

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









General Information Bulletin

2020-2021

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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





- 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 (later Thai-French Innovation Institute).
- 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.
- The establishment of Faculty of Information Technology in Bangkok campus.
 - 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 Faculty of Information Technology was renamed as the Faculty of Information. Technology and Digital Innovation.
 - The Department of Technological Education, Faculty of Technical Education was renamed as the Department of Technological Education and Information.
 - The International Space TechnologyInstituteforEconomic 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.



 $1^{\rm st}$ March 1984, President of the Federal Republic of Germany, Karl Carstens with his wife honored KMUTNB $25^{\rm th}$ 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.

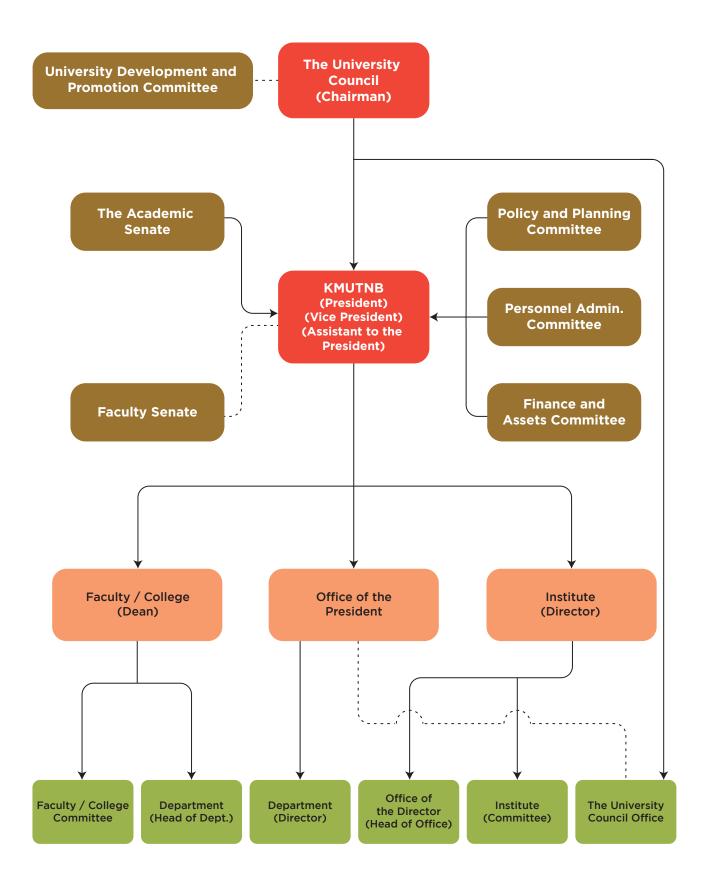


25th June 2002, President of the Federal Republic of Germany, Dr. Johannes Rau became the third President of Germany who visited KMUTNB since its foundation.



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













Dr. Siritach Rojanaphruk Vice-Chairman and Distinguished Member



Mr. Thaweesak Woraphiwut 4. Distinguished Member



- Dr. Surin Tohtubtiang 5. Distinguished Member



6. Prof. Dr. Banjerd Singkaneti Distinguished Member



7. Mr. Opas Khiewwichai Distinguished Member



Mr. Okas Teparagul 8. Distinguished Member



- Mrs. Poranee Leenutaphong 9. Distinguished Member



10. Dr. Winai Sansuwan Distinguished Member



- 11. Dr. Sangchai Chotchuangchutchaval Distinguished Member
- 12. Dr. Somyos Keratichewanun Distinguished Member
- 13. Dr. Preeda Attavinijtrakarn Distinguished Member
- 14. Dr. Promsawat Tipkongka Distinguished Member





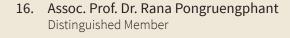
















17. Prof. Dr. - Ing. habil. Suchart Siengchin KMUTNB President















21. Assoc. Prof. Dr. Chanchai Thongprasit Administrative Representative



22. Assoc. Prof. Dr. Unalome Wetwatana Hartley



23. Prof. Dr. Athakorn Kengpol Academic Representative

Academic Representative



- 24.1 Dr. Rittirong Intarajinda President, KMUTNB alumni (May 16, 2018 - December 15, 2020)
- 24.2 Mr. Suradet Buasup President, KMUTNB alumni (December 16, 2020 - Present)
- 25. Mrs. Mukda Jongchanachavawat Supporting Staff Representative
- 26. Asst. Prof. Worawit Chaturapanich Vice President and Secretary of KMUTNB Council

