

King Mongkut's University of Technology North Bangkok Leader in University - Industry Cooperation



INVENTION TO INNOVATION

General Information Bulletin 2021-2022

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King Mongkut's University of Technology North Bangkok

The Philosophy

To encourage innovation in Science and Technology through the development of people.

Commitments

The development of human resources in science and technology through a balance of knowledge, morality, as well as the capacity to innovate so as to contribute to the economic, social and environmental development.

Identity

Graduates with Creativity and Workability.

Uniqueness

KMUTNB: University of Creative Invention to Innovation.

Vision

To guide KMUTNB towards professionalism regarding science and technology.

Mission

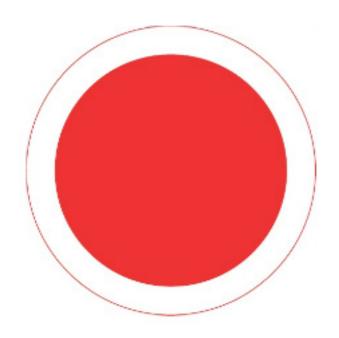
- To supply qualified graduates to the society.
- To encourage research and academic work.
- To support public academic services.
- To maintain national arts and culture.

KMUTNB Symbolism



KMUTNB's Emblem

The emblem of the Great Crown (Maha Mongkut), the royal seal of King Rama IV, was kindly granted to the University by His Majesty King Bhumibol Adulyadej.



KMUTNB's Color

Vermilion, a vivid reddish-orange color, was the color of Siam's King Rama IV, and thus it has been adopted as KMUTNB's color.



The Tree of KMUTNB

'Red Pradoo', a strong vascular plant in Thailand growing to about 80 feet high and yielding a bright yellow-red to dark-brick red color, is the symbolic tree of the University. The orange-vermilion flowers are annually in full bloom in February, commemorating the period of KMUTNB's establishment on the 19th of February.



KM stands for King Mongkut

- The vibrant orange color in "KM" signifies the vigorous implementation of knowledge management strategy.
- The number "4" indicates the reign of King Rama IV, the fourth monarch under the present Chakri dynasty. His Majesty is regarded as "Thailand's Father of Science and Technology."

UT is the abbreviation for "University of Technology"

- The color gray in "UT" represents the official university color connected to the specific disciplines of science, technology and innovation.
- The University is committed to the practices of human resource development to sustain academic excellence. A strong focus is placed on science and technology capabilities and advanced studies related to the disciplines.
- The education is arranged to foster students' academic progress and moral competencies.

NB stands for North Bangkok

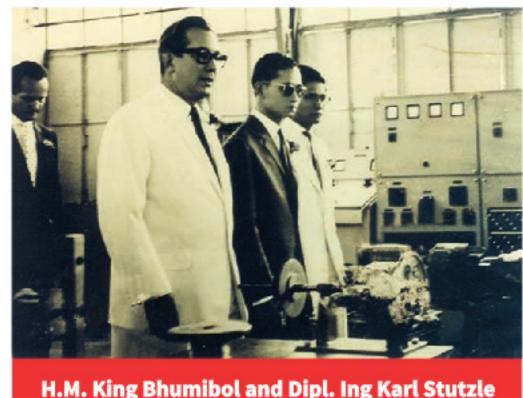
 The color green in "NB" is associated with the framework of sustainable development goals. The university has devoted its energy to corporate sustainability and environmentally conscious actions.

Invention to Innovation

 The phrase "Invention to Innovation" in black letters demonstrates the university's solid commitment to maintaining the environment that allows technology-based invention and innovation to thrive.

History





H.M. King Bhumibol and Dipl. Ing Karl Stutzle during a visit to KMITNB on 7 February 1962

- 1959 KMUTNB was established from the cooperation between Thai Government and the Federal Republic of Germany. It was known as the "North Bangkok Technical School" but generally called "Thai-German Technical School."
- 1964 The School was upgraded to "North Bangkok Technical College."
- 1971 Three technical colleges: North Bangkok Technical College, Thonburi Technical College, and Telecommunication College Nonthaburi were merged and given a new name "King Mongkut's Institute of Technology" which comprised three campuses, North Bangkok, Thonburi, and Ladkrabang.
- 1974 The establishment of the Faculty of Engineering, Faculty of Technical Education and Science.
- 1981 The establishment of the College of Industrial Technology and Institute for Technical Educational Development.
- 1986 King Mongkut's Institute of Technology was separated into three autonomous universities namely:
 - King Mongkut's Institute of Technology North Bangkok.
 - King Mongkut's Institute of Technology Ladkrabang.
 - King Mongkut's Institute of Technology Thonburi.
- 1988 The establishment of Faculty of Applied Science.
 - The establishment of the Central Library.

- 1991 The establishment of Institute of Technological Development for Industry.
- 1993 The establishment of Thai-French Innovation Centre and it was rename as Thai-French Innovation Institute in 2007.
- 1995 KMUTNB extended its educational obligations to the rural areas, leading to the creation of the Prachinburi campus in Prachinburi province.
- 1996 The establishment of Faculty of Industrial Technology and Management in Prachinburi and Institute of Computer and Information Technology in Bangkok.
- 2001 The establishment of Faculty of Information Technology in Bangkok campus and it was renamed as the Faculty of Information Technology and Digital Innovation in 2020.
 - The establishment of Welding Institute of Thailand.
- **2002** The establishment of Faculty of Applied Arts in Bangkok campus.
- 2003 The establishment of Faculty of Agro-Industry in Prachinburi campus.
- 2005 The establishment of The Sirindhorn International Thai-German Graduate School of Engineering (TGGS) in Bangkok campus.
- 2007 King Mongkut's Institute of Technology North Bangkok was renamed "King Mongkut's University of Technology North Bangkok" and became an autonomous state university.

- 2010 The establishment of KMUTNB's new campus, located at the Eastern Seaboard Industrial Zone, Rayong, entitled "King Mongkut's University of Technology North Bangkok (Rayong campus)."
 - The establishment of Faculty of Architecture and Design in Bangkok campus.
- 2013 The establishment of Thai-German Dual Education and e-Learning Development Institute (TGDE) in Bangkok campus.
 - The establishment of Faculty of Engineering and Technology in Rayong campus.
 - The establishment of Faculty of Science Energy and Environment in Rayong campus.
 - The establishment of Faculty of Business Administration in Rayong campus.
- 2014 The establishment of International College in Bangkok campus.
- 2015 The establishment of Faculty of Business and Industrial Development in Bangkok campus.
 - The establishment of Faculty of Business Administration and Service Industrial in Prachinburi campus.
- 2018 The establishment of a new constituent unit, Research and Human Resources Training Center for Industry in Rayong campus.
- 2020 The International Space Technology Institute for Economic Development was set up as a Department under the Office of the President.

Historical Royal and German visits



7th February 1962, Founding Principals of Thai-German Technical School, Dipl.-Ing. Karl Stutzle and Prof. Dr. Boonyasak Jaijongkit gave a warm welcome to His Majesty King Bhumibol Adulyadej.



22nd November 1962, Dr. Heinrich Luebke the first President of the Federal Republic of Germany paid a visit to KMUTNB.



1st March 1984, President of the Federal Republic of Germany, Karl Carstens with his wife honored KMUTNB 25th commemoration with their presence.



2nd of May 1986, Dr. Helmut Kohl, the Chancellor of Germany paid a visit to KMUTNB and was awarded a KMUTNB honorary Ph.D. in Technical Education.

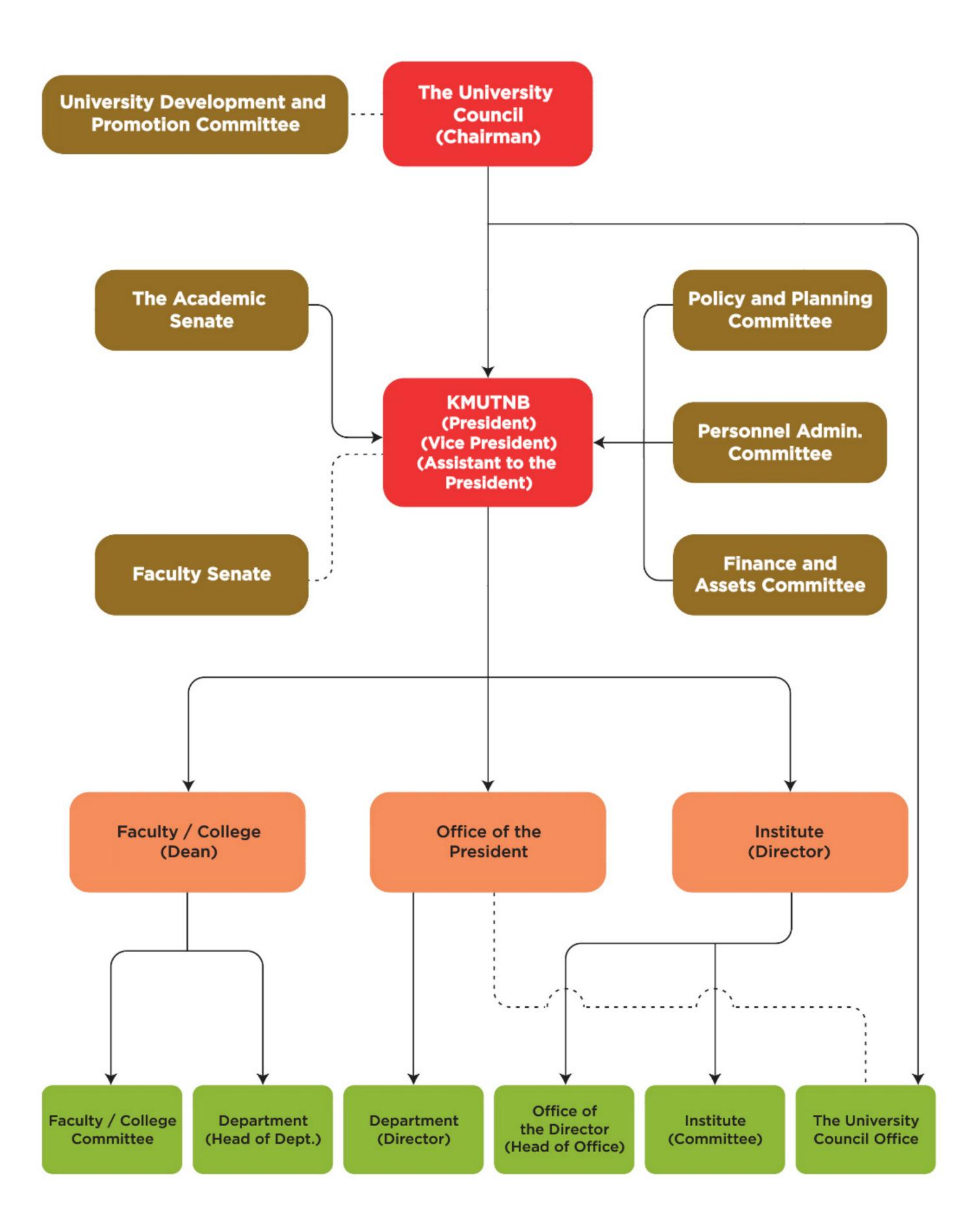


25th June 2002, President of the Federal Republic of Germany, Dr. Johannes Rau became the third President of Germany who visited KMUTNB since its foundation.



7th October 2015, HRH Princess Maha Chakri Sirindhorn presided over the opening ceremony and paid a royal visit to the Science, Technology and Innovation Exhibition to Honor HRH's 60th birthday anniversary.

KMUTNB Administrative Chart



KMUTNB Council



Prof. Dr. Teravuti Boonyasopon Chairman



Asst. Prof. Preecha Ong-aree Advisor to the KMUTNB Council





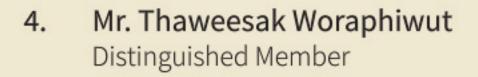








Mr. Okas Teparagul Vice-Chairman and Distinguished Member





5. Dr. Surin Tohtubtiang Distinguished Member



- Prof. Dr. Banjerd Singkaneti 6. Distinguished Member



Mr. Opas Khiewwichai Distinguished Member



- Dr. Siritach Rojanaphruk 8. Distinguished Member



Mrs. Poranee Leenutaphong 9. Distinguished Member



- Distinguished Member 11. Dr. Sangchai Chotchuangchutchaval

Distinguished Member

10. Dr. Winai Sansuwan





- 13. Dr. Preeda Attavinijtrakarn Distinguished Member
- 14. Dr. Promsawat Tipkongka Distinguished Member









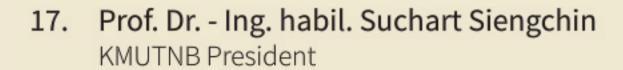






Mrs. Phannee Jarusombat Distinguished Member



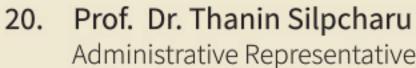


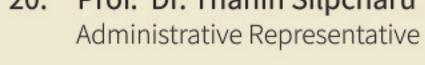


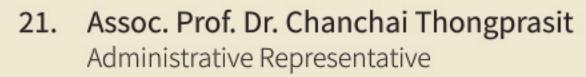


18. Assoc. Prof. Dr. Sittichok Soontonopas President of the Faculty Senate













- 22. Assoc. Prof. Dr. Unalome Wetwatana Hartley Academic Representative
- 23. Prof. Dr. Athakorn Kengpol Academic Representative









26. Asst. Prof. Worawit Chaturapanich Vice President and Secretary of KMUTNB Council

KMUTNB Administration















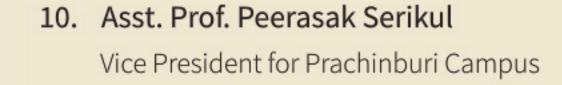


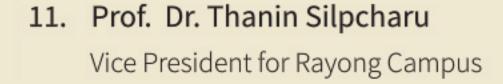


- Prof. Dr. Ing. habil. Suchart Siengchin
 President
- Asst. Prof. Worawit Chaturapanich
 Vice President for Administration
- Prof. Dr. Somrerk Chandra-Ambhon
 Vice President for Research and Information
 Technology Development
- Prof. Dr. Saowanit Sukparungsee
 Vice President for Academic Affairs
- Asst. Prof. Dr. Krissachai Sriboonma
 Vice President for Corporate Affairs
 Development for Sustainability
- Asst. Prof. Somchai Vetchakam
 Vice President for Student Affairs and Alumni Relations
- Dr. Raknarin Sanrach
 Vice President for Finance
- 8. Assoc. Prof. Dr. Somnoek Wisuttipaet
 Vice President for Academic Services
 Development and Industrial Relations
- Ms. Sikan Kulchonchan
 Vice President for International Affairs













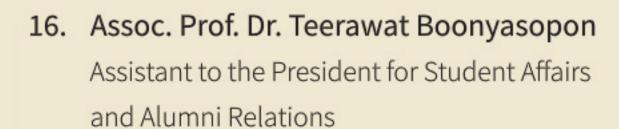
- 12. Assoc. Prof. Dr. Sumet Umchid

 Assistant to the President for Academic
 Enhancement and Quality Assurance
- 13. Assoc. Prof. Dr. Malinee Sriariyanun
 Assistant to the President for University
 Development towards Internationalization
 and Special Affairs





- 14. Asst. Prof. Dr. Nattapong Makaratat Assistant to the President for University's Environmental and Physical Development
- 15. Asst. Prof. Dr. Nawaporn Wisitpongphan Assistant to the President for Research and Information Technology Development







17. Dr. Sarawut Suebyaem
Assistant to the President for Finance and General Affairs



Assoc. Prof. Dr. Somchob Chaiyavej Advisory to KMUTNB



Assoc. Prof. Dr. Banleng Sornil
Advisory to KMUTNB























Dean and Director

- Assoc. Prof. Dr. Udomkiat Nontakaew Dean, Faculty of Engineering
- Assoc. Prof. Dr. Pairote Stirayakorn Dean, Faculty of Technical Education
- Assoc. Prof. Dr. Surapun Yimman Dean, Faculty of Applied Science
- Asst.Prof. Dr.-Ing. Sunantha Sodsee Dean, Faculty of Information Technology and Digital Innovation
- Prof. Dr. Manop Chunin Dean, Faculty of Applied Arts
- Asst. Prof. Surasit Sangsuriya
 Dean, Faculty of Architecture and Design
- 7. Assoc. Prof. Dr. Sakarin Yuphong
 Dean, Faculty of Business and Industrial
 Development
- 8. Prof. Dr. Nisai Fuengwarodsakul Dean, The Sirindhorn International Thai-German Graduate School of Engineering
- Assoc. Prof. Dr. Smith Songpiriyakij
 Dean, College of Industrial Technology
- Asst. Prof. Dr. Piyarach Kullamethee
 Dean, Faculty of Agro-Industry
- 11. Assoc. Prof. Dr. Pichet Sriyanyong
 Dean, International College





























