



VIETNAM ACADEMY OF SCIENCE AND TECHNOLOGY
UNIVERSITY OF SCIENCE AND TECHNOLOGY OF HANOI



UNIVERSITY OF SCIENCE AND TECHNOLOGY OF HANOI

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INTERNATIONAL STANDARD

PUBLIC UNIVERSITY

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DR. VU DUC DAM

Deputy Prime Minister of the Socialist Republic of Vietnam

"The value of USTH is the symbol of international cooperation and integration. With the special support of the governments, organizations and universities of the two countries, USTH has a good condition to achieve its international standard and expand the cooperation network. USTH is one of the typical projects for the collaboration between Vietnam and France."



PROF. ACAD. CHAU VAN MINH

President of Vietnam Academy of Science and Technology

"The Vietnam Academy of Science and Technology will continue to support USTH in all aspects from facilities to human resources, in order to develop USTH to a leading research university in Vietnam as well as in the region, reaching the ultimate aim of Vietnamese government."



Mr. Nicolas WARNERY

French Ambassador in Vietnam

"USTH is the pinnacle of the diamond that represents the higher education cooperation between Vietnam and France. This is also one of the most ambitious projects of the French Government in higher education abroad."



ESTABLISHMENT AND DEVELOPMENT



MISSION

The USTH's mission is to train quality human resources in the field of science and technology, in order to develop research and promote technology transfer. Using its close partnerships with France, it must also anticipate the future in terms of technological change in Asia and become a university recognized in South-East Asia for its skills in Industry 4.0.

VISION

- USTH is a future world-class university, attracting talented international students with advanced training programs, meeting the needs of social development, closely combining with scientific innovation and research activities.
- All USTH graduate students are expected to become leaders in their field of excellence, fully committed to supporting their country and society while having a strong scientific background and an open mind.

CORE VALUES

ETHICS	INNOVATION	DIVERSITY
LEADERSHIP	EXCELLENCE	OPEN-MINDEDNESS
PROBITY	PROFESSIONALISM	RESPECT



FACILITIES

Currently, the campus of the University is located at A21 building within VAST's campus with a total area of 8,100m². The university currently has 35 classrooms of total 2,550m², 06 international joint laboratories of 1,425m², 20 laboratories of 1,120m² and a library of 200m² with thousands of books and journals. Moreover, the University also uses modern research laboratories of specialized institutes under VAST for teaching and research.



FUTURE CAMPUS IN HOA LAC

USTH's campus in the future will be located in Hoa Lac Hi-Tech Park, including functional areas designed in accordance with international standards (classroom systems, laboratories, gymnasium, library, dormitory, etc). It is expected to be one of the most prestigious center for training, research and technology transfer in Vietnam in the future. The project was built with ADB loan and will be completed by the end of 2023.





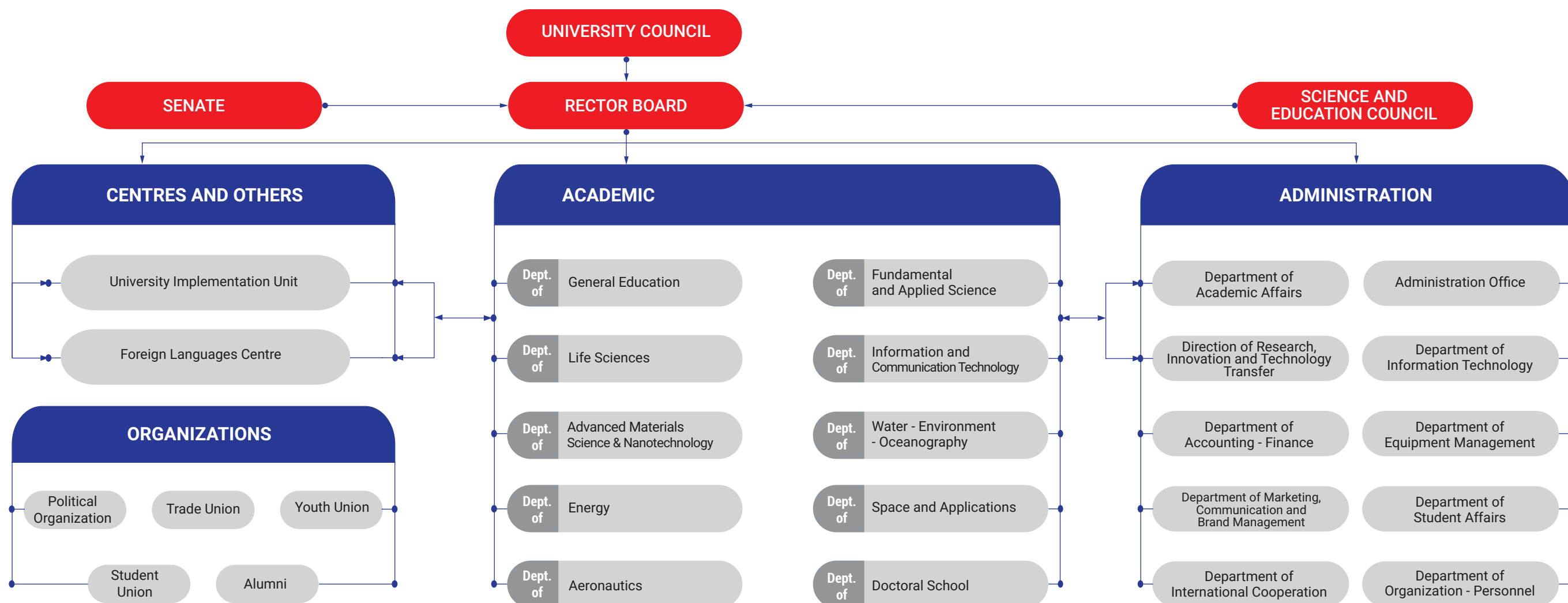
ORGANIZATIONAL STRUCTURE

A remarkable feature of the University's organizational structure and governance is the close and harmonious coordination between Vietnam and France. The French side assigned experts who are experienced professors in management, teaching and research to hold the position of Principal Rector and key leadership positions in strategic specialized departments, cooperating with dedicated Vietnamese leaders to ensure and continuously improve the quality of teaching and research of the University.



