worth 30 million VND
ASIC Consulting and technologies services JSC	02 portable multimeter
Nestle Vietnam Co.,Ltd	Milo milk to support students in the Covid-19 pandemic
Atesco Industrial Catering JSC	Rice and food to support students in the Covid-19 pandemic

160+ organizations and individuals sponsor +90 **billion VND** 



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HUST

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