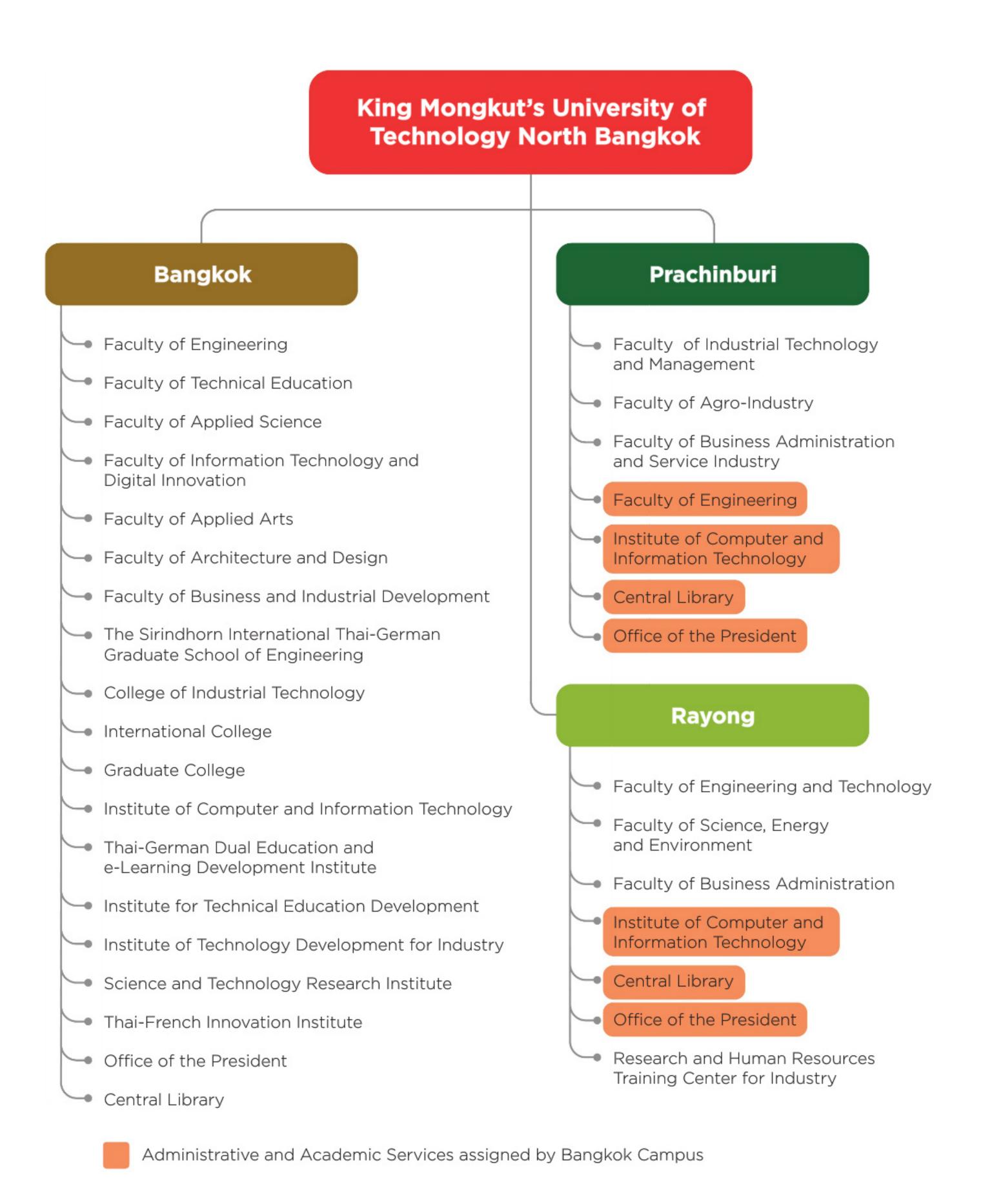




Dean and Director

- 12. Asst. Prof. Dr. Khridsadakhon Booddachan Dean, Faculty of Industrial Technology and Management
- 13. Asst. Prof. Peerasak Serikul Acting Dean, Faculty of Business Administration and Service Industry
- 14. Asst. Prof. Dr. Tawatchai Wongchang
 Dean, Faculty of Engineering and
 Technology
- 15.1 Asst. Prof. Dr. Sabaithip Tungkamani Dean, Faculty of Science, Energy and Environment (March 28, 2018 - March 27, 2022)
- 15.2 Asst. Prof. Dr. Aiya Chantarasiri Dean, Faculty of Science, Energy and Environment (March 28, 2022 - Present)
- 16.1 Prof. Dr. Thanin Silpcharu
 Dean, Faculty of Business Administration
 (March 28, 2018 March 27, 2022)
- 16.2 Assoc. Prof. Dr. Sunee Wattanakomol Dean, Faculty of Business Administration (March 28, 2022 - Present)
- 17. Asst. Prof. Dr. Suphot Chunwiphat Dean, Graduate College
- Assoc. Prof. Dr. Phayung Meesad Director, Central Library
- 19.1 Asst. Prof. Dr. Peeteenut Triwong
 Director, Institute for Technical Education
 Development
 (November 25, 2017 November 24, 2021)
- 19.2 Assoc. Prof. Dr. Chatchan Thongjub
 Director, Institute for Technical Education
 Development
 (November 25, 2021 Present)
 - 20. Assoc. Prof. Dr. Chanchai Thongprasit
 Director, Institute of Technological
 Development for Industry
 - 21. Assoc. Prof. Dr. Choopan Rattanapoka Director, Institute of Computer and Information Technology
 - 22. Assoc. Prof. Dr. Kampanart Theinnoi Director, Science and Technology Research Institute
 - 23. Asst. Prof. Dr. Wattana Kaewmanee
 Director, Thai–French Innovation Institute
 - 24. Asst. Prof. Dr. Phongsak Keeratiwintakorn
 Director, Thai-German Dual Education and
 e-Learning Development Institute

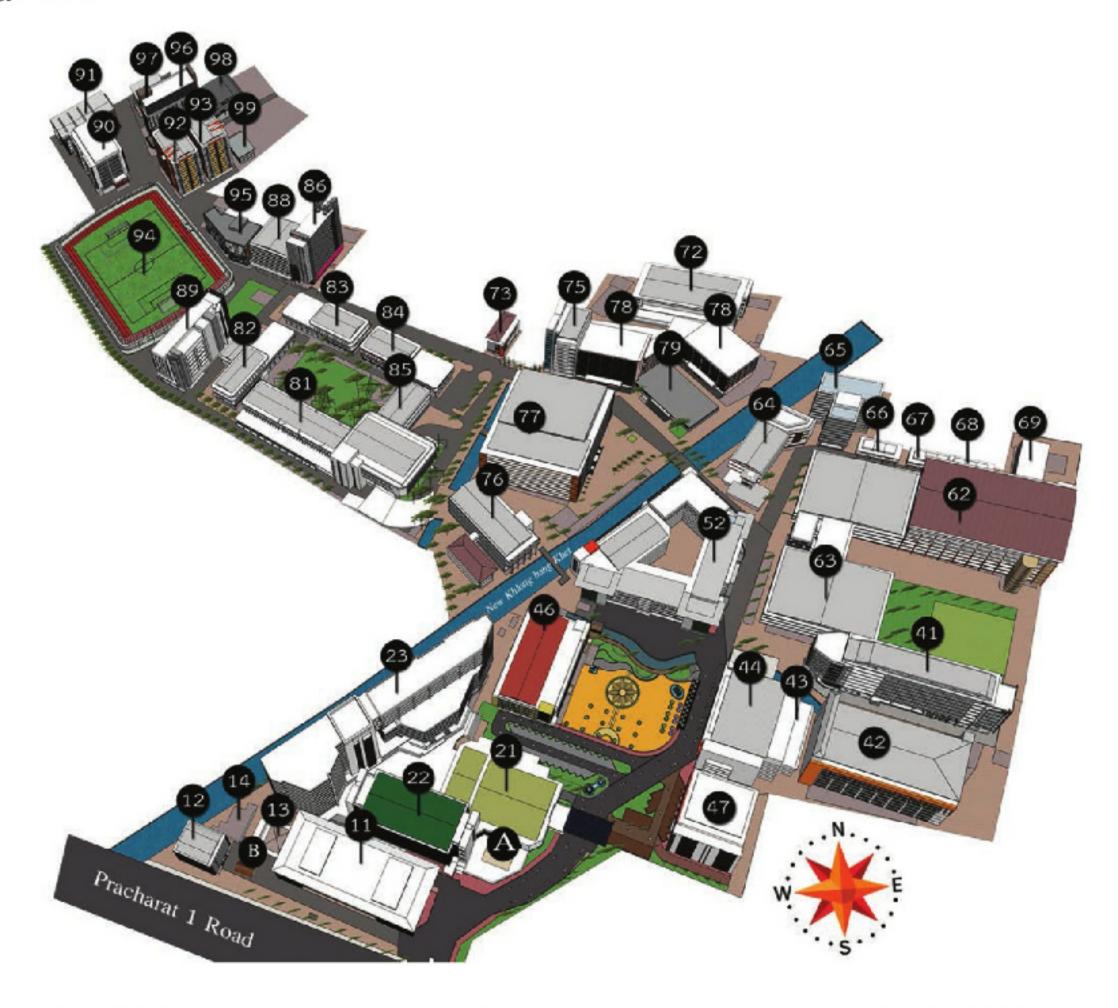
KMUTNB Organization Chart



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Bangkok Campus

King Mongkut's University of Technology North Bangkok, Campus is located at 1518 Pracharat 1 Road, Wongsawang, Bangsue, Bangkok 10800. The total area of 34.85 acres comprises 20 academic buildings, 9 workshops, 7 offices and a list of facilities. The buildings currently under construction are KMUTNB Technology Park.



11	The Sirindhorn Thai-German Graduate School of	75,78	Faculty of Applied Science
	Engineering (TGGS)	76	Institute for Technology Education
12	Building and Vehicle Department		Development (ITED)
13	Operation Building of Electrical and Heavy	77	Student Activities club
	Equipment Technology	79	Health Service and recreation center
14	Electrical Substation	81-89	Faculty of Engineering
21 - 22	President Office Building	90-91, 97	Thai–German Pre Engineering School
23	Navamindra Rajini Building	92-93	KMUTNB dormitory
41	Faculty of Architecture and Design	94	Stadium
42, 62 - 69	College of Industrial Technology	95	International College
43	Thai-French Innovation Institute (TFII)	96	Faculty of Business and Industrial
44,52	Faculty of Technical Education		Development
46	Faculty of Applied Arts	98	Canteen
47	Science and Technology Research Institute (STRI)	99	Document Storage Building
72	Gymnasium	Α	King Rama IV Monument
73	Thai-German Dual Education and e-Learning	В	Buddhist Shrine
	Development Institute (TGDE)		

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Prachinburi Campus

King Mongkut's University of Technology North Bangkok, Prachinburi Campus is located at 129 Moo 6, Tumbon Noenhom, Amphur Muang, Prachinburi 25230. The total area of 715.28 acres contains 3 academic buildings, 6 workshops, 3 student dormitories, 4 offices, 4 Staff dormitories, 2 gymnasiums, Villa Vichalai Hotel and various facilities.



- 1 Administrative Building
- 2 Anek-Prasong Building
- 3 Faculty of Industrial Technology and Management
- 4 Staff Dormitories
- 5 Student Dormitories
- 6 Sirindhorn Building (Central Library)
- 7 Faculty of Agro-Industry
- 8 Engineering Building
 - Laboratory of Engineering Instrumentation and Research Services
- 9 Agricultural Machinery Technology Building
- 10 Gymnasium Building I
- 11 Industrial Management Building (Villa Vichalai Hotel)
- 12 Gymnasium Building II
- 13 Faculty of Business and Service Industry
 Administration
- 14 Agro-Processing Research Center (Technology Park)
- 15 Para Rubber Germination Beds

- A. Water Reservoir and Reservation Zone
- B. Substation
- C. King Rama IV Monument
- D. Small General Aviation Airport and Automotive Proving Grounds
- E. Buddhist Shrine

Rayong Campus

King Mongkut's University of Technology North Bangkok, Rayong Campus is located at Tambon Nonglalok, Amphur Bankhai, Rayong 21120. The total area of 38.96 acres contains 7 academic buildings, offices, halls, and a list of facilities.



- 1 Administration Building
- 2 Engineering and Technology Laboratory Building
 - Basic Engineering Laboratory Building
- 3 Lecture Hall
- 4 Faculty of Science, Energy and Environment
- 5 Science and Technology Laboratory Building
- 6 Faculty of Business Administration
 - Logistics Operations Building
- 7 Sports Science Building and Central Canteen
- 8 Learning and Recreation Center 1
- 9 Learning and Recreation Center 2
- 10 Community Center

- G. Surveillance Booth
- K. Campus Name Board
- M. King Rama IV Monument
- Z. Power Substation

Research and Human Resources Training Center for Industry

Research and Human Resources Training Center for Industry is located at 15 Map Ta Phut Phan Road, Map Ta Phut Sub-district, Muang, Rayong 21150. The Center has a total area of 12.64 acres, consisting of 5 separate buildings.



- 1 Center for Training and Industrial Relations
- 2 Development Center for Manufacturing Technology and Innovation
- 3 Center for Automotive Technology and Automation
- 4 Welding Technology and Steel Industry Center
- 5 Residence Hall for students and staff-members
- 6 Center of Business and Industrial Development (under construction)

Faculties of KMUTNB (Bangkok Campus)

Faculty of Engineering

Faculty of Engineering is committed to train engineers and develop technology for international community. We offer the highest quality programs for undergraduate and graduate levels. There are 9 engineering departments covering 19 bachelor's, 13 master's and 7 doctoral programs. For undergraduate programs, 6 English / International Engineering

programs were taught within the Faculty.

Faculty of Engineering prepares students for life-long learning and provides unique theoretical and practical hands-on learning experiences to succeed in their specialized fields. Our world-class facilities, equipment and laboratories well support student in learning and graduate-level research. We are committed to train competent engineering workforce to support development and prosperity of Thailand and other countries.

International Awards and Achievements

The Faculty fosters students' engagement with innovation, invention and design projects, encouraging their participation in domestic and international academic competitions. Our famous Invigorating Robot Activity Project (IRAP) won eight championships and Best in Class Mobility awards in World RoboCup Rescue from 2006 -2019. There are many student organizations to enhance student skills and to encourage teamwork among classmates, such as formula car club, robot academy, and international activity club.

Our innovative research ideas have been emerged to the world and affects our lives. The first Thai-made cube satellite known as "KNACKSAT" is internationally recognized and was entirely made by our faculty and students. DYNA-T, an explosive-disposal robot, was in close collaboration with Explosive Ordnance Disposal (EOD) of the Royal Thai Army. DYNA-T uses ultra-high-pressure recoilless water cannon to render improvised explosive devices harmless. The Remotely Operated Underwater Vehicles (ROV) is deployed to take high-resolution videos and pictures of sea biodiversity, while substantially reducing the risk of the divers using SONAR and Inertia Measurement Unit (IMU) systems. This ROV was used in rescuing "Wild Boars" missing football team rescue mission in Tham Luang cave.

Achieving ABET accreditation

In 2021, Faculty of Engineering entered the Memorandum of Understanding (MoU) under the project for Thai higher education institutions to receive accreditation from Accreditation Board for Engineering and Technology (ABET). Currently, the process of evaluation has taken place already. The exit statement was unofficially informed, which concluded that the department of Chemical Engineering, Faculty of Engineering was qualified for being accredited.









MOU TOWARD ACCREDITATION BOARD FOR ENGINEERING AND TECHNOLOGY (ABET)

Faculty of Technical Education

The Faculty of Technical Education was founded in 1969. Initially it was a department within the Thai-German Technical School, referred to as the Thai-German Technical Teacher College (TGTTC). It is Thailand's pioneer organization that offers an undergraduate curriculum towards Bachelor of Science in Technical Education program (B.S.Tech.Ed.).

Since then, the Faculty achieve its objectives by providing teaching and learning support, machinery, tools, specialists, along with scholarship funds for studies and teacher training, and has been producing top quality industrial and technical teachers for over five decades. Different degrees at various levels are available across diverse disciplines, including Teacher Training in Mechanical Engineering, Teacher Training in Civil Engineering, Teacher Training in Electrical Engineering, Computer Education, Technical Education Management, Education Technological and Information Science.

The Faculty now enrolls more than 1,500 students along with over 130 members of permanent and non-permanent academic staff. So far it has developed manpower and produced over 10,000 capable graduates to serve the community and society.

The Faculty hosting annual academic conferences and events to encourage our students and staffs to be innovative, entrepreneurial; to adopt best practices with Creativity, Workability, and Knowledge Transferable.

Since year 2014 participation in Teaching Academy Award project that empowers students to thrive with creativity and improved teaching skills, the teams from the Faculty of Technical Education have been successful in achieving first and runner-up prizes. In order to increase its efficiency of learning, teaching and research potential, the Faculty of Technical Education has embraced collaboration and network initiatives among public and private sector institutions, which presently results in more than 30 domestic and foreign partner organizations.

"A Mastership of Engineering Teacher and Creative Innovation."









Faculty of Applied Science

The Faculty of Applied Science was launched in 1988. Since its inception the Faculty has focused on producing qualified science and technology graduates with high expertise in their academic specialty and high moral standards to meet the national demand for sustainable social, economic, and industrial development. The Faculty supports and promotes a cooperative educational program that provides brilliant opportunities for students to experience real-life situations in the workplace. In academic year 2020, students had the opportunity to attend cooperative education abroad in Germany, Japan and Korea thereby providing them with ideal conditions to learn more about different academic environments and culture. The Faculty has highly qualified academic staff and is very active in research. It also maintains close connections with industry, public and private organizations through consultative services, technology transfer, staff, student research projects and work experience programs.

The Faculty consists of the Office of the Dean and 7 academic departments;

- Department of Mathematics
- Department of Biotechnology
- Department of Applied Statistics
- Department of Industrial Chemistry
- Department of Computer and Information Science
- Department of Agro-Industrial, Food and Environmental Technology
- Department of Industrial Physics and Medical Instrumentation

At present, the Faculty offers 16 Bachelor's degree courses, 11 Master's degree courses, and 7 Ph.D. courses.