USTH is one of the first universities in Vietnam to have a University Council. The University Council consists of 20 members involving 10 French and 10 Vietnamese, who are representatives of VAST, Ministry of Education and Training, the French Ministry of Higher Education,

Research and Innovation, the French Ministry of Europe and Foreign Affairs, USTH Consortium and universities, research institutes, businesses strategic partners of the University in training and research.





TRAINING

With the mission of training high quality human resources, 16 majors of USTH were established based on the demand of the country's scientific and technology development and the strengths in science and technology of France.

USTH is one of the few universities in Vietnam to follow the Bologna process (LMD 3/5/8) - a model widely applied in European universities. Accordingly, the training duration for bachelor, master and PhD is 3 years, 2 years and 3 years respectively.

USTH trains students comprehensively through researching extensively, and equipping students with autonomy, critical thinking and soft skills to meet requirements of the global job market.

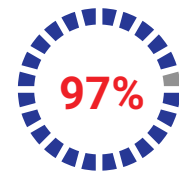
KEY NUMBERS



**MORE THAN
3500** STUDENTS ARE NOW OR
HAVE BEEN TRAINED



STUDENTS HAVE
OVERSEAS
INTERSHIP



GRADUATES GO TO
WORK IMMEDIATELY
OR GO ON TO
HIGHER LEVELS



SCIENCE LECTURERS
HAVE DOCTORATE
OR HIGHER
DEGREES



INTERNATIONAL STANDARD PROGRAM



The bachelor programs were accredited by the High Council for Evaluation of Research and Higher Education (HCERES), which is the guarantee of quality for the university's training programs and creates a competitive advantage for the students in the international market.

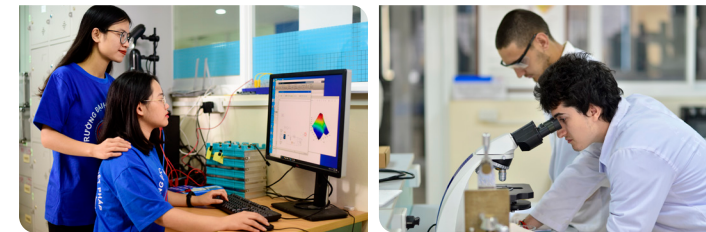
HIGH-LEVEL LECTURERS

USTH focuses on building a team of talented, passionate and enthusiastic young lecturers to create a new training and research environment. In addition, many excellent scientists of VAST have been participating in teaching and learning activities at USTH.

Every year USTH welcomes more than 200 foreign lecturers and researchers from France, Japan, Korea, Thailand... to teach, conduct research and organize scientific seminars.



THEORY IN ROW WITH PRACTICE



Students learn theoretical and practical knowledge through practice sessions in laboratories, especially internships at businesses, organizations and research institutes in Vietnam, France and other countries.

Students are encouraged to participate in research projects with USTH's scientists to form and practise critical, creative thinking, improve practice skills and soon find their own research orientation. Therefore, many students have published in prestigious scientific journals with high impact factor (IF).

OPPORTUNITY FOR DEVELOPMENT

Students are supported to find internship opportunities from 3 to 6 months in Vietnam and overseas. In fact, USTH students have become interns at more than 200 universities, research institutes, laboratories, and businesses in 20 countries with advanced science and technology such as France, Germany, and Switzerland, Italy, USA, Japan, Korea, Thailand...

Besides, students also have exchange opportunities with many prestigious universities in Europe under the Erasmus+ project or a bilateral cooperation agreement signed by USTH.