KMUTNB Administration



Prof. Dr. - Ing. habil. Suchart SiengchinPresident























- 2. Asst. Prof. Worawit Chaturapanich
 Vice President for Administration
- 3. Prof. Dr. Somrerk Chandra-Ambhon
 Vice President for Research and Information
 Technology Development
- 4. Assoc. Prof. Dr. Saowanit Sukparungsee Vice President for Academic Affairs
- **5.1 Assoc. Prof. Dr. Sunchai Inthapichai**Vice President for University Development and Promotion
 (January 8, 2017 January 7, 2021)
- **5.2 Asst. Prof. Dr. Krissachai Sriboonma**Vice President for Corporate Affairs
 Development for Sustainbility
 (January 8, 2021 Present)
- 6. Asst. Prof. Somchai Vetchakam Vice President for Student Affairs and Alumni Relations
- 7.1 Asst. Prof. Achara Sungsuwan
 Vice President for Finance
 (January 8, 2017 January 7, 2021)
- **7.2 Dr. Raknarin Sanrach**Vice President for Finance
 (January 8, 2021- Present)
- 8. Assoc. Prof. Dr. Somnoek Wisuttipaet
 Vice President for Academic Services
 Development and Industrial Relations
- 9. Ms. Sikan Kulchonchan Vice President for International Affairs
- 10. Asst. Prof. Peerasak Serikul Vice President for Prachinburi Campus





















11. Prof. Dr. Thanin Silpcharu Acting Vice President for Rayong Campus

12. Assoc. Prof. Dr. Montree Siriprachyanun Assistant to the President for Academic and Special Affairs Promotion (January 8, 2017 - January 7, 2021)

13. Assoc. Prof. Dr. Sumet Umchid Assistant to the President for Academic Enhancement and Quality Assurance

14. Assoc. Prof. Dr. Malinee Sriariyanun Assistant to the President for University Development towards Internationalization and special Affairs

15.1 Asst. Prof. Dr. Krissachai Sriboonma Assistant to the President for University's Environmental and Physical Development (January 8, 2017 - January 7, 2021)

15.2 Asst. Prof. Dr. Nattapong Makaratat Assistant to the President for University's Environmental and Physical Development (January 8, 2021- Present)

16. Asst. Prof. Dr. Nawaporn Wisitpongphan Assistant to the President for Research and Information Technology Development

17. Assoc. Prof. Dr. Teerawat Boonyasopon Assistant to the Student Affairs and Alumni Relations (January 8, 2021- Present)

18.1 Dr. Raknarin SanrachAssistant to the President for Finance and General Affairs (January 8, 2017 - January 7, 2021)

18.2 Dr. Sarawut SuebyaemAssistant to the President for Finance and General Affairs (January 8, 2021- Present)



Assoc. Prof. Dr. Somchob ChaiyavejAdvisory to KMUTNB



Assoc. Prof. Dr. Banleng SornilAdvisory to KMUTNB

























Dean and Director

- 1. Assoc. Prof. Dr. Udomkiat Nontakaew Dean, Faculty of Engineering
- 2. Assoc. Prof. Dr. Pairote Stirayakorn Dean, Faculty of Technical Education
- 3. Assoc. Prof. Dr. Surapun Yimman Dean, Faculty of Applied Science
- **4.1** Assoc. Prof. Dr. Phayung Meesad
 Dean, Faculty of Information Technology
 and Digital Innovation
 (June 6, 2016 June 5, 2020)
- **4.2** Asst.Prof. Dr.-Ing. Sunantha Sodsee
 Dean, Faculty of Information Technology
 and Digital Innovation
 (June 6, 2020 Present)
- 5. Prof. Dr. Manop Chunin
 Dean, Faculty of Applied Arts
- 6. 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
- 9. Assoc. Prof. Dr. Smith Songpiriyakij Dean, College of Industrial Technology
- **10. Asst. Prof. Dr. Piyarach Kullamethee** Dean, Faculty of Agro-Industry
- 11. Assoc. Prof. Dr. Pichet Sriyanyong
 Dean, International College

