Faculty of Information Technology and Digital Innovation

The Faculty of Information Technology and Digital Innovation launched its inaugural graduate international program in collaborative partnership with Monash University, Australia. After that, a number of Thai and international programs covering a broad spectrum of subjects and research areas have been provided. The Faculty has deepened the academic cooperation with relevant international organizations, academics, industries and institutes. At present, the faculty provides education in the undergraduate and graduate levels with 9 programs:

6 Thai Programs:

- Master of Science Program in Information Technology,
- Master of Science Program in Network and Information Security Management,
- Master of Science Program in Management Information Systems,
- Doctor of Philosophy Program in Information Technology,
- Doctor of Philosophy Program in Management Information Systems, and
- Doctor of Philosophy Program in Network and Information Security Management

3 International Programs:

- Bachelor of Science in Informatics for Digital Economy,
- Master of Science Program in Information and Data Science, and
- Doctor of Philosophy Program in Information and Data Science

The Faculty has a partnership with computer-based testing leader Pearson VUE that provides information technology certified professional examinations. Testing services provided include Oracle, Cisco, SAP, IBM and CompTia. In line with the Faculty's target to enhance student attainment, a candidate's quality of experience and practical knowledge in Information Technology can be demonstrated through professional examinations.

The Faculty of Information Technology and Digital Innovation has actively participated in a number of international research projects including a project promoted by the German Academic Exchange Service (DAAD) "NLPLab (Kz.305538) Project" with FernUniversität in Hagen, Germany. Many times the lecturers were invited from prestigious organization, e.g. as a session chair at the 4th Workshop on Complex Structures 2019 at Cala Millor, Spain, and as a visiting professor at FernUniversität in Hagen, Germany.









Faculty of Applied Arts

The Faculty of Applied Arts was originally the Department of Languages and Social Sciences under the Faculty of Technical Education. Later, the Council of King Mongkut's Institute of Technology North Bangkok reached an agreement and approval on the establishment of the Faculty of Applied Arts on the 12th June 2002 according to the 9th Tertiary Education Development Plan 2002-2006. There are three Departments: Department of Languages, Department of Humanities, and Department of Social Sciences.

The Faculty of Applied Arts concerns about creating academic networks so as to expand our knowledge and improve teaching and learning in terms of national and international standard levels.

Objectives

- To administer and take responsibility for teaching services in compulsory, elective, and free elective courses in the field of languages, humanities and social sciences taught in the university to provide the same standard in terms of learning, teaching management, teaching plan, and testing of bachelor level.
- To provide graduate programs in Applied Linguistics,
 Social Sciences and Humanities in accordance with the philosophy of the Faculty and the University.

Degree programs offered:

Master of Arts (M.A.)

- Industrial and Organizational Psychology
- English for Business and Industry Communication

Doctor of Philosophy (Ph.D.)

Industrial and Organizational Psychology









College of Industrial Technology

The College of Industrial Technology (CIT), known as "The Thai-German Technical School", with the equivalent status to a Faculty of King Mongkut's University of Technology North Bangkok was founded under an economic and academic cooperative agreement between the Royal Thai Government and the Federal Republic of Germany in 1959. In 1964, the School became known as "North Bangkok Technical College" and in 1971 it was promoted to a tertiary education institution called "King Mongkut's Institute of Technology." At that instant the Thai-German Technical School assumed the role of a

department within the Faculty of Engineering, the so-called Department of Industrial Technology.

In 1980 whereas the Faculty of Engineering was thriving in supplying talented engineers whose knowledge and skills are highly respected by the industrial sectors, the Department of Industrial Technology was separated from the Faculty of Engineering and its administration was undertaken by its own staff. The new organizational unit was named "College of Industrial Technology" (CIT). It was formed as a mitigation measure towards the shortage of industrial technicians and skilled manufacturing workforce. Notably, College of Industrial Technology focuses more on practical aspects of learning, complying with the practice-oriented principles of the Fachhochschule in Germany.

The College's main commitments are expressed as follows: to produce high-potential graduates in technology, science and engineering; to develop relevant collaboration networks for improved instructional research and services; to provide education and technological services for public and private sectors; and to enhance environmental quality for the communities.

Currently CIT consists of 9 departments, offering 19 bachelor's, 11 master's and 2 doctoral programs. Meanwhile, 6 types of certificate programs are available at its subsidiary body, the "Thai-German Pre-Engineering School," of which academic activities and operations are overseen by CIT. The certification programs embrace those in Mechanical, Electrical and Electronic, and Civil Engineering, both Thai and English options.

CIT has strengthened academic cooperation with institutions overseas, as evidenced by a number of MoUs conducted with national and international institutions. Accordingly students are consistently provided with opportunities to gain career-boosting experience through international internship and cooperative education. For career growth and development opportunities, CIT supports exchange missions where promising staff and researchers can take part in exchange programs with a list of Fachhochschule Universities in Germany.









Thai-German Pre-engineering School

The Thai-German Pre-engineering School, as overseen by College of Industrial Technology, is operated in accordance with the administration and educational policy of King Mongkut's University of Technology North Bangkok. The School is located inside Bangkok campus. Since 1959, the school's program has been originated from German 'hand-on' practice model as well as STEM (Science, Technology, Engineering, Mathematics) education. Embarked through the cooperation of Thai and German government, the program has been widely progressed and become a unique and successful one. It has been continuously progressed so as to keep pace with social changes, technological advances, and industrial needs. The program which was originated as German vocational education model has been called 'pre-engineering' program with the existing Thai and English (EP) programs in Mechanical, Electrical and Electronic, and Civil Engineering.

The unique system carried out by the Thai-German Pre-engineering School is recognized as the predecessor of the similar model on integrated curriculum nationwide. Specifically, students graduated from the School, with academic and personal potential are eligible to apply for admission to a range of academic programs of KMUTNB (14 Faculties) or any higher education institution.

Applicant Requirements:

Students who wish to apply for the Pre-engineering program must hold acertificate of secondary level (Mattayom 3). An overall grade point average of 2.50 or higher (either in Mattayom 1-3 or only for Mattayom 3) is compulsory for all applicants.









Faculty of Architecture and Design

The faculty of Architecture and Design's primary mission is to prepare qualified and competent students, encouraging their abilities corresponding to architectural design, innovative and creative arts along with design related disciplines. The Faculty has put emphasis on the promotion of art and design's research and development with technology application for the production of design and outputs. The Faculty is committed to producing highly skilled, employable graduates whose abilities meet the entrepreneurial and societal outcome expectation. The graduates should be capable of academic skill integration into occupational outlooks and continuous knowledge enhancement. This is in line with potential to progress towards internationalization.

Degree programs offered:

Bachelor of fine Arts (B.F.A.)

- Interior Design
- Ceramics Product Innovation Design
- Applied Art and Product Design

Bachelor of Architecture (B.Arch.)

Architecture

Bachelor of Business Administration (B.B.A.)

Interior Design Management and Business Development

Master of Architecture (M.Arch.)

Innovation and Designing for Sustainability

Awards and Achievements

Architecture and Design student team wins innovative design competition

A student team from the Faculty of Architecture and Design achieved the first prize in the Covestro Innovation Design Contest 2020 (IDC 2020). The campaign, organized by Covestro (Thailand) Co., Ltd. together with Research & Innovation for Sustainability Center (RISC) was launched to inspire and accelerate innovative ideas and thinking on innovations under the theme "World of innovation for sustainable living."









Faculty of Business and Industrial Development

The Faculty of Business and Industrial Development was launched in 2015 for the purpose of producing graduates with sought-after skill in business-industry knowledge coupled with human resource competencies which are in line with the need of industries. The co-operative education partnership model is performed with assistance and support form a number of companies and associations representing business and industry. Pioneering research projects are specially promote to sustain the country's economic growth.

Undergraduate Students are supposed to be prepared with theoretical knowledge and practical experiences. Areas of focus involve advanced management practice, novel management technology, and research studies for Thailand's economic, industrial and business development. In addition, the Cooperative Education Program, as a career-formation support arrangement is combined with academic studies, enabling the students to relate studies to practical experience during career training. In order to strengthen language skills, English-specific support courses account for 20 percent of the mainstream curriculum.



Bachelor of Business Administration (B.B.A)

- Industrial Business and Human Resource Development
- Manufacturing and Service Industry Management

Master of Business Administration (M.B.A)

Industrial Business and Human Resource Development

Doctoral of Business Administration (D.B.A)

Industrial Business and Human Resource Development









The Sirindhorn International Thai-German Graduate School of Engineering (TGGS)

The Sirindhorn International Thai-German Graduate School of Engineering (TGGS) was established as an autonomous institute under the joint initiative of the Government of the Kingdom of Thailand and the Government of Federal Republic of Germany, with its operation under the supervision of KMUTNB and RWTH Aachen University. Its industry-oriented engineering master and doctorate education concept combines teaching and research based on the successful model of RWTH Aachen University, Germany, one of Europe's leading technical universities.

TGGS offers international programs in "industry-oriented" engineering at Master and Doctoral levels. At TGGS, multidisciplinary groups of lecturers and researchers are working closely with industry for research and development issues. Students are seamlessly integrated into research projects under the guidance of lecturers and industry experts from whom

they acquire technical knowledge and teamwork skill. In addition, selected students with high performance are involved in formal international collaboration programs, supervised by RWTH Aachen University and other partner universities.

Degree Programs offered:

Master of Engineering (M.Eng.)

- 1. Chemical and Process Engineering (CPE)
- 2. Materials and Production Engineering (MPE)
- 3. Mechanical and Automotive Engineering (MAE)
 - Mechanical Engineering Simulation and Design (MESD)
 - Automotive Safety and Assessment Engineering (ASAE)
- 4. Electrical and Software Systems Engineering (ESSE)
 - Communication and Smart System Engineering (CSE)
 - Electrical Power and Energy Engineering (EPE)
 - Software Systems Engineering (SSE)
 - Smart Grids Engineering (SGE)
- Railway Vehicles and Infrastructure Engineering (RVIE-Joint Master Program with faculty of Engineering at Chulalongkorn University)
 - Railway Vehicles Engineering (RVE)
 - Railway Infrastructure Engineering (RIE)

Doctor of Engineering (D.Eng.)

- 1. Chemical and Process Engineering
- 2. Materials and Production Engineering
- 3. Mechanical and Automotive Engineering
- 4. Electrical and Software Systems Engineering









International College

At the International College, we encourage "innovative mind" and "international vision". Our business administration program: B.B.A. International Trade and Business Logistics (International Program) is a four-year bachelor program designed to produce the next generation of business professionals, equipped with knowledge and understanding of the ever-changing international business environment.

Academic Cooperation:

1) Double Degree 3 + 1 Thai - German

The academic cooperation between International College, KMUTNB and Hochshule Bremerharven, Germany provided TWO Internationally recognized Bachelor Degree: B.B.A. International Trade and Business Logistics (3 years in International College) and Bachelor of Arts in Business Administration (1 year in Germany).



The academic cooperation between King Mongkut's University of Technology North Bangkok and Florida International University allows graduates/alumni with certain Bachelor degrees from KMUTNB to apply for admission to FIU in various Engineering Master of Science degree programs.

Program Detail

- Four-Year Bachelor Degree Program (Total credits: 123 credits)
- Semester 1 starts from August to December and Semester 2 starts from January to May

Admission Requirement

Thai University Central Admission System (TCAS 2020)







Faculties of KMUTNB (Prachinburi Campus)

Faculty of Industrial Technology and Management

The Faculty of Industrial Technology and Management (FITM) was established at Prachinburi campus in 1996. Its main mission is to produce well-equipped graduates in technology and management of industry and other related sectors.

FITM is made up of 4 departments: Information Technology, Industrial Management, Construction Design and Management and Agricultural Engineering for Industry. Eight undergraduate program and one graduate program are available across departments:

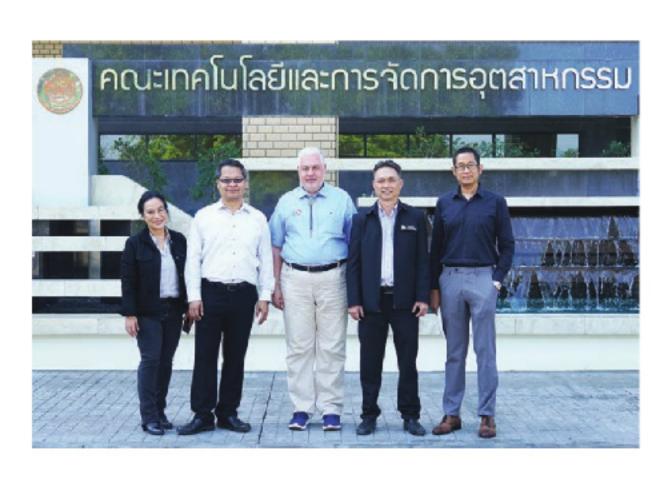
- Bachelor of Science Program in Information Technology
- Bachelor of Engineering in Information and Network
- Bachelor of Industrial Technology Program in Industrial Management
- Bachelor of Industrial Technology Program in Industrial Management (Continuing Program)
- Bachelor of Industrial Technology Program in Agricultural Machinery Technology
- Bachelor of Industrial Technology in Mechanical and Manufacturing Technology
- Bachelor of Science Program in Computer-aided Design and Construction Management
- Bachelor of Industrial Technology Program in Information Technology (Continuing Program)
- Master of Industrial Technology Program in Industrial Management

With learning experiences that are relevant to multidisciplinary integration approach and extra curricula activities, FITM graduates can fully serve the requirement of industrial and different industry-related sectors. Through a number of academic services the Faculty has contributed to local communities and outside parties. External collaboration activities have been performed through extended academic and research collaboration with public sectors, external business partner and enterprises.









Faculty of Agro-Industry

In 2003, the faculty of Agro-Industry was founded as a part of "King Mongkut's University of Technology North Bangkok" in Prachinburi campus. The main objective of this foundation is to provide an educational opportunities to students living in the Eastern region of Thailand. Three educational fields proposing are: Food science and management, Food science and nutrition, and Innovation and product development technology. The research and academic services are provided in related fields as well.

The learning programs consists of basic science, food processing technology and management, food nutrition and quality control, product development for health and beauty, and food products packaging development. Moreover, there are co-operative education program and student exchange program (Thai-Germany) that student can choose for their needs in order to develop themselves and to improve Lifelong Learning. The goal of these learning programs is to prepare a qualified graduate who can work in agro-industrial field, either in government organization and private sector, or for future study in higher level.

Objective

- To produce a bachelor's degree and master's degree graduates who are socially responsible. This production can promotes the ethical practices with professional knowledge and skills relevant to their field.
- To provide the educational opportunities in the agro-industrial sector.
- To promote and transmit the knowledge and know-how through active participation to the community and society.
- To closely promote the cooperation between the public and private sectors.

Degree programs offered:

Bachelor of Science (B.Sc.)

- Food Science and Management
- Food Science and Nutrition
- Innovation and Product Development Technology

Master of Science (M.Sc.)

Food Science and Management









Faculty of Business Administration and Service Industry

Established since 2015, the Faculty of Business Administration and Service Industry was formerly known as the Department of Tourism Industrial Business Administration and Hotel, part of Business Management section under the Department of Industrial Management, Faculty of Industrial Technology and Management.

The Faculty of Business Administration and Service Industry is composed of the Department of Business Administration in Tourism and Hotel and the Department of Industrial Business Administration and Trade.

Objectives

- To prepare graduates with theoretical knowledge and verifiable skills to be competence and credential at work.
- To establish knowledge, skill, wisdom while nurturing the attributes of responsibility, ethical behavior, positive relationship as a good samaritan.

Degree programs offered:

Bachelor of Business Administration (B.B.A.)

- Tourism and Hotel Industry Management
- Industrial Business Administration and Trade

Master of Business Administration (M.B.A.)

Industrial Business Administration and Trade









Faculties of KMUTNB (Rayong Campus)

Faculty of Engineering and Technology

The faculty of Engineering and Technology under King Mongkut's University of Technology North Bangkok Rayong Campus was established on October 16, 2013. With advice and support from the office of the Higher Education Commission and several enterprises in Rayong Province, the Faculty provides students and staff members opportunity in practice-based professional learning for career development.

The Faculty of Engineering and Technology aims to contribute towards local and national development. Graduates are expected to possess creative skills along with numeracy and practical understanding of engineering and technology systems to keep up with the requirements of manufacturing industries in Royong Province and Thailand's eastern region.

Degree programs offered:

Bachelor of Engineering

- Industrial and Logistics Engineering Technology
- Mechanical and Automotive Engineering Technology
- Material and Process Engineering Technology
- Instrumentation and Automation Engineering Technology
- Chemical Process Engineering Technology

Bachelor of Technology

 Next Generation Automotive and Automation System Technology (Continuing Program)









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Faculty of Science, Energy and Environment

Established in 2013, the Faculty of Science, Energy and Environment (Rayong Campus) has defined its objective to integrate and develop human resources, energy technology and environment concerns in Eastern Thailand. The Faculty commits to producing quality graduates, conducting high-quality research for further innovations and practical values, and offering educational services and resources that help students achieve their academic goals.

The Faculty is on the mission to produce the best graduates equipped with scientific skill sets, practical and intellectual capacities. They are expected to possess competencies and skills needed to apply research methodologies trends and developments for successfully addressing issues of the chemical industry, energy efficiency, and environmental management.

Area of Study

The Faculty has provided the integrated program in Science and Technology specialized in Chemical Industrial Process and Environment (CIPE) and Energy Technology and Management (ETAM). The undergraduate and postgraduate course is followed by

Chemical Industrial Process and Environment (CIPE)

- Bachelor of Science (B.Sc.) in Chemical Industrial
 Process and Environment (CIPE)
- Master of Science (M.Sc.) in Chemical Industrial Process and Environment (MCIPE)

Energy Technology and Management (ETAM)

- Bachelor of Science (B.Sc.) in Energy Technology and Management (ETAM)
- Master of Science (M.Sc.) in Energy Technology and Management (METAM)









Faculty of Business Administration

The Faculty of Business Administration was established in 2013 with a primary aim to expand business training and learning opportunities so the students and graduates can match their skills, experience and qualifications to the occupational requirements, specifically those related to business education and human-resource development.

The Faculty of Business Administration, KMUTNB was officially launched to satisfy the ever-increasing demands from different industries in Rayong Province and eastern seaboard industrial zones. It is committed to producing quality graduates equipped with desired knowledge and expertise in business administration along with professional obligations, ethical concerns and social accountability. So far the Faculty has encouraged and supported research development and academic services as to create a knowledgeable community and to address the needs of today's society.