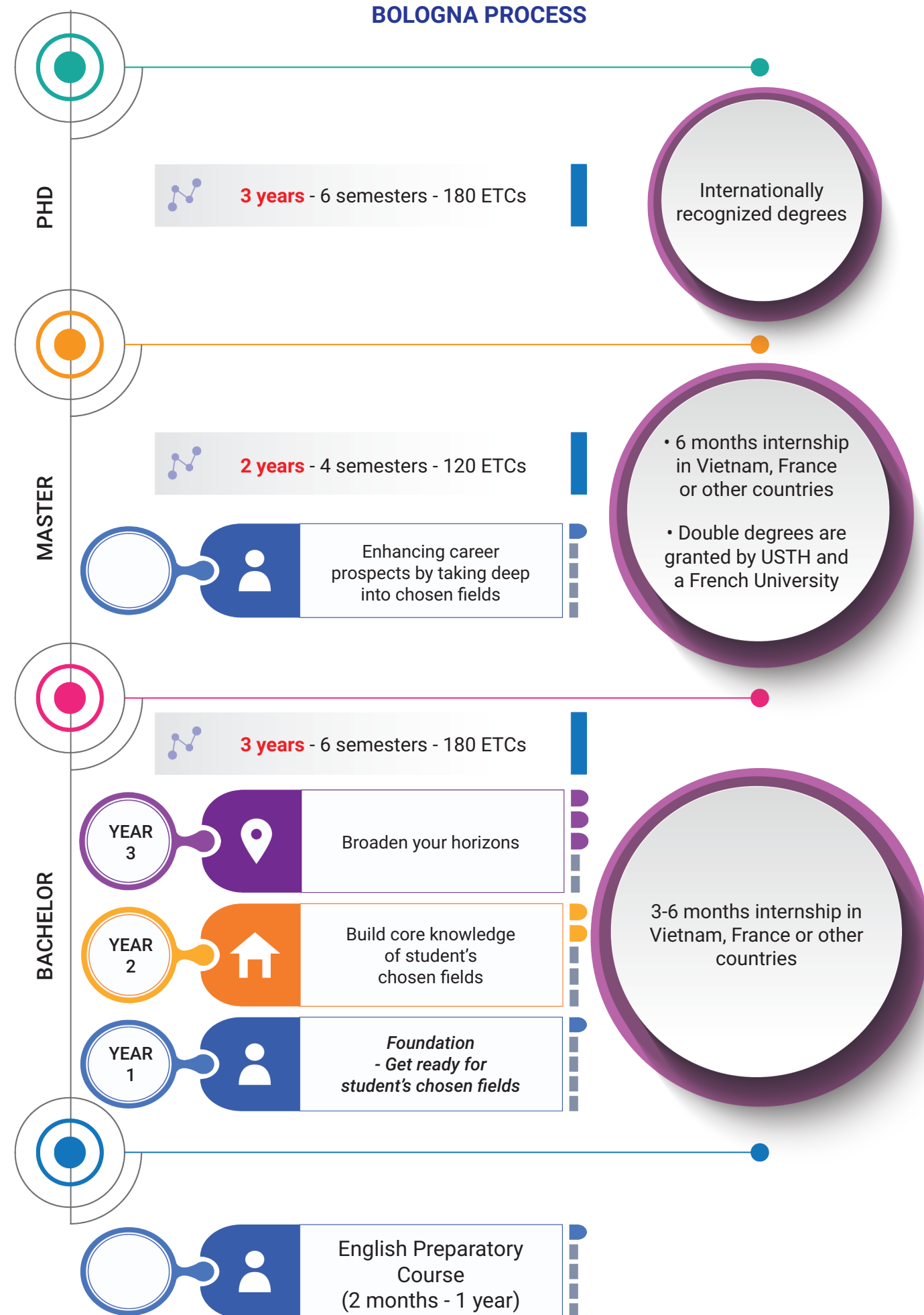


Mapping the expansion of Bologna Process membership in Europe



From 1999
 From 2001
 From 2003
 From 2005
 From 5/2007
 From 2010
 Still Eligible

BOLOGNA PROCESS





RESEARCH

With the strong support of VAST, the Embassy of France in Vietnam and the Consortium of more than 40 French universities and research institutes, as well as the investment from the Vietnamese Government, USTH has built 4 international joint laboratories and many talented young research groups, bringing the participation of many excellent and experienced scientists at universities, research organizations of Vietnam, France and many other countries.

The current major research areas of the University include Artificial Intelligence, data science and machine learning; applied biotechnology in smart agriculture; health care, advanced materials; recycled energy; explore; environment; combating climate change and sustainable development...

4 INTERNATIONAL JOINT LABORATORIES

- Information, Communication and Technology Laboratory - **ICTLab**
- CleanEnergy and Sustainable Development Lab - **Clean-ED**
- Drug Resistance in South East Asia - **LMI DRISA**
- Project - Laboratoire Mixte International LOTUS – “Land Ocean aTmosphere regional coUpled System” - **LMI LOTUS**

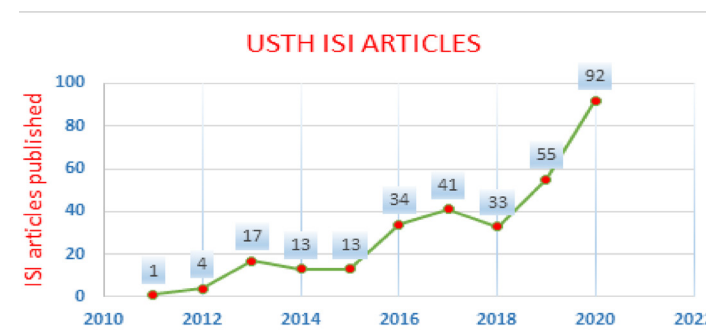
KEY RESEARCH GROUPS

- **REMOSAT** - Research group for Remote sEnsing and MOdeling of Surface and ATmosphere
- **Lab Cells** - Lab Cells
- **FST** – Food Science & Technology
- **MICS** - Microbial Sciences
- **NaPro** - Natural Products
- **CECS** - Chemistry for Energy Conversion & Storage



OUTSTANDING ACHIEVEMENTS

- 344 publications in prestigious international magazines.
- 2017-2019: Top 10 NATURE INDEX of Vietnamese Universities and Research Institutes.
- On average: 1.5 article in the list of SCI & SCI-E / lecturer / year.
- Assoc. Prof. Tran Dinh Phong, was honored to receive the 2016 Golden Globe Youth Science and Technology Award and the Ta Quang Buu Award given by the Ministry of Science and Technology of Vietnam in May 2018.



Home	News	Current Index	Annual tables	Supplements	Client services
Home	2019 tables	Institutions - academic			
Table criteria	Region/country	Sector	Subject/journals	Generate	
	Vietnam	Academic	All		
The 2019 tables are based on Nature Index data from 1 January 2018 to 31 December 2018.					
2018	Institution	FC 2017	FC 2018	AC 2018	Change in Adjusted FC 2017-2018
1	Hanoi University of Science (VNU), Vietnam	0.96	2.53	24	154.0% ↑
2	Hanoi University of Science and Technology (HUST), Vietnam	0.21	2	3	836.9% ↑
3	Vietnam National University - Ho Chi Minh City (VNU-HCM), Vietnam	0.69	1.4	6	95.6% ↑
4	Ton Duc Thang University (TDTU), Vietnam	1.25	0.89	5	-31.4% ↓
5	Duy Tan University (DTU), Vietnam	0.33	0.66	7	89.4% ↑
6	University of Science and Technology of Hanoi (USTH), Vietnam	0.3	0.46	3	44.0% ↑
7	Ho Chi Minh City University of Education (HCMUE), Vietnam	0.38	0.29	2	-25.3% ↓
8	Hanoi Metropolitan University (HMAU), Vietnam	-	0.25	1	N/A
9	Hanoi Architectural University (HAU), Vietnam	-	0.25	1	N/A
10	University of Medicine and Pharmacy at Ho Chi Minh City, Vietnam	0.24	0.24	2	-2.0% ↓
11	Nha Trang University (NTU), Vietnam	0.11	0.17	1	44.1% ↑
12	Can Tho University (CTU), Vietnam	0.2	0.17	1	-19.3% ↓



Assoc. Prof. Tran Dinh Phong receive the 2016 Golden Globe Youth Science and Technology Award



Assoc. Prof. Tran Dinh Phong receive the 2018 Ta Quang Buu Award

COOPERATION NETWORK

USTH has established strong cooperation in training, research with 40 French universities and research institutes from USTH Consortium. The cooperation is shown in exchanging lecturers, researchers and students;

co-accrediting Master's program as well as building and implementing joint research projects.