Dean and Director

- 12.1 Assoc. Prof. Dr. Anirach Mingkhwan
 Dean, Faculty of Industrial Technology and
 Management (September 23, 2016 September 22, 2020)
- 12.2 Asst. Prof. Dr. Khridsadakhon Booddachan Dean, Faculty of Industrial Technology and Management (September 23, 2020 - Present)
- 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. Asst. Prof. Dr. Sabaithip Tungkamani Dean, Faculty of Science, Energy and Environment
- **16. Prof. Dr. Thanin Silpcharu**Dean, Faculty of Business Administration
- 17. Asst. Prof. Dr. Suphot Chunwiphat Dean, Graduate College
- 18.1 Assoc. Prof. Udom Jeenpradab Director, Central Library (June 20, 2016 - June 19, 2020)
- 18.2 Assoc. Prof. Dr. Phayung Meesad Director, Central Library (June 20, 2020 - Present)
- 19. Asst. Prof. Dr. Peeteenut Triwong
 Director, Institute for Technical Education
 Development
- 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
- 22.1 Prof. Dr. Phatiphat Thounthong
 Director, Science and Technology
 Research Institute (January 3, 2017 January 2, 2021)
- **22.2 Assoc. Prof. Dr. Kampanart Theinnoi**Director, Science and Technology
 Research Institute (January 3, 2017 Present)
- 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

King Mongkut's University of **Technology North Bangkok** Prachinburi **Bangkok** Faculty of Engineering Faculty of Industrial Technology and Management Faculty of Technical Education Faculty of Agro-Industry Faculty of Applied Science Faculty of Business Administration Faculty of Information Technology and and Service Industry Digital Innovation Faculty of Engineering Faculty of Applied Arts Institute of Computer and Faculty of Architecture and Design Information Technology Faculty of Business and Industrial Development Central Library The Sirindhorn International Thai-German Office of the President Graduate School of Engineering College of Industrial Technology Rayong International College Graduate College Faculty of Engineering and Technology Institute of Computer and Information Technology Faculty of Science, Energy and Environment Thai-German Dual Education and e-Learning Development Institute Faculty of Business Administration Institute for Technical Education Development Institute of Computer and Information Technology Institute of Technology Development for Industry Central Library Science and Technology Research Institute Office of the President Thai-French Innovation Institute Research and Human Resources Office of the President Training Center for Industry Central Library

Administrative and Academic Services assigned by Bangkok Campus

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	75, 78	Faculty of Applied Science
	of 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		
73	Thai-German Dual Education and		
	e-Learning Development Institute (TGDE)		

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 Mongkut's 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 3 separate buildings: i.e. The 2 buildings currently under construction.



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



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.

Pursuing ABET accreditation

Faculty of Engineering along with KMUTNB quality management signed the Memorandum of Understanding (MoU) for academic cooperation under the project for Thai higher education institutions to receive accreditation from Accreditation Board for Engineering and Technology (ABET) by 2022. Faculty of Engineering will be the first pilot faculty of KMUTNB, which will implement ABET for educational quality assurance.









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 8 programs:

5 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, and
- Doctor of Philosophy Program in Management
 Information Systems

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, 10 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

- Tanawat Boondee, Nisarat Oumprasert, Kanatip Kongtong, Ajjima Saardthing, Pusit Sopakam, students and Advisor (Svit Piriyasurawang) from IDMB division, was awarded the special prize from Nansha Bird Park in 2020 Bamboo Architecture Design and Construction Competition, Guangdong- Hong Kong-Macau Great Bay Area.
- 2. Architecture team, 4th year students of Architecture division, was awarded in Thailand Sustainable Expo 2020.









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.

Academic Achievements in 2020

- KMUTNB Outstanding Researcher 2020
- KMUTNB Person of Honors 2020

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)
- 5. 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.



- 1. 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.
- 2. 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.
- 4. 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

- 1. To prepare graduates with theoretical knowledge and verifiable skills to be competence and credential at work.
- 2. 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.



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)









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.

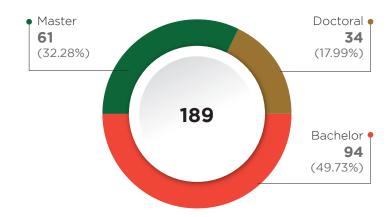








Academic Programs



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		
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		

Programs	Fields of Study
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
- 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 Software Systems Engineering, Materials and Production Engineering, Railway Vehicles and Infrastructure Engineering
Doctor of Engineering (D.Eng.) - International Program	Mechanical and Automotive Engineering, Electrical and Software Systems 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, Electrical and Power 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
Doctor of Philosophy (Ph.D.)	Energy Engineering Technology
Doctor of Engineering (D.Eng.)	Automotive and Energy Engineering Technology
Pre - Engineering Certificate in Technical Education (Cert.in Tech.Ed.) - Thai Program	Mechanic, Civil Construction, Electrical and Electronics
- English Program	Mechanic, Civil Construction, Electrical and Electronics

Programs	Fields of Study
(Prachinburi Campus) Faculty of Industrial Technology and Management Bachelor of Industrial Technology (B.Ind.Tech.)	Industrial Management, Agricultural Machinery Technology, 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
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.