Degree programs offered:

Bachelor of Business Administration (B.B.A.)

- Accounting
- Business Computer
- Industrial Business and Logistic Administration

Master of Business Administration (M.B.A.)

- Industrial Business Administration
- Accounting

Doctor of Business Administration (D.B.A.)

Industrial Business Administration

Faculty members are encouraged to be actively engaged in research, innovations, patenting and a full range of academic activities in the pursuit of knowledge, dissemination and its potential application.





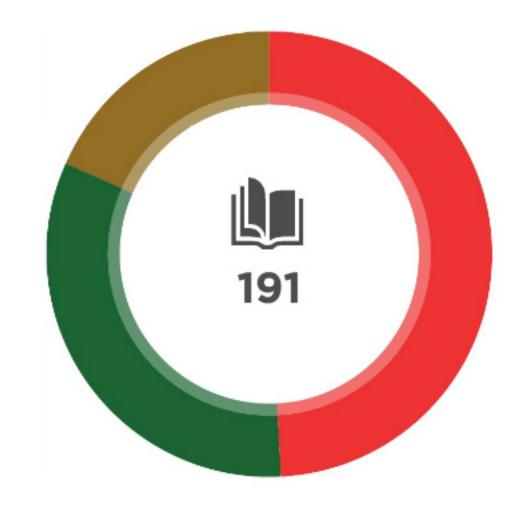




Academic Programs









Programs	Fields of Study		
(Bangkok Campus) Faculty of Engineering Bachelor of Engineering (B.Eng.) - Thai Program	Mechanical Engineering, Electrical Engineering, Production Engineering, Chemical Engineering, Civil Engineering, Industrial Engineering, Materials Handling Engineering, Materials Engineering, Instrumentation System Engineering, Aerospace Engineering, Computer Engineering, Logistics Engineering, Industrial Electrical and Energy Engineering		
- English Program	Electrical Engineering, Robotics Engineering and Automation System		
- International Program	Chemical Engineering, Innovative Materials Engineering, Aerospace Engineering, Mechanical Engineering		
Master of Engineering (M.Eng.) - Thai Program	Mechanical Engineering, Electrical Engineering, Production Engineering, Chemical Engineering, Civil Engineering, Industrial Engineering, Industrial Management Engineering, Construction Management, Aerospace Engineering, Materials Engineering, Automation Engineering, Materials Handling and Logistics Engineering		
- English Program	Mechanical Engineering		
Doctor of Philosophy (Ph.D.)	Electrical Engineering, Industrial Engineering, Chemical Engineering, Civil Engineering, Materials Engineering, Mechanical Engineering, Production Engineering		
Faculty of Technical Education Bachelor of Science in Technical Education (B.S.Tech.Ed.)	Mechanical Engineering, Mechatronics Engineering, Production and Industrial Engineering, Electrical Engineering, Computer Technology		
Bachelor of Science in Technical Education (B.S.Tech.Ed.) 5 years	Computer Technology		
Bachelor of Engineering (B.Eng.) 5 years	Civil Engineering and Education, Electrical Engineering and Education		
Master of Science in Technical Education (M.S.Tech.Ed.)	Mechanical Engineering Education, Electrical Engineering Education, Technical Education Technology, Vocational and Technical Education Management, Computer Education		
Master of Engineering (M.Eng.)	Civil Engineering and Education		
Master of Science (M.Sc.)	Information and Communications Technology for Education		

Doctor of Philosophy (Ph.D.) - Thai Program	Computer Education, Technical Education Technology, Electrical Engineering Education, Vocational and Technical Education Management, Information and Communications Technology for Education, Civil Engineering and Education, Mechanical Engineering Education
- English Program	Electrical and Energy Engineering
Faculty of Applied Science Bachelor of Science (B.Sc.) - Thai Program	Industrial Chemistry, Applied Mathematics, Applied Statistics, Business Statistics and Insurance, Industrial Physics and Medical Instrumentation, Agro-Industrial Technology, Biotechnology, Food Science and Technology, Environmental Science and Technology, Mathematics with Computer Science, Computer Science, Statistical Data Science and Analytics, Agro-Industrial Technology and Innovation
- Bilingual Program	Engineering Physics
Bachelor of Engineering (B.Eng.)	Biomedical Engineering, Microelectronics Engineering
Master of Science (M.Sc.)	Industrial Chemistry, Applied Mathematics, Applied Statistics, Computer Science, Medical Instrumentation, Bioindustrial Technology, Environmental Technology and Management, Applied Physics, Mathematics with Computer Science, Biotechnology, Software Engineering
Doctor of Philosophy (Ph.D.) - Thai Program	Industrial Chemistry, Applied Statistics, Bioindustrial Technology, Computer Science, Applied Physics, Environmental Technology and Management
- English Program	Applied Mathematics
Faculty of Information Technology and Digital Innovation Bachelor of Science (B.Sc.) - International Program	Informatics for Digital Economy
Master of Science (M.Sc.) - Thai Program	Information Technology, Management Information Systems, Network and Information Security Management
- International Program	Information and Data Science
Doctor of Philosophy (Ph.D.) - Thai Program	Information Technology, Management Information Systems, Network and Information Security Management
- International Program	Information and Data Science
Faculty of Applied Arts Master of Arts (M.A.) - Thai Program	Industrial and Organizational Psychology
- English Program	English for Business and Industry Communication
Doctor of Philosophy (Ph.D.)	Industrial and Organizational Psychology
Faculty of Architecture and Design Bachelor of Fine Arts (B.F.A.)	Interior Design, Ceramics Product Innovation Design, Applied Art and Product Design
Bachelor of Business Administration Program (B.B.A.)	Interior Design and Management and Business Development
Bachelor of Architecture (B.Arch.) 5 years	Architecture
Master of Architecture (M.Arch.)	Innovation and Designing for Sustainability

Programs	Fields of Study
The Sirindhorn International Thai-German Graduate School of Engineering Master of Engineering (M.Eng.) - International Program	Mechanical and Automotive Engineering, Chemical and Process Engineering, Electrical and Computer Engineering, Materials and Production Engineering, Railway Vehicles and Infrastructure Engineering
Doctor of Engineering (D.Eng.) - International Program	Mechanical and Automotive Engineering, Electrical and Computer Engineering, Chemical and Process Engineering, Materials and Production Engineering
International College Bachelor of Business Administration (B.B.A.) - International Program	International Trades and Business Logistics
Faculty of Business and Industrial Development Bachelor of Business Administration (B.B.A.)	Industrial Business and Human Resource Development, Manufacturing and Service Industry Management
Master of Business Administration (M.B.A.)	Industrial Business and Human Resource Development
Doctor of Business Administration (D.B.A.)	Industrial Business and Human Resource Development
College of Industrial Technology Bachelor of Engineering (B.Eng.)	Machine Design and Manufacturing Engineering Technology, Refrigeration and Air Conditioning Engineering Technology, Polymer Engineering Technology, Mechatronics Engineering Technology, Electronics Engineering Technology, Electronics Engineering Technology, Civil Engineering and Technology, Tools and Dies Engineering Technology, Automotive Engineering Technology, Industrial Engineering Technology, Welding Engineering Technology, Aircraft Maintenance Engineering Technology
Bachelor of Industrial Technology (B.Ind.Tech.) (Continuing Program) 2 - 3 years	Mechanical Technology, Power Technology, Electrical and Power Electronics Technology, Electronics Technology, Welding Technology, Mechatronics Technology
Bachelor of Science (B.Sc.)	Information and Production Technology Management
Master of Engineering (M.Eng.)	Construction Engineering Technology, Engineering Technology Management, Automotive and Energy Engineering Technology, Energy Engineering Technology, Mechanical Engineering Technology, Applied Electronics Engineering Technology, Welding Engineering Technology, Applied Electrical Engineering Technology
Master of Science (M.Sc.) - Multidisciplinary Program	Innovation Management for Business and Industry
Master of Science (M.Sc.)	Urban and Environmental Engineering Management, Information and Industrial Technology Management
Doctor of Philosophy (Ph.D.)	Energy Engineering Technology
Doctor of Engineering (D.Eng.)	Automotive and Energy Engineering Technology
Certificate in Technical Education in Thai-German Pre-Engineering Science and Technology-Based (Cert.in Tech.Ed.) - Thai Program/English Program	Pre-Mechanical Engineering, Pre-Electrical and Electronic Engineering, Pre-Civil Engineering

Programs	Fields of Study
(Prachinburi Campus) Faculty of Industrial Technology and Management Bachelor of Industrial Technology (B.Ind.Tech.)	Mechanical and Manufacturing Technology
Bachelor of Industrial Technology (B.Ind.Tech.) (Continuing Program) 2 - 3 years	Industrial Management, Information Technology
Bachelor of Science (B.Sc.)	Computer-aided Design and Construction Management, Information Technology
Bachelor of Engineering (B.Eng.)	Information and Network Engineering, Industrial Engineering and Management, Agricultural and Food Engineering
Master of Industrial Technology (M.Ind.Tech.)	Industrial Management
Faculty of Agro-Industry Bachelor of Science (B.Sc.)	Food Science and Management, Innovation and Product Development Technology, Food Science and Nutrition
Master of Science (M.Sc.)	Food Science and Management
Faculty of Business Administration and Service Industry Bachelor of Business Administration (B.B.A.)	Tourism and Hotel Management, Industrial Business Administration and Trade
Master of Business Administration (M.B.A.)	Industrial Business Administration and Trade
(Rayong Campus) Faculty of Engineering and Technology Bachelor of Engineering (B.Eng.)	Electrical and Automation Engineering Technology, Mechanical and Automotive Engineering Technology, Industrial and Logistics Engineering Technology, Chemical Process Engineering Technology, Material and Process Engineering Technology
Bachelor of Industrial Technology (B.Ind.Tech.) (Continuing Program) 2 - 3 years	Next Generation Automotive and Automation System Technology
Faculty of Science, Energy and Environment Bachelor of Science (B.Sc.)	Chemical Industrial Process and Environment, Energy Technology and Management
Master of Science (M.Sc.)	Energy Technology and Management, Chemical Industrial Process and Environment
Faculty of Business Administration Bachelor of Business Administration (B.B.A.)	Business Computer, Accounting, Industrial Business and Logistic Administration
Master of Business Administration (M.B.A.)	Industrial Business Administration, Accounting
Doctor of Business Administration (D.B.A.)	Industrial Business Administration

Associate Institution

Golden Jubilee Royal Goldsmith College

Programs	Fields of Study
Bachelor of Fine Arts (B.F.A.)	Royal Goldsmith

Research and Development

Science and Technology Research Institute (STRI)

The Science and Technology Research Institute is working as a center of research cooperating with institutions and organizations inside and outside the university. STRI is supporting, promoting and publishing the university's research studies, as well as administering the university's intellectual properties and the application of the research results for commercial purposes.



- To perform as a major organization of the university in forming policies and work plans; being responsible for the promotion, support, and administration of the university's research,
- To allocate research budgets and search for research support from institutions and organization within outside the university, and evaluate research results for more effective application,
- To perform as a center of research information and publication for the country's advantages as well as to promote the research and their implementations for commercial benefits. The STRI also coordinates with the section of industry and makes use of the discoveries of such research for educational purposes,
- To support the center of research in specific fields and promote educational management of the university by providing the university's lecturers and students with varied academic services: the use of laboratories, testing devices and equipment,
- To manage and administer the university's intellectual properties as a consequence of research studies as well as benefits obtained from such properties.









Academic Services

Institute of Technological Development for Industry (ITDI)

The Institute of Technological Development for Industry is a unit equivalent to the faculty level. It acts as a center of academic services for the government and the private sector in business and industry. ITDI was established in 1991.

Organizational structure

- 1. Office of the Director
- 2. Training and Research Promotion Department
- 3. Inspection and Testing Service Department
- 4. Information and Industrial Relations Department
- 5. Industrial Services Department

Organization objectives

- To bring in resources and equipment that are already available for the country's industrial development,
- To promote science and technology research and development for the advancement of the industry,
- To boost professional growth and learning development for the important benefits of education and the capacity of national industry,
- To be a coordination center of cooperation between public and private sectors to support technology development,
- To be a research center for conducting analysis of the manpower issues under the National Economic and Social Development Plan,
- To support the teaching and learning of students, in particular those pursuing science, technology, and engineering education.









Thai-French Innovation Institute (TFII)

Thai-French Innovation Institute (TFII) is a supporting administration unit founded in 1990 by King Mongkut's University of Technology North Bangkok (KMUTNB), French Federation of Mechanical Engineering Industries (FIM), France DIDAC, and other 13 French companies.

The main objectives of TFII highlights the development of technology and human resources in manufacturing process together with distribution of innovation technology to both national or regional academia and industry sector.

TFII has strong industrial sector cooperation with a number of companies, including Schneider Electric (Thailand), PTTEP, TOTAL&P Thailand, Institute de Soudure (Thailand), INS (Thailand), M.C.S Steel, Experteam, Greenyellow (Thailand) Co.,Ltd. AppliCAD Co.,Ltd. and Defence Technology Institute

TFII received ISO 9001: 2015 international quality system certification for the administration since 1998 and its laboratory is accredited for ISO/IEC 17025:2005 for the competence of the chemical composition testing and is now in the process of changing the standard. To TIS 17025 - 2017 (ISO / IEC 17025: 2017). Furthermore, TFII is the Approved Training Body (ATB) authorized by Welding Institute of Thailand (WIT) a member of International Institute of Welding (IIW), for conducting training International Welding Engineer (IWE), International Welding Specialist (IWS), International Welding Practitioner (IWP), and International Welding Inspection Personnel (IWIP) courses.

In academic section, TFII facilitates several French related academic missions including the Double Degree Ph.D Program in Electrical and Energy Engineering between KMUTNB and University of Lorraine, France. TFII also has a solid relation with Institute for Tropical Technology, Vietnam where the research is focused on the corrosion technology.









Thai-German Dual Education and e-Learning Development Institute (TGDE)

The Thai-German Dual Education and e-Learning Development Institute TGDE undertaking incurred from the signing of MOU and Bangkok protocol, the cooperative relationship agreements in October 2012 as to commemorate the 150th anniversary of Thai-German diplomacy and 53 years of academic collaboration between KMUTNB and Germany. The agreements seek to encourage German instructional approaches of Dual Education and Cooperative Education for national productivity and potential growth in academic, social and economic aspects. The scheme leads to interorganizational relationships with industries-academia collaboration, enhancement of e-learning, training activities and dissemination and transfer of technologies among students, technologists, higher education administration and personnel in Thailand and ASEAN countries.



- To promote the teaching and learning involving dual education and cooperative education; enhancing electronic media development through reciprocal collaboration between Thai-German industries.
- To encourage cooperative training and knowledge transfer to ASEAN's education related personnel.
- To consolidate cooperation in electronic media development; utilizing the media as a tool to promote learning and instruction for students, teachers, craft technicians, technologists, engineers and professional administrators.
- To promote academic and information technology consultation services in favor of industrial business and education accelerated growth.

Additional enhanced services to support the academic mission include IT consulting services specializing in serving both public agencies and private sectors. In this manner, parties involved will be able to stay abreast of changes and upcoming trends of the globalization.









The Institute for Technical Education Development (ITED)

The Institute for Technical Education Development (ITED) offers academic services in vocational and technical education, science, and technology. ITED's expertise in design and development of instruction aids, academic research service, as well as training and accreditation of a practitioner has been broadly recognized.

ITED has been certified with ISO 9001:2015 by Management System Certification Institute (Thailand), aka MASCI. The ISO standard specifically involves design, development and production of teaching aids supporting research and training for technical education.

ITED has created and maintained strong partnerships among a diverse group of organizations, some of which include the Department of Industrial Promotion, Thailand Professional Qualification Institute, and Office of the Cane and Sugar Board, Ministry of Industry.

Vision: Excellence in media and technology in education

Organizational structure

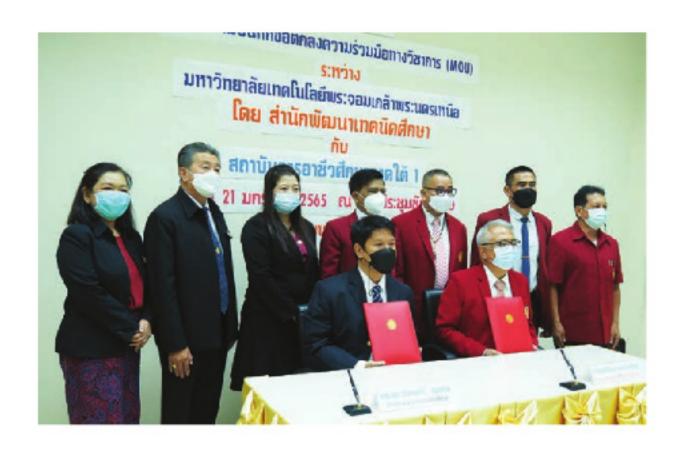
- Department of Teaching Aids
- Department of Academic Services and Innovation Development
- Department of Information System Development
- Director's Office
- KMUTNB Personnel Certification Body

Organizational objectives to:

- Encourage the design and development of educational and technological media,
- Achieve the goals of educational technology research and development,
- Develop and augment human expertise in the related areas,
- Offer professional certifications to those attaining high performance standards.