In addition, in order to expand the cooperation in training and scientific research, USTH has signed 130 memorandums of understanding and cooperation agreements with universities, research institutes, organizations and businesses from Vietnam and multiple countries in the world such as France, Italia, Poland, Lithuania, Ireland, Japan, South Korea,...

USTH has also effectively cooperated to establish and implement Erasmus+ International Academic Exchange Projects of the European Union (Erasmus+ International Credit Mobility). Particularly in 2019, 05 projects which USTH participated in received funding with a total value of 83,000 Euro. These projects provide opportunities for academic exchange and research for the students and researchers of the USTH in many countries in Europe.

USTH is a member of the Association of

Southeast Asian Institutions of Higher Learning (ASAIHL), Asian Micro-satellite Consortium (AMC). As a subordinate unit of VAST, USTH has taken advantage of VAST's international cooperation network, especially its membership role in associations such as Agence Universitaire de la Francophonie (AUF), The Associations of Academies of Sciences in Asia (AASA), Pacific Science Association (PSA), The International Union of Geodesy and Geophysics (IUGG), Intergovernmental Oceanographic Commission.



STUDENT LIFE

USTH has strived to provide a favorable learning environment, encourage critical thinking and nurture students' creative passion.

FabLab USTH is an open creative space for students who are passionate about engineering to realize their ideas and implement community projects. Here, many of the student's patent products have been born such as hydroponic projects combining mechanical - electronic and biological systems. Fablab USTH also regularly organizes diverse activities such as the 24-hour Hackathon Creative Contest or 3D design class to

interact and spread the passion for science and technology to the community.

In order to support and encourage students in their learning process, USTH has awarded scholarships for students with excellent academic achievements, internship scholarships in France, financial aids for disadvantaged students...

In addition, USTH students also receive scholarships from external organizations and units such as Odon Vallet Scholarship Fund, Agribank (Vietnam Bank for Agriculture and Rural Development), Vietcombank (Joint Stock Commercial Bank for Foreign Trade of Vietnam), etc.



LIBRARY

USTH meets students' learning demands through organizing and exploiting a library on the 1st floor of the A11 building which belongs to VAST's library and providing diverse scientific and technical materials from paper and electronic sources (E-library). The library currently has over 600 titles, 1,000 scientific journals, and 1,400 theses and dissertations for USTH's majors.

DORMITORY

USTH works closely with VAST Accommodation and My Dinh Dormitory – Vietnam National University, Hanoi to provide accommodation for students. Good security, comfortable living conditions and reasonable cost are the factors that always attract USTH students to register for the dorm.

CLUBS

At USTH, students not only study and research but also participate in many activities and events organized by the Communist Youth Union, the Student Union and the University's clubs.

With the largest number of members of Communist Youth Union in VAST, USTH has organized many volunteer activities, camping, participated in Communist Youth Union training classes, creating a foundation for promoting and developing student activities in the future.

Through participating in club activities at USTH, students have the opportunity to develop management skill, teamwork skill, enhance their creativity, contribute their efforts to meaningful activities, and create a premise to help students increase future career opportunities.



ALUMNI

Up to 2021, USTH has had 698 bachelor graduates, 447 master graduates and 4 doctoral graduate students. According to recent statistics, 48% of students continue to study in master's and doctoral programs, 49% of students have worked at enterprises, state agencies and non-governmental organizations.

USTH's graduates are highly appreciated for their professional expertise, foreign language proficiency as well as the ability of quick adaptation to international training and working environment.

Currently, USTH's alumni have been working all over the world at many top-ranked universities, research institutes in the field of science and technology such as Cambridge University, the UK; Polytechnic University of Paris; AMES Research Center of NASA, USA; Institute for Water Education, Netherlands; Institute of Research and Development – IRD, France; Electricity Group EDF, France; Bio-pharmaceutical Company VBI Vaccines Inc., Canada;... Especially, many excellent alumni hold management and key positions at agencies and enterprises in Vietnam.

ALUMNI TESTIMONIALS

Pham Ha My

Bachelor Gen 2 (2011-2014), Dept. of Pharmacological, Medical and Agronomical Biotechnology, Master at Cambridge University, UK

"It has been 8 years since my first day as a USTH's student. At that time, choosing USTH was a risky decision for me because there had not been any generation of USTH's graduates. But at present, I'm confident to affirm that it was an absolutely right decision. Knowledge, experience and skills acquired at USTH have helped me to have a good position at Clinical Research Unit of Vietnam Oxford University, as well as receive a full scholarship at Cambridge University, UK"

Truong Si Thi Vu

Bachelor Gen 8 (2017-2020), Department of ICT
Awarded by 'Vingroup Science & Technology Scholarship Program for overseas Study Master's and Doctoral Degrees'

"During the scholarship application process, I realized that the projects I have been involved in at USTH have helped me to have a stronger profile. Moreover, the questions of the committee are not difficult for me because that is part of the knowledge I have learned at USTH."

Truong Thanh Loan

Bachelor Gen 4 (2013-2016), Department of Advanced Materials Science and Nanotechnology, Master at the University of Paris XI

"Studying at USTH helped me a lot when I took internship and studied abroad at the University of Paris XI. Since I got used to listening to lectures in English, I knew how to get the main points and the requirements of the lecturers. Studying at USTH trained me with some other necessary skills such as how to select useful information from documents, how to write reports following international standards."