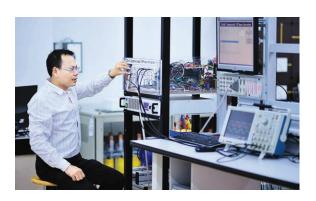


- To perform as a major organization of the university in forming policies and work plans; being responsible for the promotion, support, and administration of the university's research,
- To allocate research budgets and search for research support from institutions and organization within outside the university, and evaluate research results for more effective application,
- 3. 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,
- 4. 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

- 1. To bring in resources and equipment that are already available for the country's industrial development,
- 2. To promote science and technology research and development for the advancement of the industry,
- 3. To boost professional growth and learning development for the important benefits of education and the capacity of national industry,
- 4. 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,
- 6. 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.

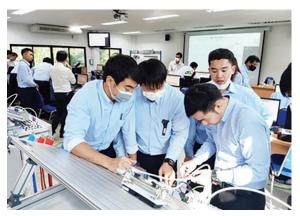
2) Center for Industrial Robot and System

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.

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.



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
- 2. To support organizations, associations and personnel involvement for international welding standardization e.g. ISO as well as professional skill development
- 3. 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
- 19. Research and Human Resources Training Center for Industry, Rayong
- 20. 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.
- 2. High quality and responsive services for graduate students, faculty, and staff.
- 3. Harmonizing the interactivity between the Graduate College and faculty.
- 4. 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)
- 4. 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.









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 2020-2021

National Excellence Researchers Award (Fiscal year 2021)

Prof. Dr.-Ing. habil Suchart Sienchin, KMUTNB President and faculty member at the Department of Mechanical and Process Engineering, The Sirindhorn International Thai-German Graduate School of Engineering was awarded the National Excellence Researcher Award (Engineering and Research Industry) of the Fiscal Year 2021. The award, granted by the National Research Council of Thailand is aimed to recognize and honor the researchers whose relentless devotion to their academic disciplines or interdisciplinary fields in company with research ethics are widely admired.





Rising Star Award 2020

Assoc. Prof. Dr. Saowanit Sukparungsee, Vice President for Academic Affairs and lecturer of the Department of Applied Statistics, Faculty of Applied Science was presented the 2020 honorary Rising Star pin by the Association of Thai Government Scholarship Students. The aim of the Rising Star Award is to honor candidates under the Royal Thai Government scholarship whose unflinching commitment to producing exceptional work, distinguished academic capabilities as well as professional integrity are broadly respected.





TRF Senior Research Scholar Grant 2021

Prof. Dr. Vilai Rungsardthong, faculty member of the Department of Agro-Industrial, Food, and Environmental Technology, Faculty of Applied Science achieved research and innovation funding, the "Senior Research Scholar Grant" from Thailand Research Fund (TRF).

The objectives of the grant are to provide support for the development of research teams as well as to provides financial assistance for distinguished senior researchers who have shown exceptional research capacity, ethical integrity and whose work has gained national and international academic recognition.

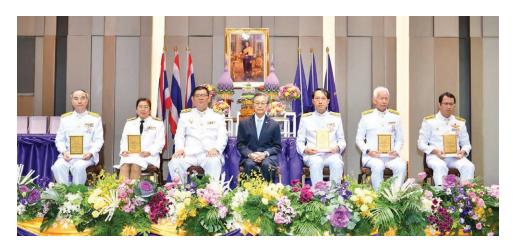


National Outstanding Teacher Award 2020 (Science and Technology Category)

Prof. Dr. Athakorn Kengpol, faculty member of the Department of Industrial Engineering, Faculty of Engineering was honored with the 2020 outstanding science-technology teacher award and received a plaque of honor in front of the portrait of Her Royal Highness Princess Maha Chakri Sirindhorn.

The prestigious award was established to honor outstanding faculty members of public higher education institutions. They are academic individuals who are highly admired in these aspects: mastery of academic knowledge and knowledge transfer, maintaining ethical and socially responsible behavior, and working with devotion for the development of the country.





KMUTNB lecturers feature in top 2% of the World Scientists Ranking 2019

Prof. Dr. Phatiphat Thounthong and Assoc. Prof. Dr. Montree Siripruchyanun, Lecturer and Researcher from the Department of Teacher Training in Electrical Engineering, Faculty of Technical Education have been listed among the top 2% of the world scientists for career-long citation impact until the end of 2019, according to a global-scale list compiled by Stanford University, USA.