Research and Human Resource Training Center for Industry (RTCI)

Research and Human Resource Training Center for Industry (RTCI), located at Map Ta Phut, Mueang Rayong District, Rayong Province, is a part of KMUTNB Technology Park and affiliated to the Office of the President. RTCI was established in 2018 for the purpose of supporting the government's implementation of Thailand 4.0 policy. As the industrial training

center with a specialty in advanced technology in the Eastern Region of Thailand, the center provides academic services and training, and plays a role in disseminating knowledge in advanced technology to personnel in local enterprises, as well as carrying out research to promote the development on manufacturing in conformity with the quality requirement of international standards. In addition, RTCI is a learning center for modern and advanced technology that works together and supports the business and industrial sectors in the Eastern Economic Corridor (EEC). Since the special economic zone has been situated in Rayong Province, RTCI has the potential to support the government's Thailand 4.0 policy and serve the local industrial sector by providing the development of human resource in three areas of the university's specialization which will increase the industrial sector's competitiveness.



The center aims to undertake research for the development of the old automotive industry, as well as to provide training to the workforce in order to prepare them for the promotion of the modern automotive industry and improve their knowledge which they can apply to increase the efficiency of their job performance.

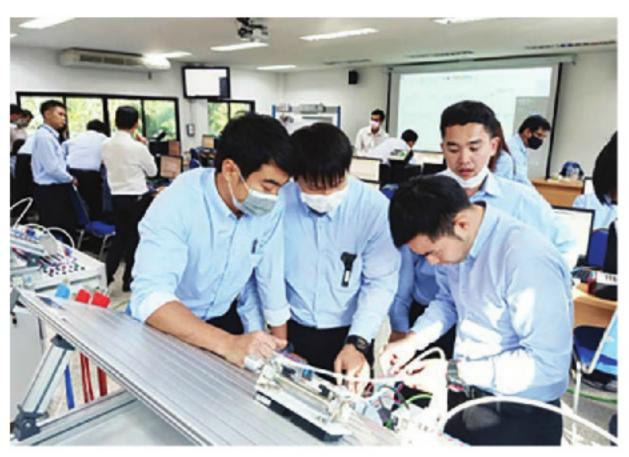
2) Center for Industrial Robot and System

The center has a goal to support the future industry (New S - Curve) by offering training to improve both theoretical and practical knowledge of the workforce in the relevant industries, so that the workforce is well prepared for the development of robotic industry according to the Thailand 4.0 policy.

3) Center for Testing in Steel Industry and Welding Standards

The center provides academic services in steel product evaluation and also offers training to the workforce in welding industry. The high quality workforce in welding is required by the local industries situated in the Eastern Economic Corridor (EEC), especially the petrochemical industry that still lacks the internationally qualified workforce.









Welding Institute of Thailand (WIT)

The Welding Institute of Thailand (WIT) was established in 2001 and it is a member of International Institute of Welding (IIW). In 2004, the Institute was approved by IIW to be the sole Authorised Nominated Body (ANB) of Thailand. WIT offers different certification categories which comprise International Welding Engineer-IWE International Welding Specialist-IWS, International Welding Practitioner-IWP, International Welder-IW, and International Welding Inspection Personnel-IWIP. In addition, International Institute of Welding (IIW) has developed new curriculums which were aimed to prepare the workforce for the Industrial 4.0 era, namely Standard and Comprehensive level in International Mechanized, Orbital and Robot Welding Personnel (IMORW), International Welding Structure Designer (IWSD), International In-Service Inspection (III) i.e. Pressure equipment, Nuclear equipment, constructions, Railway and Transmission Pipeline and level of Operator and Engineer in Additive Manufacturing (AM) in 3 areas i.e. Directed Energy Deposition-Arc Personnel (DED-Arc), Directed Energy Deposition-Laser Beam Personnel (DED-LB), Powder Bed Fusion-Lase Beam Personnel (PBF-LB). Welding Institute of Thailand is an organization unit within the Office of the President, KMUTNB.

Organizational Structure

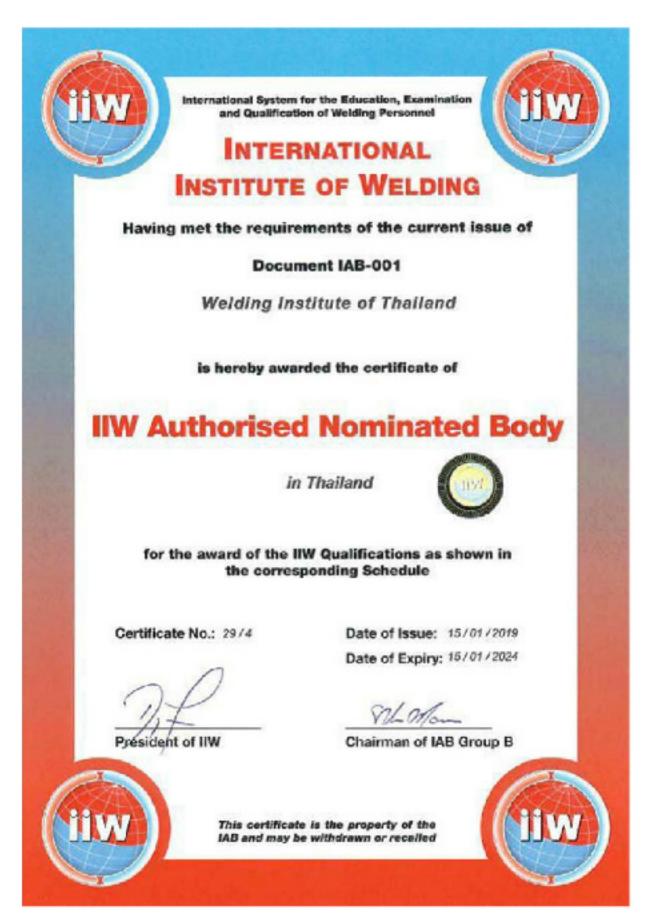
The administration of Welding Institute of Thailand is in accordance with IAB-001 Rules for the implementation of IIW Guidelines for the education, examination and qualification of welding personnel. The organization is an independent entity where the Governing Board functions as a steering committee that makes policy decisions. The Chief Executive Officer (CEO) manages overall operations, supervise and control strategic aspects of the Institute.

Objectives

- To issue an International Welding Diploma that is globally recognized as a professional welding qualification
- To support organizations, associations and personnel involvement for international welding standardization e.g. ISO as well as professional skill development
- To be the country's representative center for the National Welding Capability (NWC) focusing on education, training and research in order to encourage cooperation and connection with relevant agencies, both domestically and internationally.







Administration and Academic Services

Office of the President

Office of the President is a part of Administration of KMUTNB that deals with formalities, academic services, as well as Thai culture and art conservation. The Office of the President is subdivided into the following department:

- 1. Academic Service Department
- 2. Academic Enhancement Department
- 3. Building and Vehicle Department
- 4. Finance Department
- 5. Human Resource Management Department
- 6. General Department
- 7. Planning Department
- 8. Student Affairs Department
- 9. Legal Affairs Department
- 10. Inventories Department
- 11. Internal Audit Unit
- 12. International Cooperation Centre
- 13. KMUTNB Textbook Publishing Center
- 14. Educational Quality Assurance Center
- 15. Center of Welfare Promotion and Incentives
- 16. Central Affairs Department, Prachinburi Campus
- 17. Central Affairs Department, Rayong Campus
- 18. Welding Institute of Thailand
- Research and Human Resources Training Center for Industry, Rayong
- International Institute of Space Technology for Economic Development









Graduate College

The Graduate College is responsible for overall supervision and administration of all graduate programs offered by King Mongkut's University of Technology North Bangkok.

Established in 1986, the Graduate College is the central authority that provides graduate administrative support to the Graduate College community, ensuring that all the programs achieve academic standards as stipulated by university regulations.

Vision

The Graduate College enhances strategic leadership, S.M.A.R.T. administration and well-functioning academic structures based on KMUTNB's core values.

Identity

Responsive and responsible administration

Mission

The Graduate College is the central authority that provides support for the academic Departments and Faculties overseeing academic matters and graduate courses, thus ensuring that all the programs achieve the objectives of academic standards whereas the policies and practices are in conformity with the University regulations.

To support the KMUTNB's mission, the Graduate College provides:

- 1. Consistent, equality, and transparent administration.
- High quality and responsive services for graduate students, faculty, and staff.
- Harmonizing the interactivity between the Graduate College and faculty.
- Enhancing opportunities for skill and professional development by promoting innovation, research, and industrial co-operations.









Institute of Computer and Information Technology (ICIT)

Institute of Computer and Information Technology (ICIT) was established on July 30, 1996. ICIT is a support organization assisting academics and research works related to information technology at Bangkok, Prachinburi and Rayong campus. ICIT is responsible for software development and maintenance, campus network design and installation, improving information technology services, and also arrangement of the meeting and seminar via video conference to the university using existing and new information technologies.

Under the university governance, ICIT is made up of 6 subunits: Director Office; Academic Service and Research Department; Information System Development Department; Network System Engineering Department; Prachinburi Information Technology Department; and Rayong Information Technology Department.

Moreover, ICIT was certified as ISO 9001:2015 compliant in the scope of IT services and as ISO/IEC 29110 compliant in the scope of software project management and software implementation process.

Service Location

1. Bangkok campus on the 3rd - 5th floor of Anek Prasong building including computer service rooms, wireless service room, computer laboratory, knowledge exchange and independent study room, IT clinic, seminar and training room (smart classroom), network operation center (NOC), administrative office, network system engineering department, academic service and research department, and information system development department.

Moreover, at the basement of Building 79, there is "FINN Space". It is the Co-Learning space, where everyone can share and create new ideas with friends and feel "FIN" at the same time.

- 2. **Prachiburi campus** on the 6th floor of Sirindhorn Building including information technology department, computer services rooms, computer laboratory and printing room.
- 3. Rayong campus on the 7th floor of Anek Prasong Building including Rayong information technology department, and computer laboratory for education and research.









Central Library

Central Library, founded in 1988, is one of educational service units of King Mongkut's University of Technology North Bangkok (KMUTNB). Currently, KMUTNB Central Library are situated in four different locations in order to provide the most convenient services to staff and students as follows:

- 1. Navamindra Rachinee Building (2nd 9th Floors)
- 2. Faculty of Architecture and Design (2nd Floor)
- 3. Prachinburi Campus (Central Library Building)
- Rayong Campus (5th 6th Floors of Anekprasong Building).

KMUTNB Central Library is targeted to be a "Smart Digital Library".

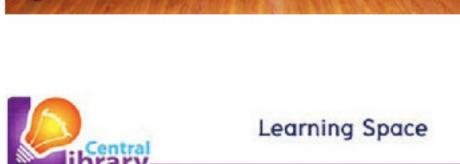
The Central Library has main objectives to develop, procure, store, and collect information resources as well as to provide places and information resources services to support staff members and students for research practices, learning and knowledge development.

The Central Library has played major role as the University's center of the standard mass of knowledge. The services of many kinds of the information resources such as that of general books, reference books, domestic and international standards, domestic and international conference proceedings and journals, newspapers, audio & visual multimedia, electronic databases and other academical documents. The service collections always have been systematically serviceable managed. Practically, the Central Library has additionally provided the online modernized services through the information technology to service all officers and students of KMUTNB modernly educationally. The Central Library provides many standardized modern services such as Digital Contents, Smart Space, Smart Room, Smart Apps, etc.













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KMUTNB Awards

Prime Minister's Award 2001 for the Best Academic Management and Development Category among Thai Universities



On the 29th of April 2002, it was with great pride that KMUTNB President, Prof. Dr. Teravuti Boonyasopon received the 2001 Award for the best academic Administrator with regard to management and development among Thai universities. The award was given by H.E. Mr. Pongpol Adireksarn, Fomer Deputy Prime Minister of Thailand. This annual award was introduced in 1998 by the then Thai government as part of a reform program to increase public sector competitiveness and commitment to community and national welfare. He received the same award once again on the 24th of September 2003.

The Golden Garuda for the Outstanding University President of Thailand 2001-2002



June 2003, Prof. Dr. Teravuti Boonyasopon received the Golden Garuda for the outstanding University President of Thailand 2001-2002. This award is granted by the Civil Servants Association of Thailand to honor the outstanding official administrator serving as a good role model for Thai civil servants. Similar awards were allocated to 5 other categories: Permanent Secretary, Director-General, Governor, Rector of a University, and Ambassador categorization.

KMUTNB President received L'Ordre National du Mérite Award



French Government awarded the Ordre National du Mérite (National Order of Merit) to Prof. Dr. Teravuti Boonyasopon who established TFII with objectives to promote the transfer of French technology, R&D between the public and private sectors of France and Thailand in 1990. H.E. Mr. Laurent Aublin , French Ambassador to Thailand decorated Ordre National du Mérite medal to Prof. Dr. Teravuti Boonyasopon on 8th July 2003.

H.M. the King Award 2007 for the Best Organization in Science and Technology in Thailand



In the year 2007, KMUTNB was privileged to receive the award for the best national organization in science and technology granted by His Majesty the King. According to the Ministry Council, the award was an acknowledgement of the university's distinguished personnel, organization, and programs benefitting society as well as the nation. This honorable award strengthened the university's commitment toexcellence in academic achievement, research, innovation, and creativity in science and technology. Her Royal Highness Princess Maha Chakri Siridhorn gave this award to Asst. Prof. Preecha Org-aree at Sala Dusitdalai-Suanchitlada on 30th November 2007.

KMUTNB President received Officier de Légion d'Honneur Award



Prof. Dr. Teravuti Boonyasopon, one of the founders of TFII and former KMUTNB President was bestowed l'Ordre national de la Legion d'honneur from France. H.E. Mr. Gildas le Lidec, the French Ambassador to Thailand, on behalf of President Nicolas SARKOZY of France presented a medal to Prof. Dr. Teravuti Boonyasopon on 15th October 2010.

The Légion d'Honneur (National Order of the Legion of Honor), is the highest decoration rank in France which honors those with eminent performance.

KMUTNB President received the Cross of the Order of Merit of the Federal Republic of Germany



On the 2nd October 2012, the Thai-German Conference on Dual Education and Dual Studies was organized at KMUTNB on the occasion of 150th anniversary of Thai-German Diplomatic Relations and 53rd anniversary of KMUTNB-German educational cooperation. The President of KMUTNB, Prof. Dr. Teravuti Boonyasopon was awarded with the Cross of the Order of Merit of the Federal Republic of Germany. Dr.h.c. Cornelia Pieper, Minister of State, Federal Foreign Office presented Prof. Dr. Teravuti Boonyasopon the prestigious medal.

KMUTNB Faculty Members Have Achieved Great Distinctions 2021-2022

A Royal Order was bestowed upon KMUTNB President

A Royal Order of the Direkgunabhorn (Chatuttha Direkkhunaphon Class) of the year 2021 was bestowed upon Prof. Dr.-Ing. habil. Suchart Siengchin, President of KMUTNB and faculty member at Materials and Production Engineering Program of the Sirindhorn International Thai-German Graduate School of Engineering. The Royal Decoration was awarded in recognition of the recipeint's exceptional and distinguished achievement in the category of national outstanding researcher.



KMUTNB Ranked within World's Top 2% Scientists by Stanford World Ranking

KMUTNB researchers have been listed among the Stanford University "World Ranking of Top 2% Scientists 2021" across major scientific fields for career-long citation impact 2020. The list include Prof. Dr.-Ing. habil. Suchart Siengchin, President of KMUTNB and lecturer in Materials and Production Engineering Program of TGGS (in Polymers); Prof. Dr. habil. Phatiphat Thounthong and Assoc. Prof. Dr. Montree Siripruchyanun from the Department of Teacher Training in Electrical Engineering, Faculty of Technical Education (in Electrical & Electronic Engineering)







KMUTNB researchers among World's Top 2% Scientists 2021 by Stanford University for single year citation impact 2020 consist of Prof. Dr.-Ing. habil. Suchart Siengchin, Prof. Dr. habil. Phatiphat Thounthong, Prof. Dr. Piti Sukontasukkul, Dr. Jyotishkumar Parameswaranpillai and Dr. Sanjay Mavinkere Rangappa.











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Person of the Year Award 2021

Assoc. Prof. Dr. Pairote Stirayakorn, Dean of the Faculty of Technical Education was awarded the "Person of The Year 2021" in the category of Academic Service Provision for Society 2021. The ceremony by the theme "Million Virtue Seeds Sown in Gratitude to the Motherland" was held by "For Thai Social Foundation." The distinction is given in recognition of the recipient's positive role model regarding education delivery for society benefits, cooperative competencies and adherence to moral and ethical principles,

The award ceremony was presided over by H.E. Air Chief Marshal Chalit Pukbhasuk, Privy Councilor and Secretary-General of the Phra Dabos Foundation. The ceremony took place on March 5, 2021 at Air Force Convention Hall, Phahonyothin road, Bangkok.





Senior Research Awards 2021 from National Research Council of Thailand

Prof. Dr. habil. Phatiphat Thounthong. Professor of Electrical Engineering, Faculty of Technical Education was awarded a TRF Research-Team Promotion Grant 2021 from the National Research Council of Thailand. The funding provides support for the project "DC Power Supply and their Applications for Thailand's Sustainable Development."

The grant is determined to support distinguished senior researchers and to honor scholars who have shown outstanding work and significant accomplishment, who serves as positive role models whose achievements are acknowledged nationally and globally.



Distinguish International Associates Award 2021

Prof. Dr. Nipon Pisutpaisal from the Department of Agro-Industrial, Food, and Environmental Technology (AFET) was presented the 2021 Distinguished International Associates Award (DIA) by The Royal Academy of Engineering, the UK's national academy of engineering. Serving as an Academy Ambassador for 2 years, he gave inspiration and applied engineering knowledge and skills in the missions that foster socio-economic sustainability. Additionally his efforts have strengthened cooperation among stakeholder networks and UK's international cooperation on research and innovation.



Best Presentation Award

Assoc. Prof. Dr. Ubolrat Wangrakdiskul from the Department of Production Engineering, Faculty of Engineering received the Best Presentation Award at the 2021: 3rd International Conference on Resources and Environment Sciences (ICRES 2021). The presentation is a part of her research work, entitled "Valorisation Wastes from Sugar Mill Plant and Water Supply Treatment Process as Alternative Materials for Ecological Ceramic Floor Tiles" ICRES 2021 was held during June 5-7, 2020 in Kasetsart University, Bangkok.