Truong Tuan Ngoc

Bachelor Gen 5 (2014-2017), Department of Space and Applications
The first Vietnamese student taking an internship at NASA
Full PhD scholarship at the University of Cornell, USA

"I chose USTH since this is a university with diverse training programs and research fields, which brings many chances to meet well-known scientists all over the world. USTH helped me realize my dream to take the internship at NASA Ames Research Center"

Nguyen Quyen Anh

Bachelor Gen 7 (2016-2019), Department of Energy
Master student at Polytechnic University of Paris

"I would like to send special thanks to USTH, which helped me to be able to find the prestigious and reputable scholarships so that I can continue pursuing the study at a leading engineering university in France. Besides, thanks to the French language courses at USTH and my effort, I can easily communicate with the French natives. Now I am ready to register for the next academic year in a program trained entirely in French."

To Duy Thai

Master Gen 4, Department of Water – Environment – Oceanography
Excellence Scholarship from the Government of France
PhD Student at the University of Paul Sabatier, France

"USTH guided me to continue my study in PhD's program in France with lots of passion and ambition. It is USTH that changed my life and I feel lucky that I studied here."



DEPARTMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY

The Department of Information and Communication Technology (ICT), established in 2010, is one of the key departments of USTH with the largest number of students. The Department aims to train high-quality human resources to meet the demand of the rapidly-growing information technology labor market.

TRAINING

Department of ICT offers the following programs:

- Bachelor degree: Information and Communication Technology; Cyber security; Data Science.
- Master degree: Information and Communication Technology.
- Doctorate: Information and Communication Technology.

The training programs are highly applicable, associated with practical needs, focusing on the following specialties: Software technology, computer science, cyber security, and network security with the goal to equip students with basic to advanced knowledge of system administration, information systems, software development or artificial intelligence - the key areas of Industry 4.0 in Vietnam.

The bachelor's program has been accredited by HCERES. The Master's degree is co-accredited by USTH and one of the 5 French universities including University of La Rochelle, University of Montpellier, University of Poitiers, University of Rennes I and National Polytechnic Institute of Toulouse (INP Toulouse).

After graduating, ICT students are equipped with advanced knowledge and skills in information technology as well as high competence in English, which creates a beneficial condition for them in the labor market or pursue higher education in Vietnam, France or other countries. Many ICT alumni have worked as managers or founders of their own ICT startups.

RESEARCH

ICTLab is a joint international ICT research laboratory between USTH and Vietnamese/French partners. It involves researchers coming from USTH, IOIT (Institute of Information Technology, Hanoi), IRD (Institut de Recherche pour le Développement) and La Rochelle University, France. ICTLab is supported by USTH, the French Embassy in Vietnam, 13 French institutes and universities (USTH Consortium), and the ADB (Asian Development Bank).

Research topics:

- Machine Learning, Deep Learning and Data Mining
- Image and Speech Processing
- Modeling and Simulation
- Sensor Networks and Embedded Systems
- High Performance Computing
- Health Informatics and Bioinformatics



PARTNERS



DEPARTMENT OF LIFE SCIENCES

The Department of Life Sciences (LS), formerly the Department of Pharmacological, Medical and Agronomical Biotechnology, is one of the first 6 academic departments established in 2009.

TRAINING

Department of Life Sciences offers the following programs:

- Bachelor degree: Pharmacological, Medical and Agronomical Biotechnology; Food Science and Technology; Medical Science and Technology.
- Master degree: Pharmacological, Medical and Agronomical Biotechnology.
- Doctorate: Pharmacological, Medical and Agronomical Biotechnology.

The program in Pharmacological, Medical and Agronomical Biotechnology focuses on the direction of applying biotechnology in agriculture, medicine and pharmaceuticals; the program in medical science and technology focuses in 2 directions: biomedical sciences and biomedical engineering; the program in Food Science and Technology focuses on 3 directions: Food processing, food safety and innovation in food technology.

The Master's program in biotechnology offers three majors: Biomedical, Plant Biotechnology and Drug Development. The Master's degree is co-accredited by USTH and one of the 4 French universities: Aix-Marseille University, Claude Bernard University Lyon 1, University of Montpellier and University of Nice Sophia Antipolis.

LS Department graduates can hold important positions in businesses, institutes and research organizations in the field of biotechnology, health care, food science and technology... in Vietnam and abroad, or continue studying for master and doctorate degrees.

RESEARCH

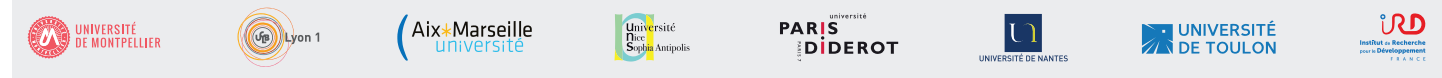
LS Department develops research from basic to advanced, applying and transferring technology based on three main research directions: Biomedical, Research and Development of Medicines and Plant Biotechnology.

LMI DRISA - International Joint Lab on "Drug Resistance in South Asia" was set up in 2016 with the participation of scientists from USTH, National Institute of Hygiene and Epidemiology (NIHE), Oxford University Clinical Research Unit (OUCRU), Montpellier University, Pasteur Cambodia, Lao's Center for Tropical Diseases, Laboratory for emerging diseases (France).

LMI DRISA research areas focus on the mechanisms of drug resistance emergence and its transmission at different spatial and temporal scales.



PARTNERS





DEPARTMENT OF ADVANCED MATERIALS SCIENCE AND NANOTECHNOLOGY

Department of Advanced Materials Science and Nanotechnology (AMSN) was established in 2009 with the goal of training high quality human resources, contributing to the development of materials science in Vietnam.

TRAINING

- Department of Advanced Materials Science and Nanotechnology offers the following programs:
- Bachelor degree: Engineering Physics and Electronics; Advanced Material Science and Nanotechnology.
 - Master degree: Advanced Material Science and Nanotechnology.
 - Doctorate: Advanced Material Science and Nanotechnology.

The bachelor program in Engineering Physics and Electronics aims to provide a high quality human resource with a strong technical and physics background to work in the electronics, solar cell manufacturing industries, electric cars and high-tech industries such as big data processing, smart devices in Vietnam.

The bachelor program in Advanced Materials Science and Nanotechnology equip students with basic to specialized knowledge in research and development of advanced materials for application in the field of life sciences, environmental treatment and management and renewable energy development.

The Master's Degree in Advanced Materials Science and Nanotechnology is co-granted by USTH and one of the 5 French universities: Aix-Marseille University, Le Mans University, University of Paris, University of Paris-Saclay and University of La Rochelle.

RESEARCH

- AMSN Department focuses on three main research directions:*
- Advanced materials applied in electronics and energy;
 - Advanced materials for applications in the environment, agriculture and medicine;
 - Nano photonic materials for sensing devices.



PARTNERS



DEPARTMENT OF SPACE AND APPLICATIONS

Department of Space and Applications (SA) was established in 2012 with the goal of training high-quality human resources to serve the national key strategy on space science and technology.

TRAINING

- SA Department offers 3 training levels: Bachelor, master and doctorate with 3 directions: Earth Observation (Remote Sensing), Astrophysics and Satellite Technology.
- With the direction of Observing the Earth, the training specializes in modeling, processing techniques and satellite image analysis and applications in atmospheric monitoring, climate change and monitoring of surface resources Earth face.

With the direction of Astrophysics, the training provides the basic science direction specializing in theories, simulations and experiments, using physics, mathematics, chemistry, biology,... to study the universe and its phenomena. natural statues outside the Earth.

The direction of training in Satellite technology focuses on technology to develop satellites, probes, space craft, and robots for remote discovery and surveillance, especially for objects in places where there is no human presence or harsh environment.

The master's degree is co-accredited by USTH and one of the 4 French universities and research institutes including Paris Observatory, University of Montpellier, University of Paris and University of Paris Est-Créteil.

60% of bachelor's students and 100% of master's students take internships abroad with salaries or full scholarships. Up to now, the large number of SA alumni have received scholarships to pursue higher education abroad in France, USA, Germany, Australia...

RESEARCH

LMI LOTUS - International Joint Lab on "Study center for the Land Ocean aTmosphere coupled System" was set up in 2018 and participated by Vietnamese and French researchers to carry out research on the environment of land – ocean – atmosphere; the movement of water and materials in continuous environment of river - estuaries - oceans, which are in the area of Vietnam.

REMOSAT - Research group for "Remote sensing and Modeling of Surface and Atmosphere" targeting international standards, REMOSAT, was set up in 2016, is expected to have significant contributions to the development of research and applications related to remote sensing and modeling in Vietnam, as well as to the teaching and training programs of USTH. The lab is being developed, focusing on the 3 following axes: Earth observations and modeling, Satellite technologies and Astrophysics.



PARTNERS





DEPARTMENT OF AERONAUTICS

The Department of Aeronautics was established in 2019 with the strong support from Airbus, USTH Consortium and comprehensive cooperation with Vietnam Airlines, Vietnam Airlines Engineering Company Limited (VAECO), France Aerospace Institute (IAS), French National Civil Aviation College (ENAC) to train high quality human resources in the field of engineering maintenance, aircraft maintenance and air transport operation management.

TRAINING

According to the cooperation agreement, Airbus commits to support USTH with 2.45 million USD to develop training programs, build laboratories at international standard and provide scholarships for students of the master's program in international air transport operations management (IATOM).

Department of Aeronautics currently offers 01 bachelor's program in aeronautical engineering and cooperates with ENAC to train 1 master's program in IATOM.

The bachelor's program in Aeronautical Engineering is built according to the standards of French and European aviation training universities with support from IAS. The lecturers are experts in the field of maintenance engineering, aircraft engineering from France and other countries in the world. Students learn knowledge combined with practices in the modern laboratory at USTH, internship at Vietnam Airlines and VAECO.

The master's program in IATOM is built with the aim of training the management leaders in the field of aviation. The program accredited by ENAC is globally recognized and highly evaluated by aircraft manufacturers and international airlines firms. Students study 01 semester at USTH, 02 semesters at ENAC headquarters in Toulouse, France and 01 internship at leading airlines in Vietnam, France and many other countries in the world.

RESEARCH

Department of Aeronautics focuses on the three research directions:

- Digital engineering in aviation (data management, flight optimization, data transfer and compatibility of digital systems...);
- Maintenance (maintenance warning, process durability of material);
- Transceiver signal and air traffic.



PARTNERS



DEPARTMENT OF ENERGY

The Department of Energy, was established in 2009 with an academic aim of training high-quality human resources to meet the demand for strategy of developing the electricity and renewable energy industry in Vietnam.

TRAINING

Department of Energy offers the following programs:

- Bachelor degree: Mechatronics Engineering Technology; Electrical Engineering and Renewable Energy; Automotive Engineering;
- Doctorate: Energy.

The program in Mechatronics Engineering Technology is built to serve the practical needs of the labor market with 2 main orientations: Mechatronics and robotics; production and logistics systems. The program is taught by lecturers and experts from Vietnam and France with many practical activities such as summer training course of at least 6 weeks, graduate internships at research centers and enterprises in Vietnam and abroad.

The programs in Electrical Engineering and Renewable Energy provide basic to specialized knowledge in electrical engineering, wind energy, solar energy, energy management, smart grid, biological fuel technology.

RESEARCH

CleanED Lab - International Joint Lab on "Clean Energy and Sustainable Development" được was set up in 2014, as a joint project between Center for Research on Environment and Development (CIRED) under The French National Center for Scientific Research (CNRS), Agricultural Research Center for International Development (CIRAD, France) and USTH in Vietnam.

The laboratory develops research around critical aspects of Vietnam's sustainable development: develop renewable and sustainable energy sources, transformation and conservation of natural resources, biomass energy technology, materials in the field of energy; on that basis, to contribute to the development of renewable energy in Vietnam and other Southeast Asian countries...

CleanED focuses on four research directions:

- Policy and planning for energy system
- Biomass energy technologies
- Materials in the field of energy
- Energy systems optimization



PARTNERS





DEPARTMENT OF WATER - ENVIRONMENT - OCEANOGRAPHY

Department of Water - Environment - Oceanography (WEO), established in 2009, was the main developing focus of USTH with the aim of training high-quality engineers as well as science and technology researchers in the field of environment.