Prime Minister Award Innovation for Crisis

Prof. Dr. Chantaraporn Phalakornkule from the Department of Chemical Engineering, Faculty of Engineering was announced the recipient of the "Prime Minister Award: Innovation for Crisis (Public Sector) for the "Small Hospital Medical Oxygen Generator." The ceremony took place in "The Startup x Innovation Thailand Expo 2021 (SITE 2021) under the concept of "Deep Tech Rising...The Next Frontier of Innovation."

In-depth technology upgrades for future innovations specifically focus on 5 domains: agriculture, food, medicine, aerospace along with the category of robotics, artificial intelligence and virtual reality technology. The award aims at honoring the organizations that support and promote innovation to combat COVID-19 in the midst of the global pandemic. The innovations must meet the criteria of being novel, useful and capable of practical use.





Gold Medal at Inventions Geneva 2021

Assoc. Prof. Dr. Anuchit Jitpattanakul, from the Department of Mathematics Faculty of Applied Science, in collaboration with his armament research team to enhance national defense military capability participated in "The 48th International Exhibition of Inventions Geneva," an annual specialist event devoted to new technologies, inventions and innovations. The team inventors won Gold Medal for the project "Automatic urine color and weather measurement tool." The 48th International Exhibition of Inventions Geneva was held on March 10-14, 2021.





TIChE Award for Excellence in Chemical Engineering Education

Assoc. Prof. Dr. Phavanee Narataruksa, Lecturer at the Department of Chemical Engineering, Faculty of Engineering and Chair of KMUTNB's engineering program committee won the TIChE Award for Excellence in Chemical Engineering Education from TIChE Outstanding Professional Chemical Engineering Award 2021. The awards ceremony was organized by the Thai Institute of Chemical Engineering and Applied Chemistry. The awards are offered in recognition of faculty members and academic professionals who have made significant contribution in chemical engineering, those who achieve excellence in chemical engineering education and those who serve as positive role models whose achievements have been extensively recognized.





Fiscal Year 2022 Invention Award

Asst. Prof. Dr. Mahasak Ketcham, Lecturer at Department of Information Technology Management, Faculty of Information Technology and Digital Innovation received a fiscal year 2022 invention award from the 16th Thailand Research Expo 2021. The award was offered for "A Prototype Device for Measuring Paddy Rice Leaf Nitrogen Content to Reduce Rice Production Costs."

Thailand Research Expo 2021 provides platforms for research exchanges and important academic networks, which is critical to the future global research initiatives. The event was organized by the National Research Council of Thailand in collaboration with public and private research networks. It was held on November 22-26, 2021 at Centara Grand & Bangkok Convention Centre at Central World, Bangkok.



Faculty receives AFEO Awards and Fellowship 2021

Asst. Prof. Dr. Suchanya Posayanant from the Department of Teacher Training in Civil Engineering and Associate Dean for International Relations and Communication Affairs, Faculty of Technical Education was selected from the Awards Selection Committee of the Engineering Institute of Thailand under His Majesty the King's Patronage (EIT) to be a recipient of the ASEAN Federation of Engineering Organization (AFEO) Awards and Fellowship 2021 in the category of AFEO Honorary Member. The awards were granted in recognition of individuals who had made a valuable contribution to the advancement in engineering.



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KMUTNB Robot Achievements

HISTORY OF WORLD ROBOCUP RESCUE





Robot Team Independent World Championship 2006





Robot Team Independent World Championship 2007





Robot Team iRAP_PRO World Championship 2009





Robot Team iRAP_PRO World Championship 2010

HISTORY OF WORLD ROBOCUP RESCUE





Robot Team iRAP Judy World Championship 2011





Robot Team iRAP_Furious World Championship 2013





Robot Team iRAP ROBOT World RoboCup Rescue 2016





Robot Team iRAP ROBOT World RoboCup Rescue 2018

KMUTNB Achievements Awards in 2021 - 2022

WeWake Tech Team Awarded a Silver Medal at the Challenge and Innovation Forum (CIF) Qatar 2021

WeWake Tech student team from KMUTNB took an active part in the Challenge and Innovation Forum (CIF) Qatar 2021 and received a silver medal for the project of innovation. The technology and innovation forum, which aimed at motivating and encouraging international creative inventors and innovators was held from 7 through 11 November 2021 at the Qatar National Convention Center (QNCC), Doha, Qatar.





Students of Computer and Electronics Engineering Awarded at the TESA Top Gun Rally 2021

A team of Computer and Electronics Engineering students participated in The Competition for Skills in Embedded Systems, Thailand 15th Championship" (TESA Top Gun Rally 2021#15) and won The Best of The Best Embedded System Developers and Top Score on Project Management on the topic "A Model Design on Conveyor Belt Intelligent Lemon Sorting" (Smart Manufacturing System).

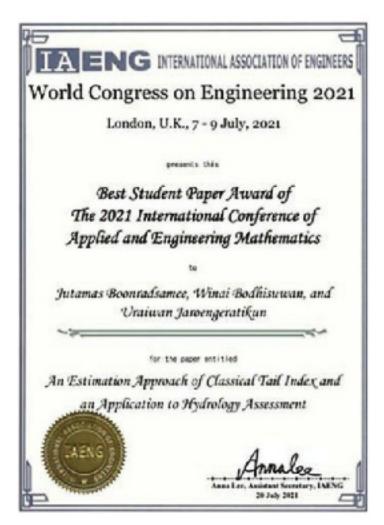
The TESA Top Gun Rally 2021 was organized at Siam University on February 22-26, 2021 by Thai Embedded Systems Association (TESA) and allied organizations.





Faculty of Applied Science's PhD. Student Wins Best Student Paper Award at World Congress on Engineering 2021

A PhD. student at the Faculty of Applied Science received the Best Paper Award for the paper entitled "An Estimation Approach of Classical Tail Index and an Application to Hydrology Assessment" from The 2021 International Conference of Applied and Engineering Mathematics (ICAEM'21). The conference ICAEM'21, taking place 7-9 July 2021 in London was held under the World Congress on Engineering 2021 which was organized by the International Association of Engineers.





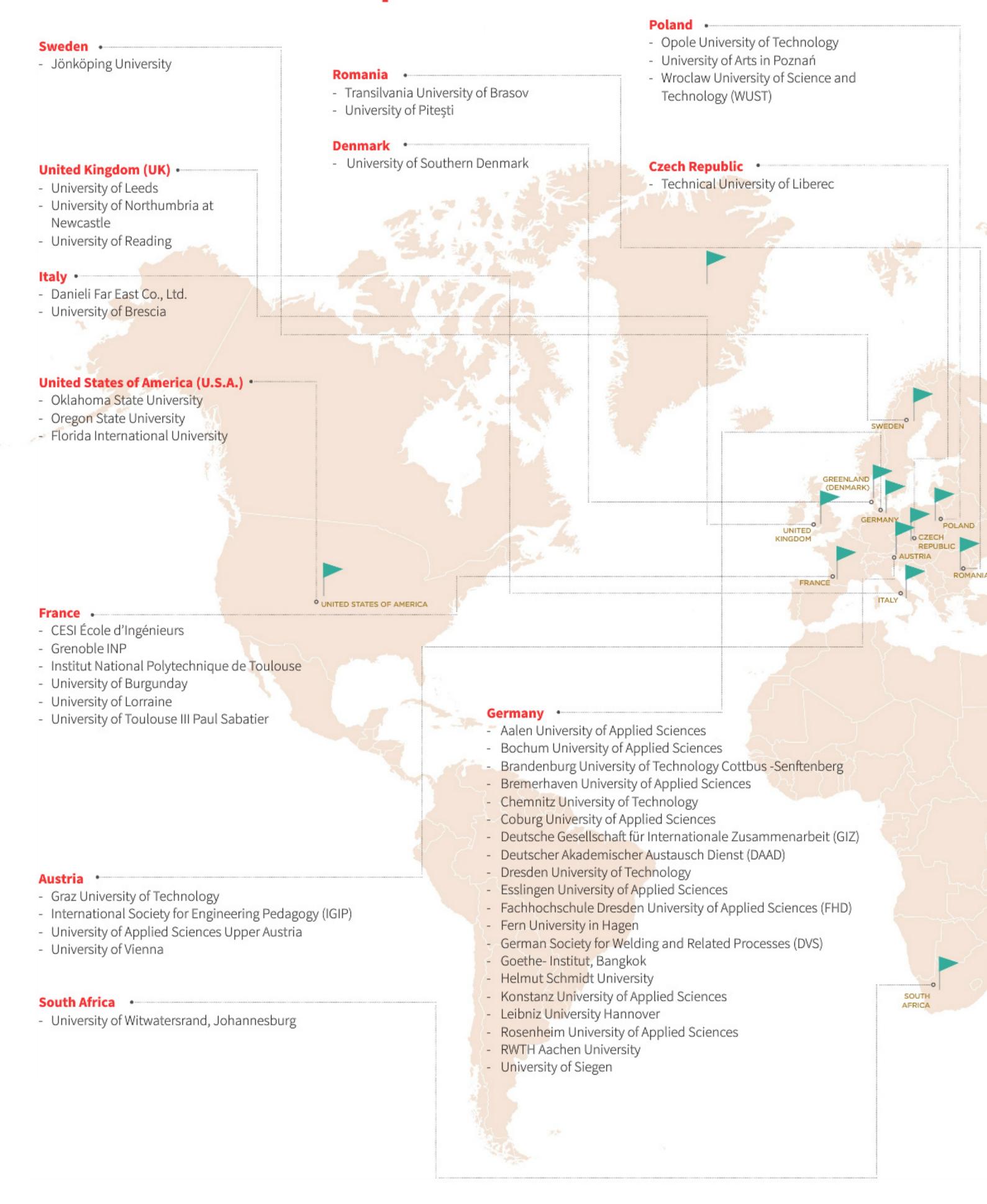
Faculty of Applied Science Student Awarded Silver Medal from Thailand Research Expo 2021

A students of the Faculty of Applied Science won a silver medal at the 16th Thailand Research Expo 2021 for the "Auscultation Training Model." The Expo was organized by National Research Council of Thailand (NRCT) under the supervision of the Ministry of Higher Education, Science, Research and Innovation in collaboration with public and private research networks in Thailand. The event took place on November 22-26, 2021





International Co-operation



China

- Central South University
- Chengdu Technological University
- China Agricultural University
- Harbin Institute of Technology
- Northwestern Polytechnical University
- Qingdao University of Science and Technology
- Rubber Valley Co., Ltd.
- Xi'An Jiaotong University

German University of Technology in Oman

India

- Indian Institute of
- Technology, Jammu - Manipal University Jaipur

Myanmar

- Victoria University College
- Technological University of Dawei

Malaysia

CHINA

MYANMAR

THAILAND

Singapore

Indonesia .

MALAYSIA

- Singapore Polytechnic

- Infineon Technologies

Asia Pacific Pte. Ltd.

- SIA Engineering Company

SINGAPORE

INDONESIA

INDIA

- ECRI BERHAD
- Malaysian Institute of Road Safety Research (MIROS)
- Universiti Malaysia Perlis
- Universiti Teknikal Malaysia Melaka
- Universiti Teknologi Malaysia
- Universiti Telekom SDN BHD
- Universiti Tunku Abdul Rahman
- Universiti Malaysia Pahang
- Universiti Putra Malaysia
- Multimedia University

TAIWAN

KOREA

PHILIPPINES

*Thailand

- Bosch Automotive (Thailand) Co., Ltd.
- Delta Electronics (Thailand) Public Company Limited
- Du Pont (Thailand) Ltd.
- HGST (Thaialnd) Limited
- Huawei Technologies (Thailand) Co., Ltd.
- Goethe Institut, Bangkok
- German Thai Chamber of Commerce (GTCC)
- Lighthouse Worldwide Solutions Ltd.
- Michelin Siam Co., Ltd.
- MODEINDUSTRIAL
- Schaeffler (Thailand) Co., Ltd.
- Schneider Electric (Thailand)
- Siam City Cement Public Company Limited
- SIEMENS Ltd. Thailand
- Sony Technology (Thailand) Co., Ltd.
- SPIE Oil and Gas Services
- Western Digital (Thailand) Co., Ltd.
- Yaskawa Electric (Thailand) Co., Ltd.

South Korea

- Chung-Ang University
- Daegu Gyeongbuk Institute of Science and Technology (DGIST)
- Hankyong National University
- Halla University
- Hongik University
- Keimyung University
- Korea Transportation Authority Korea Automobile Testing & Research Institute
- Namseoul University
- Soonchunhyang University
- University of Seoul

Japan

- Chiba University
- Japan Material Handling Society
- Junsei Education Institution
- Kyoto Institute of Technology
- Kyushu Institute of Technology
- Miyagawa Koki Co., Ltd.
- Nagaoka University of Technology
- Nagoya University - Nine National Colleges of Technology in
- Kyushu Okinawa Region (KOSEN) - Okinawa National College of Technology
- Osaka University
- The University of Electro-Communication
- Tokyo City University
- Tokyo Institute of Technology
- University of Tokyo

Taiwan

- Chung Yuan Christian University
- Kun Shan University, Tainan
- National Chung Cheng University
- National Kaohsiung University of Science and Technology
- National Taipei University of Technology
- National University of Tainan

Lao People's Democratic Republic

- Lao-German Technical College
- Ministry of Education and Sports
- Pakpasak Technical College
- Soutsaka College of Management and Technology

Vietnam

- Hanoi University of Industrial Fine Arts
- Ho Chi Minh City University of Technology
- Institute for Tropical Technology, Vietnam Academy for Science and Technology
- Vietnamese-German University

Philippines

AUSTRALIA

- De La Salle University - Dasmariñas

- Bina Nusantara University, Jakarta

- Institut Teknologi Sepuluh Nopember
- Institute of Technology and Health Bali
- Universitas Atma Yogyakarta

Australia .

- Edith Cowan University

International Co-operation Activities

MoU with Université de Lorraine (UL), France

On 23 September 2021, the virtual MOU signing ceremony between Université de Lorraine (UL), France, and King Mongkut's University of Technology North Bangkok (KMUTNB) was held. The event was honored by the presence of H.E. Mr. Thierry Mathou, the French Ambassador to Thailand, and H.E. Mr. Sarun Charoensuwan, the Thai Ambassador to France, who delivered congratulatory



remarks to all working teams involved with the collaborative activities between KMUTNB and UL. This is the latest MoU between the two universities which will stregnthen the international research partnership entitled "EE-TFRC: Electrical Engineering Thai-French Research Center." Due to the launching of the University of Lorrain's International Research Partnership project in 2019, the team of Thai-French researchers from GREEN and LEMTA's, France, and RERC-TFII, Thailand, jointly applied for the project. In 2020, UL has selected the international research partnership entitled "EE-TFRC: Electrical Engineering Thai-French Research Center" as one among the three selected projects submitted by candidates from many countries. The project period is 4 years and the field of the project is Electrical energy or Renewable Energy in particular. This project will contribute to the the advancement of Renewable Energy as its study will focus on three main topic as follows:1. Hydrogen as an energy carrier, 2. Electromechanical conversion chains for electric mobility and 3. Islanded electrical networks and micro-grids.



MoU with SPIE Oil & Gas Services, France

On 1 October 2021, the virtual MOU signing ceremony was held in order to officially establish the collaboration between SPIE Oil & Gas Services, an international sub- diary of the SPIE group specializing in the energy sector, and the Thai-French Innovation Institute (TFII), KMUTNB, in the area of education, research and industry. The ceremony was co-presided by Prof. Dr. -Ing. habil. Suchart Si engchin, KMUTNB President, and Mr. Brice AUGAY, Asia Pacific Business Unit Managing Director at SPIE Oil & Gas Services.



2021 Research, Invention, and Innovation Congress (RI2C 2021)

During 1 - 2 September 2021, King Mongkut's University of Technology North Bangkok organized the "2021 Research, Invention, and Innovation Congress (RI C 2021)." This international virtual con-ference was aimed to be a platform for the reseachers to ex-change knowledge and share their research outcomes. It was attended by reserchers and academicians from across the world. The themes of this conference emphsized on Innovative Materials Engineering, Innovative Electrical and Electronics and Innovative Sustainable Science. Additionally, there are over 148 papers from this conference that all of them were selected for publishing in international journals indexed by Scopus.



Visiting Researcher from Université de Lorraine (UL), France

During 15 Februry -15 August 2021, Assoc. Prof. Dr. Damien Guibert, GREEN Lab, Université de Lorraine, France, was invited to work as a visitig researcher for the research collaboration on the design and control of power electronics for microgrid applications which is carried out under the project on Electrical Engineering by Thai-French Research Center (EE-TFRC) at the Renewable Energy Research Centre (RERC), KMUTNB. Also another mission of his trip was to provide consultand for a thesis of Mr. Burin Yodwong, TFII researcher, who is a Ph.D student of Doctoral Dual Degree of KMUTNB and UL.



The Ambassador of the Kingdom of Bhutan to Thailand Visited KMUTNB

On 26 March 2021, Prof. Dr.-Ing. habil. Suchart Siengchin, KMUTNB President and the team of KMUTNB's executives warmly welcomed H.E. Mr. Tshewang C. Dooij, Ambassador of Bhutan to Talialand and his colleagues at Ratchapruek Room, KMUTNB. They paid an official visit to KMUTNB to have a meeting with the KMUTNB's executiveson the collaborative op-portunity between KMUTNB and Bhutan in different areas, especially in the area of Space Technology. After having the fruitful discussion in the meeting, KMUTNB granted 12 scholarships both in graduate and un-dergraduate levels to the Bhutanese students in order to promote the academic collaboration between the two nations.