TRAINING

WEO Department offers 3 levels: Bachelor, master and doctorate. Among them, the bachelor program provides students with core knowledge in environmental science (ecology, environmental chemistry, soil science, oceanography and hydrology); methods of environmental assessment and environmental treatment.

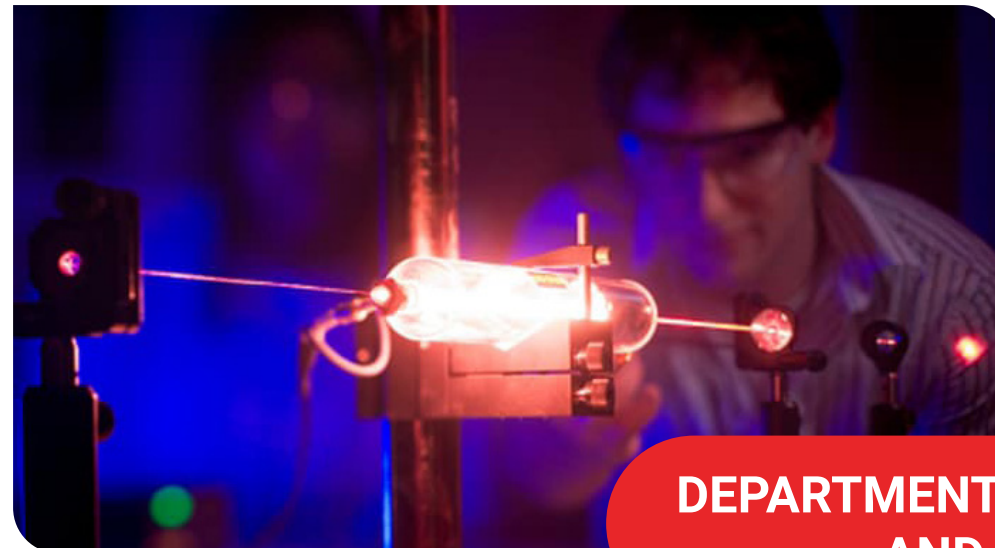
The master's program trains in 3 main directions: Water supply and wastewater treatment; Natural water and environmental quality; Hydrology and oceanography. Especially, the master's degree of WEO is co-accredited by USTH and 10 universities and research institutes in France, which are University of La Rochelle, Montpellier University, National School for Water and Environmental Engineering of Strasbourg, National Polytechnic Institute of Toulouse, Limoges University, Coastal University, Poitiers University, Toulon University, Paul Sabatier University, National Institute for Applied Sciences (INSA Toulouse).

Every year, 60% of students of WEO Department take internships abroad. Especially, with the advantage of good command of foreign languages, good expertise and being proactive, after graduation, students of WEO Department are highly appreciated and work at state agencies, enterprises and consulting companies in the field of water treatment, water supply and drainage, natural disaster prevention and environmental disaster management, and use of water and related resources.

PARTNERS

RESEARCH

LMI LOTUS - International Joint Lab on "Study center for the Land Ocean aTmosphere coupled System" was set up in 2018 and participated by Vietnamese and French researchers to carry out research on the environment of land - ocean - atmosphere; the movement of water and materials in continuous environment of river - estuaries - oceans, which are in the area of Vietnam.



DEPARTMENT OF FUNDAMENTAL AND APPLIED SCIENCES

Department of Fundamental and Applied Science (FAS) was established in 2018 with the training programs built according to international standards, to provide students extensive core knowledge to be able to adapt to professional work in the future.

TRAINING

FAS offers 2 bachelor programs:

- Chemistry.
- Applied Mathematics.

The program of Chemistry is built according to the standards of the American Chemical Society, and is selected and revised from bachelor programs in Chemistry of world - renowned universities such as Pierre & Marie Curie University (France), Nanyang Technological University (Singapore), Hanyang University (Korea) with 2 main training directions: Applied chemistry in metabolism and energy storage; and Chemistry of natural compounds. Students will be provided with background knowledge of chemistry and chemical applications in the fields of energy, food, medicine, cosmetics, and healthcare.

The program of Applied mathematics is built by leading mathematicians of the Institute of Mathematics, focusing on training applied mathematics in data science.

RESEARCH

CECS - Research group for "Chemistry for Energy Conversion & Storage" was formed in 2015 with the task of conducting high-level research in the field of designing and fabricating catalysts and components for the processes of producing H₂ fuel, reducing CO₂, storing Li, Na, and Mg ions. Currently, the research group consists of 05 full-time USTH lecturers, 02 postdocs, 05 doctoral students, and many master's and bachelor's students.

The research projects of CECS have been funded by National Foundation for Science and Technology Development (NAFOSTED), Vietnam Academy of Science and Technology, Ministry of Science and Technology, US Navy Foundation, and Vin Innovation Fund (VINIF). Many research findings of CECS have been published in leading peer-reviewed journals of Chemistry and Materials Science such as Nature Materials, Chemical Communications, etc.



PARTNERS





DEPARTMENT OF GENERAL EDUCATION

The Department of General Education (GE), was established in 2010 with the aim of implementing the general education to provide students with core knowledge and essential skills before beginning specialized training programs.

GE Department currently undertakes general training programs including first-year training program, programs of management science and conditional modules (Philosophy, Defense Education - Security).

For freshman students of 4-year training system, they are provided with basic scientific knowledge and English in science.

For freshman students of 3-year training system, they are provided with basic science, management science and advanced English to help develop comprehensive skills and competencies.

With the foundation knowledge provided in the first year, students will confidently study any of University training majors in the following academic years.

In addition to the training program, GE Department is in charge of teams participating in the national student Olympics and has achieved high results for many consecutive years.



DOCTORAL SCHOOL

The doctoral program at USTH was built with the philosophy that the scientist is the essential part of the society. The PhD student will be able to do the research and create new values serving for the development of the society and the scientific community.

The doctoral program was developed by Vietnamese and French scientists based on the demand of society and prioritized research fields at USTH, which allows PhD students to study in an international environment and to prepare for their future careers. Upon graduation, the PhD students are awarded the doctoral degree which is recognized by international institutions.

The USTH Doctoral School offers doctoral training program in the following fields:

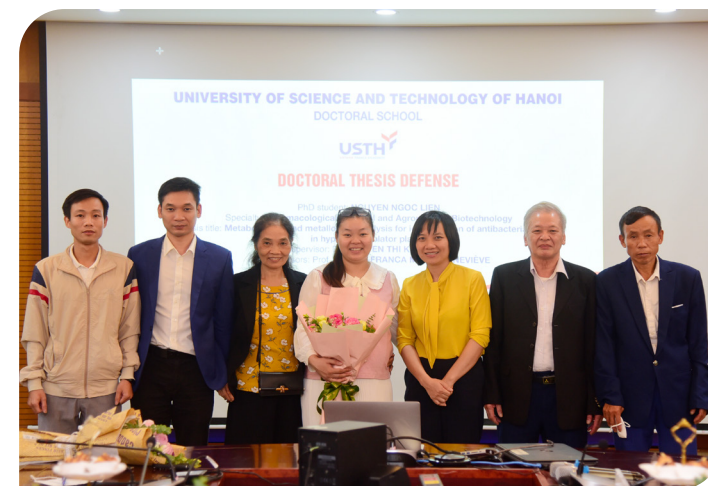
- Pharmacological, Medical and Agronomical Biotechnology
- Advanced Material Science and Nanotechnology
- Water - Environment - Oceanography
- Information Technology and Communication
- Energy
- Space and Applications

The PhD training program is conducted in the form of regular education which is 3 years for students holding a Master degree and 4 years for students holding a Bachelor degree.

SCHOLARSHIP AND FELLOWSHIP

The USTH Doctoral School offers various scholarships to PhD students who are enrolled at the university:

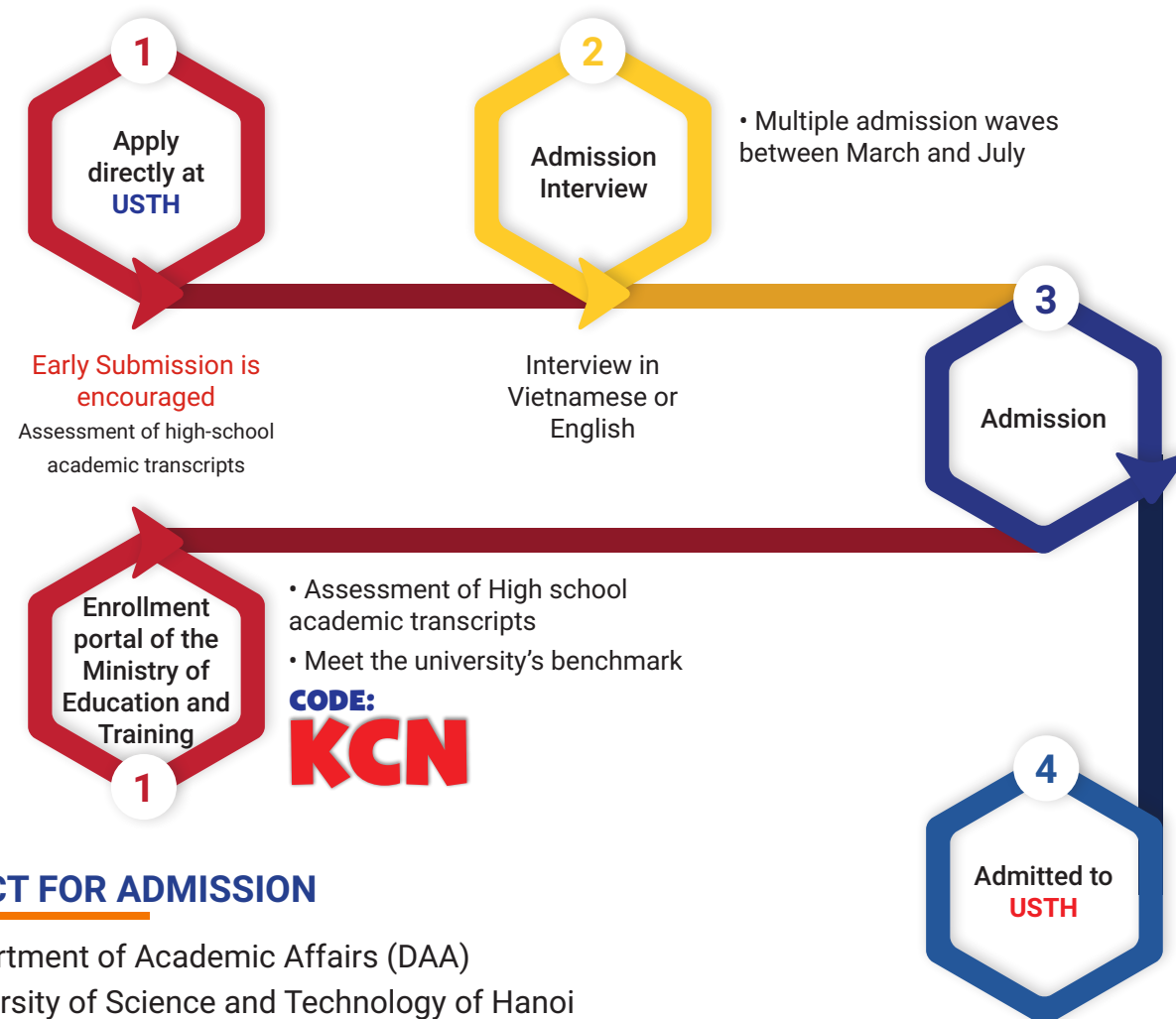
- Scholarship for Excellent Students for PhD students with outstanding academic achievements: DS-A1.
- Pathway to Success Scholarship for PhD students who graduated from USTH's Bachelor/Master programs.
- Capacity Building Scholarship for PhD students who are employees of USTH, VAST's institutes and centers, and USTH's partner institutions, etc.





ADMISSION

HOW TO APPLY?



CONTACT FOR ADMISSION

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- ✉ admission@usth.edu.vn
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