The Virtual Meeting with Central South University (CSU), China

On 8 April 2021, the meeting on collaboration between KMUTNB and Central South University China was held via an online platform. For years, both universities have developed the close cooperation in the area of Railway Technology, and it leads to several collaborative outcomes, such as the launching of a joint degree program, research project, student exchange and internship. Also, CSU has placed importance on the development of human resource and has provided scholarships to KMUTNB's students regularly. The meeting was presided over by Prof. Dr. Somrerk Chandra-ambhorn, KMUTNB's vice President for Research and Information Technology Development, Prof. He Xuhui, Dean of CSU's School of Civil Engineering, and it was attended by relevant executives and faculty members from both sides.



The Virtual Meeting with Chengdu Technological University (CDTU), China

On 22 April 2021, Asst. Prof. Dr. -Ing. Sunantha Sodsee, the dean of Faculty of Information Technology and Digital Innovation, presided over the virtual meeting between the team of KMUTNB and the team of Chengdu Technological University (CDTU) to explore the potential areas for initiating academic collaboration between both universities on Information Technology. The KMUTNB side was represented by Asst. Prof. Dr. Sakchai Tangwannawit, Associate Dean for Academic Affairs and Research, Asst. Prof. Dr. Sucha Smanchatte lecturer of the faculty and also Ms. Phirmvalanch

Moosikaphan, Director of International Cooperation Centre, KMUTNB. The CDTU side was represented by Mrs. Li Xi, Director of International Office and her team. Both sides are interested in the potential to establish collaboration on online academic activities in the near future, such as an online seminar or a cultural exchange program.



The Virtual Meeting with Ilmenau University of Technology, Germany

On 20 October 2021, Prof. Dr. rer.nat. habil. Dr. Thomas öhme, a professor for mathematics at the institute for Math-ematics of the Technische University Ilmenau (TU Ilmenau), had an online meeting with the team of faculty members of Mathematics Department to explore the potential areas for initiating academic collaborations between TU Ilmenau and the Faculty of Applied Science, KMUTNB. The meeting was presided over by Ms. Sikan Kulchonchan, KMUTNB's Vice President for International Affairs, and was also attended by Assoc. Prof. Dr. Surattana Sungnul, Head of the

Mathematics Department, Assoc. Prof. Dr. Sekson Sirisubtawee, Coordinator of the KMUTNB - TU Ilmenau Cooperation, Assoc. Prof. Dr. Sanoe Khunprasert, Head of EDMA Program, Assoc. Prof. Dr. Pongpol Juntharee, Committee of EDMA Program.

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KMUTNB and Fachhochschule Dresden to Co-organize the Cross-Cultural Business Management Special Online Workshop 2021

During 8 October 2021 - 12 November 2021, King Mongkut's University of Technology North Bangkok (KMUTNB), in Collaboration with Fachhockschule Dresden (FHD), Germany, organized the Cross-Cultural Business Management Special Online Workshop 2021, which was attended by 30 students from both universities, consisting of 15 representatives from each side. This workshop was arranged with the purpose of promoting the exchange of knowledge and ideas between the students of both universities, and also to widen the students' knowledge and understanding of cross-cultural business management. The topics of the lecture included "Reading between the line: People, Business, and Culture," Global Strategic Branding," and "Overview of the Southeast Asian region." The workshop was moderated by a team of faculty members of International College, KMUTNB.

This workshop will provide a great opportunity for the students to learn about the views on business and cultures of people from foreign countries who posess different background, and this will enable them to have an insight into the business management in different cultural backgrounds. So they will be able to work more efficiently in an international environment.







KMUTNB Co-organize the "Magallanes World Study Tour" with Other Nine Universities

On 20 May 2021, Asst. Prof. Dr. Tanaporm Rojhirunsakool, Director of the Center for International Engineering Programs (CIEP), Faculty of Engineering, KMUTNB and delegagates from KMUTNBpaticipated the "Magallanes World Study Tour program" which was organized by nine partner universities across the world, including Universiti Tunku Abdul Rahman, Malaysia, Meru University of Science and Technology, Kerya, University of West Attice, Greece, Jangsu Normal University, China, University of Limerick, Ireland, Hungkuang University, Tahwan, Fachhochschule Dortmund University of Applied Sciences and Arts, Germany. The program offered an opportunity for the participants to learn about arts, histories, cultures and languages of each country of the partner universities. KMUTNB was invited by UTAR university to give a presentation on the topic of "A Day in Thailand" on 23 June 2021 at 30.0 PM Chailand Time.

Lead as a World Global Leader Program" by Humanitarian Affairs Asia

During 16 - 17 August 2021, the 15 selected representatives of MUNTIMBS students attended the virtual seminar. "Lead as a World Global Leader, World Series Webinars." The program was organized by Humanitarian Affairs Asia with the purpose of preparing the young generation for a global career of Collaboration and contribution. The theme of this conference is in line with the concept of Global Citizenship embedded in the United Nations Sustainable Development Goals through SDG 4: Ensuring Inclusive and Quality Education for All and Promote Life Long Learning, as Humanitarian Affairs Asia regards it important to promote the knowledge and skills needed for promoting sustainable development.





Recognising achievement and innovations which will improve road safety





KMUTNB recognised with the Prince Michael International Road Safety Award 2021

The King Mongkut's University of Technology North Bangkok's community is proud that the university has been granted the prestigious Prince Michael International Road Safety Award for the outstanding work being carried out by the Automotive Safety and Assessment Research Centre (ASAE-RC) and its contribution to improve safety in Thailand and Southeast Asia. This award is presented to organizations that HRH Prince Michael of Kent considers to have had notable achievements and innovations in road safety initiatives internationally.

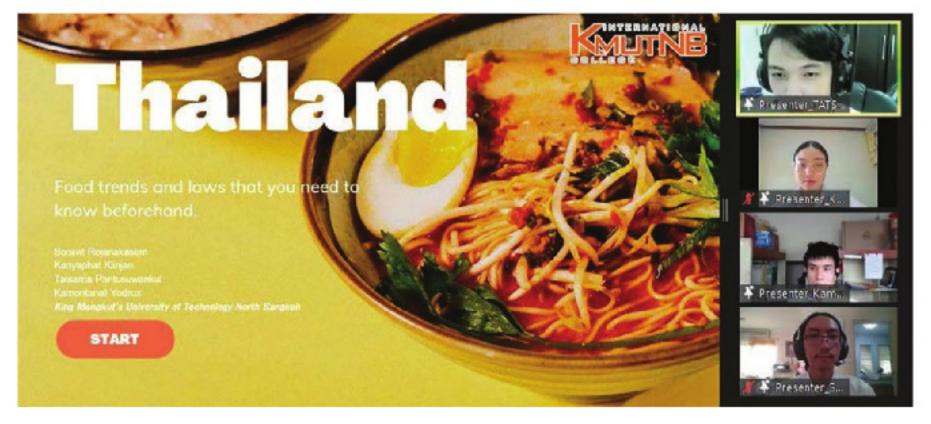
ASAE research centre was established under KMUTNB to focus on vehicle safety aspects. Led by Assoc. Prof. Dr. Saiprasit Koetniyom from The Sirindhorn Thai-German Graduate school of Engineering (TGGS), ASAE-RC has produced many research findings and patents in the area related to the safety of road users including motorcyclist and pillion passenger. It has successfully elevated vehicle safety standard in Thailand. Other than conducting research and development, ASAE-RC has also committed to do various kind of activities to raise public awareness of road safety, especially with regards to motor vehicle safety. The bestowing of this award reflects the international recognition of the ASAE-RC 's work in collaboration with several international organizations in Thailand and Southeast Asia for the betterment of road safety.

Sepuluh Nopember Institute of Technology (ITS), Indonesia

During 26 July to 6 August 2021, 4 representatives from KMUTNB attended the CommTECH Online 2021 Summer Edition. This innovative program was virtually organized by Sepuluh Nopember Institute of Technology (ITS), Indonesia, to provide an opportunity for university students zand professionals from across the world to expand their knowledge in the community and global issues through a variety of activities. Not only being a platform for the participant to discuss, exchange ideas and develop a mutual goal for the future of the global community, but the program also offers an insight into the Indonesian culture and language.

Symposium on Business and Consumer Insights Organized by Singapore Polytechnic

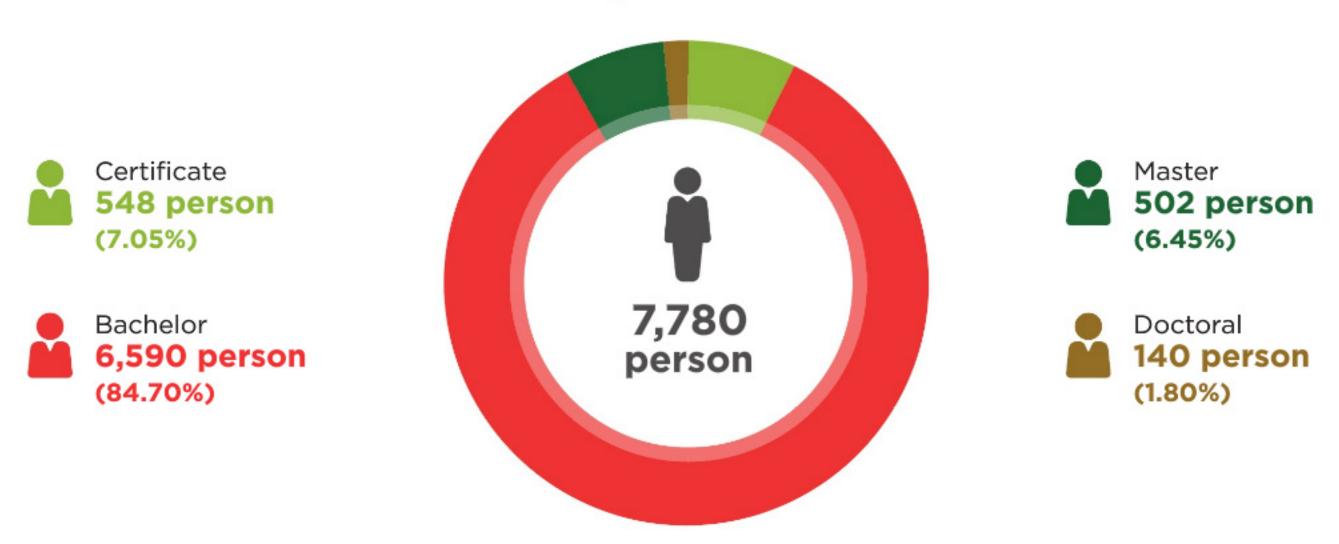
On 3 November 2021, KMUTNB's students from the International College and the Faculty of Business Administration and Service Industry attended the Symposium on Sharing on Business and Consumer Insights: Global Business Strategies organized by Singapore Polytechnic, Singapore. This conference was aimed to be a platform for the students to exchange ideas about their own culture, social and economic practices regarding food business. Food is a means to understand the business environment across countries, like Vietnam, Thailand, Singapore, and Cambodia. As ASEAN becomes more and more inter-connected and inter-dependent, the insights

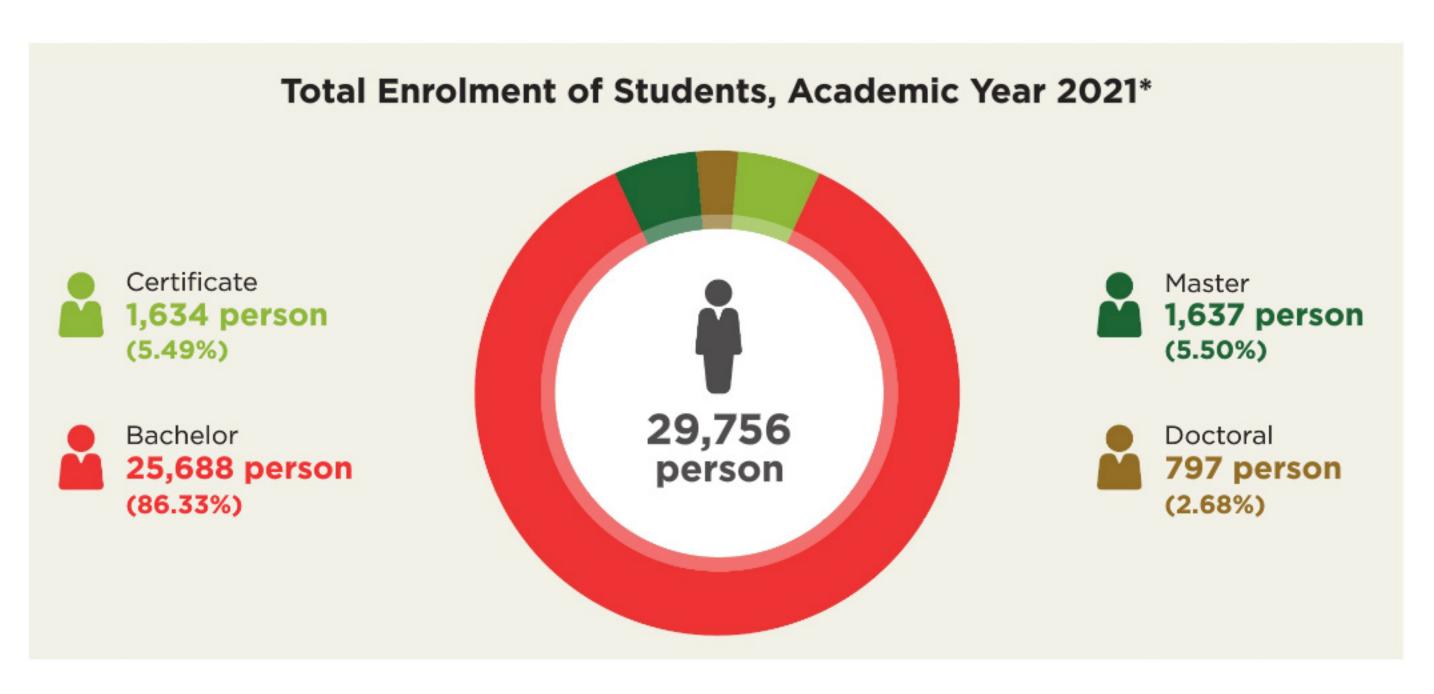


into business and consumer in other countries will be very helpful for the students' careers. The 4 representatives of KMUTNB's students also gave a presentation about food business and consumer in Thailand, including, Mr. Soravit Rojanakasem, Ms. Kanyaphat Klinjan, Mr. Tatsama Pantusuwankul and Mr. Kamontanat Yodrux. Also, other 20 students from the International College and the Faculty of Business Administration and Service Industry attended the symposium.

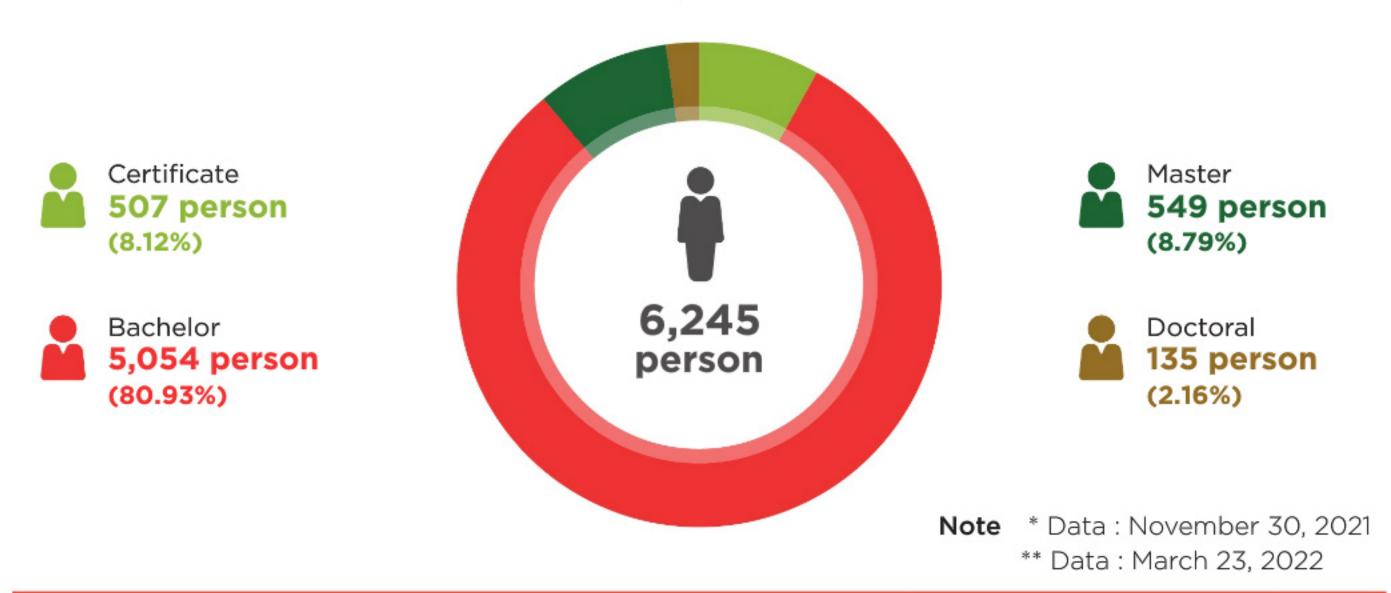
General Information

New Students, Academic Year 2021*



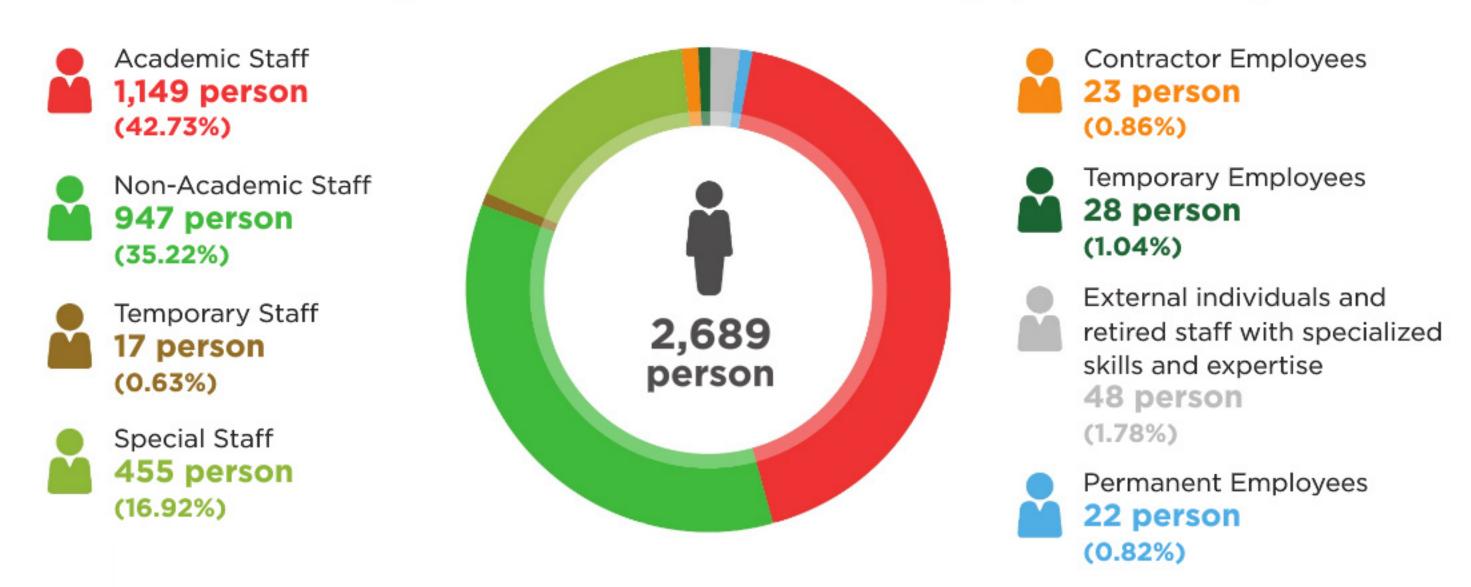


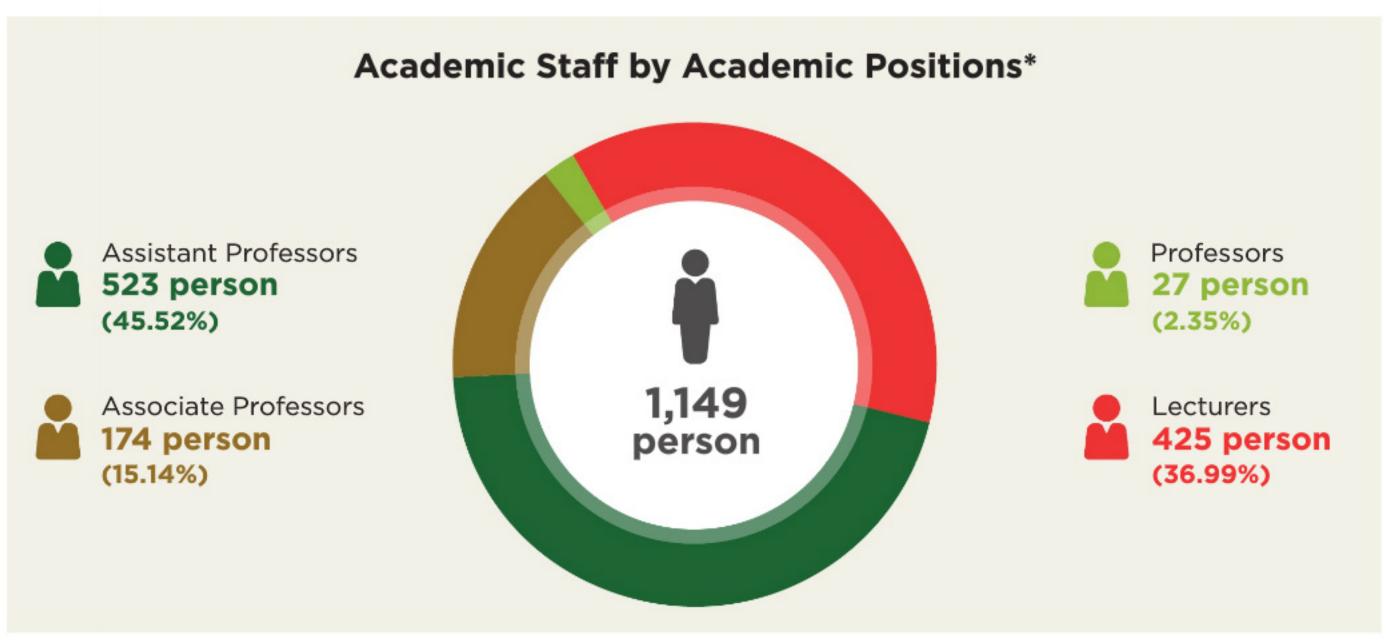
Number of Graduates, Academic Year 2020**



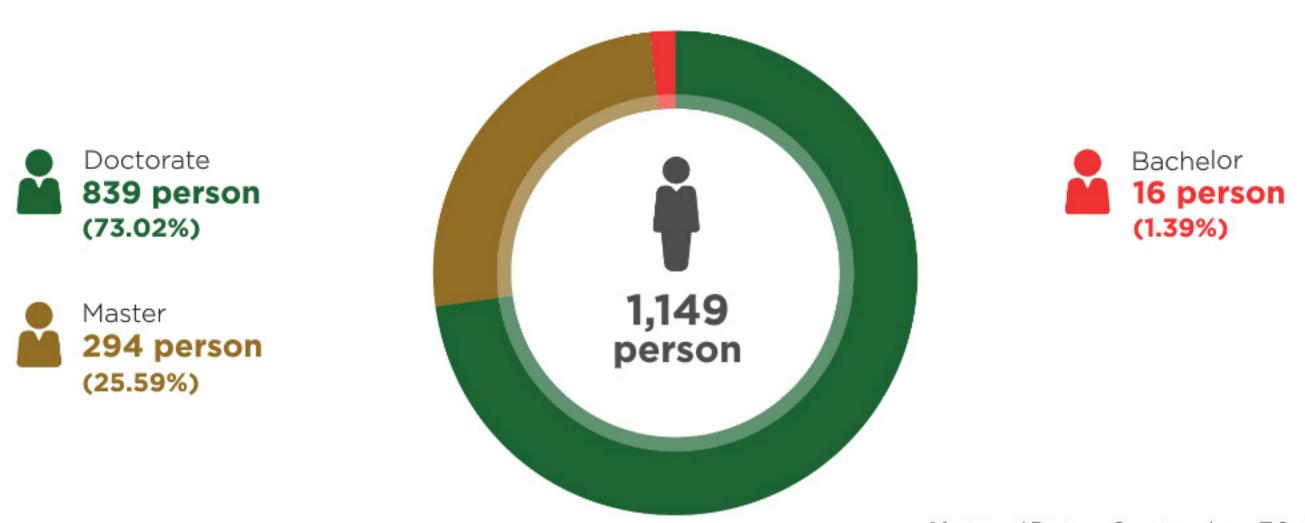
KMUTNB General Information Bulletin 2021-2022

Personnel Categorization in the Fiscal Year 2021, by Lines of Duty*



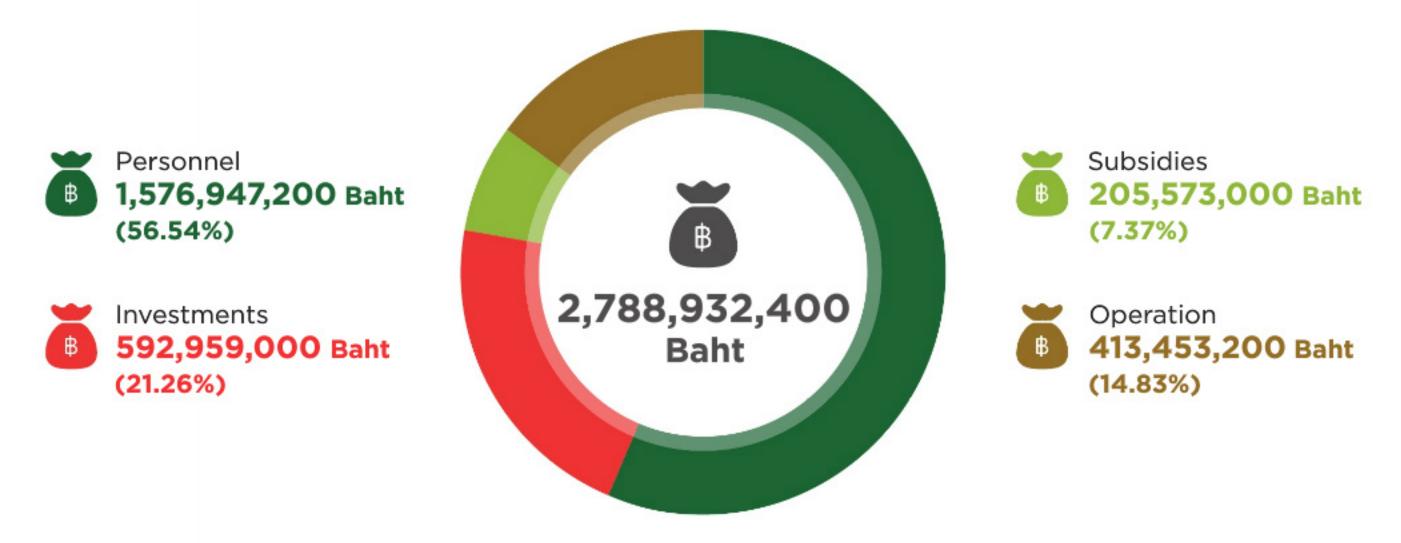


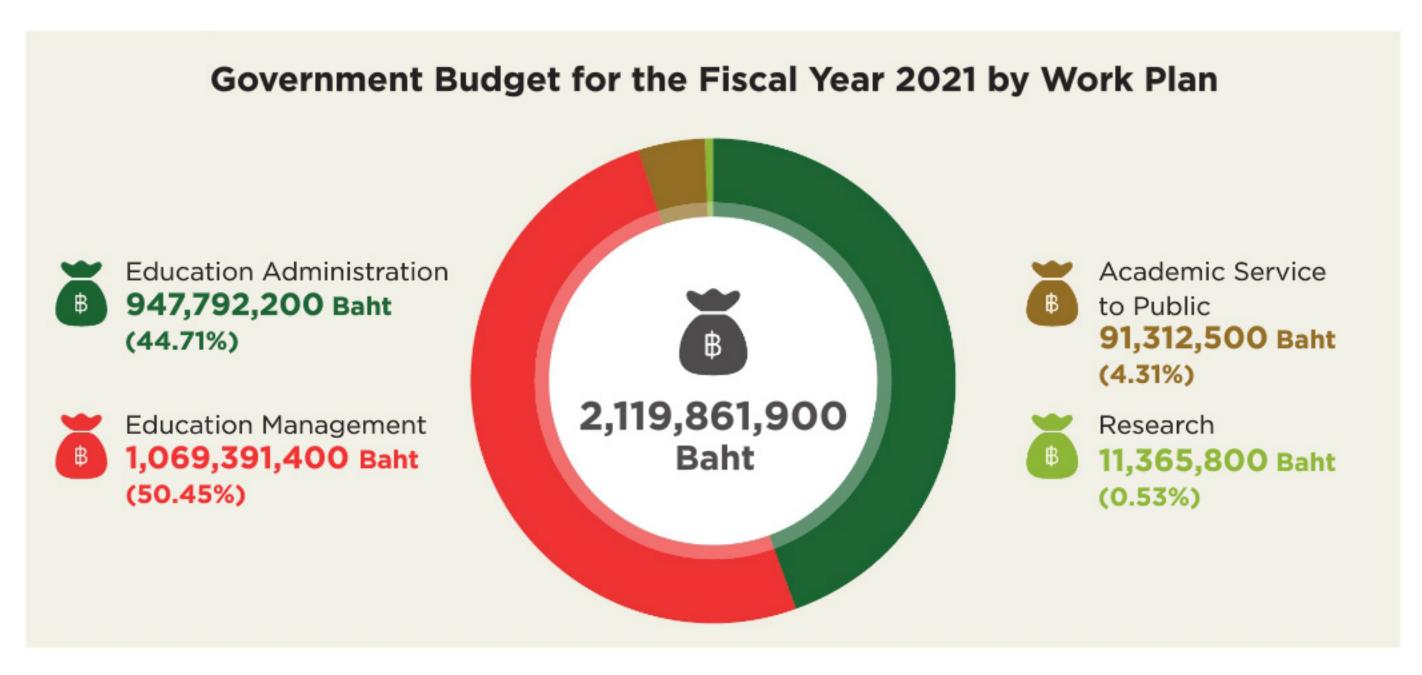
Academic Staff by Educational Qualifications*



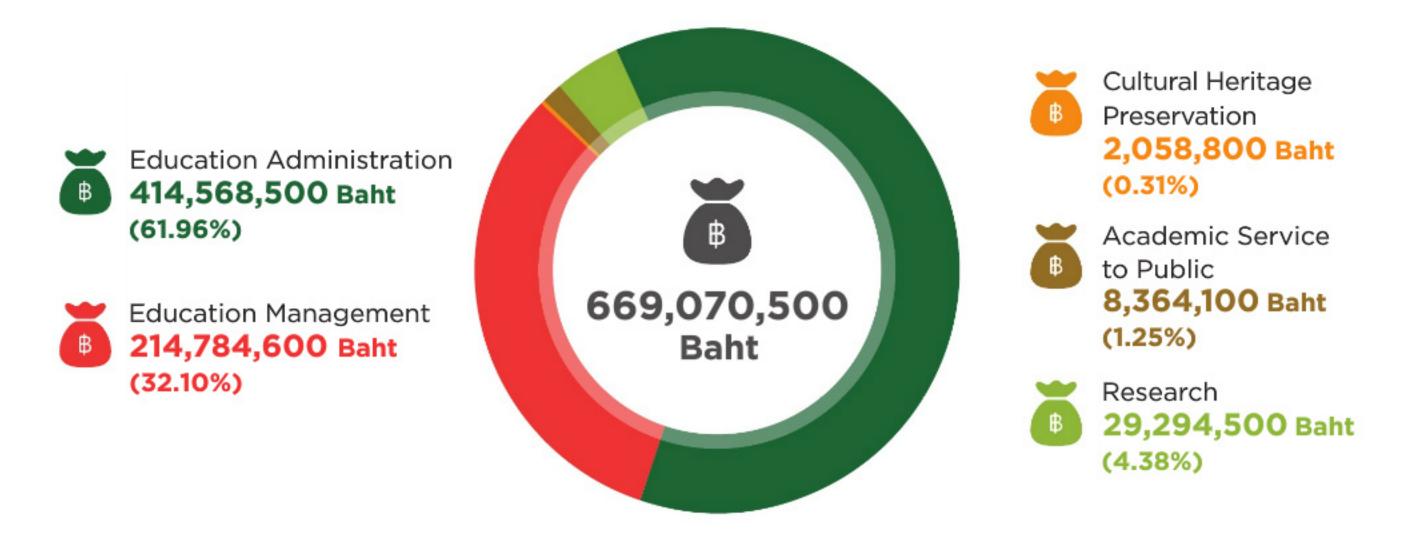
Note *Data: September 30, 2021

Total Budget Snapshots for the Fiscal Year 2021





University Budget for the Fiscal Year 2021 by Work Plan









KMUTNB's 2021-2022 Information Committee:

Prof. Dr. Teravuti Boonyasopon

Prof. Dr. - Ing. habil. Suchart Siengchin

Ms. Sikan Kulchonchan

Mr. Tera Pakdeewanich

Asst. Prof. Busayanee Getmanee

Ms. Phimvalanch Moosikaphan

Ms. Siriluk Phuengrod

Ms. Orada Kriangsinyos

Mrs. Penpitcha Polachart Davies

Mrs. Nutthanan Treerath

Mr. Thampapon Boontun

Ms. Chonticha Saksan

Advisor to the KMUTNB

Chairman of Committee

Committee member

Committee member

Committee member

Committee member

Committee member

Committee member and Secretary

Committee member and Assistant Secretary

University of Creative Invention to Innovation "Graduates with Creative and Workability"







ROBOCUP 2009



ROBOCUP 2006



ROBOCUP 2010



ROBOCUP 2011



ROBOCUP 2013



ROBOCUP 2016



ROBOCUP 2018

- KMUTNB's Achievements -

- 8 Times World RoboCup Rescue Campions: 2006, 2007, 2009, 2010, 2011, 2013, 2016 and 2018
- 3 Times First runner up in the World RoboCup Rescue Campions: 2015, 2017 and 2019
- 5 Times Best in Class Mobility in the World RoboCup Rescue Campions: 2011, 2013, 2016, 2018 and 2019

Times Higher Education University Rankings 2021:

By Subject rankings: Computer sciences - the world's 601-800;

the 4th among Thai universities

By Subject rankings: Physical sciences - the world's 1000+;

the 6th among Thai universities

By Subject rankings: Engineering and technology - the world's 801-1000;

the 7th among Thai universities

- By Subject rankings: 1001+ The national ranking for citations (research influence)
 QS Asia University Rankings 2021:
 - By Subject rankings: Employer reputation the Asia 137
 - By Subject rankings: Academic reputation the Asia 189
- By Subject rankings: The Asia 301-350; the 10th among Thailand's top universities
 QS Subject Ranking 2021:
 - By Subject rankings: Mathematics the world's 451-500;

the 1th among Thai universities

By Subject rankings: Engineering - Electrical & Electronic - the world's 451-500;

the 5th among Thai universities

By Subject rankings: Engineering - Mechanical, Aeronautical & Manufacturing -

the world's 451-500; the 7th among Thai universities



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