Prof. Dr.-Ing. habil. Suchart Siengchin, Lecturer and Researcher from TGGS's Department of Mechanical and Process Engineering; Prof. Dr. Phatiphat Thounthong from the Department of Teacher Training in Electrical Engineering, Faculty of Technical Education; and Assoc. Prof. Dr. Chutiphon Pukdeboon from the Department of Applied Mathematics, Faculty of Applied Science have been listed among the world's top 2% scientists in the single-year impact category, based on Stanford University's standardized citation metrics respecting the world's most-cited researchers.







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 2020-2021

KMUTNB student teams win first prize and runner-up at Space Flying Robot Programming Challenge 2020

A team of engineering students won first place at Flying Robot Programming Challenge 2020 and became a representative from Thailand to compete in Kibo Robot Programming Challenge 2020 (an educational robot contest offered to students in Japan and the Asia-Pacific region) at Tsukuba Space Center, Japan.

The Space Flying Robot Programming Challenge 2020 was organized by the Ministry of Higher Education, Science, Research and Innovation in collaboration with the National Science and Technology Development Agency (NSTDA), Japan Aerospace Exploration Agency (JAXA), Geo-Informatics and Space Technology Development Agency (Public Organization), and partner organizations. The contest was held on June 16, 2020 at Thailand Science Park Convention Center.



A student team from Faculty of Applied Science won the Gold Award at Thailand Research Expo 2020

A team of student from the Faculty of Applied Science was granted the Gold Award trophy at Thailand Research Expo 2020 for the "Pregnancy Torso Anatomy Model," which was invented in collaboration with Boromarajonani College of Nursing, Bangkok. Thailand Research Expo 2020 was held on August 2-6, 2020 at Centara Grand & Bangkok Convention Centre at Central World Hotel.



KMUTNB team wins first prize at "Sustainable Concrete of Living 2019"

KMUTNB's student team of the Faculty of Engineering has won the first prize at "Sustainable Concrete of Living 2019" from the "Concrete Lamp" project. The competition, organized by Siam City Cement Public Co., Ltd. in collaboration with Siam University was held on October 28, 2020 at KMUTNB.





KMUTNB student teams win 1st and 2nd runner-up at TPA KARAKURI CONTEST Thailand Championship 2020

College of Industrial Technology's DG4 team and MHE-FINITE team from the Faculty of Engineering were declared the first and the second runner-up titles respectively at TPA KARAKURI CONTEST Thailand Championship 2020.

The TPA's 2020 Automation contest under the theme "Bento Set Delivery" was organized on September 27, 2020 at Technology Promotion Association (Thailand-Japan).





Achievements of Faculty of Architecture and Design Students

Following the Covestro Innovation Design Contest 2020 (IDC 2020): World of Innovation for Sustainable Living, students at the Faculty of Architecture and Design participated in the competition and were awarded the first place as well as other 5 prizes. Covestro Innovation Design Contest 2020, hosted by Covestro in association with Research & Innovation for Sustainability Center was held on December 18, 2020 at True Digital Park, Bangkok.





Innovations to fight against COVID-19

While Covid-19 transmission rate continues to rise around the world, higher education institutions need to embrace transitioning to the new normal in education along with the implementation of public health and control measures amidst the current COVID-19 crisis. King Mongkut's University of Technology North Bangkok (KMUTNB), through private and public sector collaboration has addressed the immediate crisis by developing and launching new innovations in order to help local communities, society and the nation fight against the global pandemic.

Innovative Pressure Cabinets for COVID-19 Crisis

KMUTNB research team from the Faculty of Engineering unveiled their innovative equipment, Positive and Negative Pressure Cabinets to protect medical professionals while performing their duties during COVID-19 outbreak. The prototype of Positive Pressure Chamber was donated and installed at Chao Phraya Aphaiphubet Hospital, Prachinburi Province. Further pressure control units will be transported to other hospitals to allow COVID-19 frontliners to keep up their battle against the pandemic.





Small-type waste incinerators for infectious waste disposal

The Faculty of Engineering team joined hands to design and develop small incinerators to properly dispose of antiviral face masks and infectious waste during the COVID-19 outbreak. To manage sanitation and prevent transmission of pathogens, an effective way for infectious waste disposal is to burn it at very high temperatures above 1,000 °C.

The small-scale biohazard infectious waste incinerators were contributed to Phetchabun Hospital, Sirindhorn Hospital, and Sunpasitthiprasong Hospital.





Delivery of a medical robot called IRAPs SHaRE-aGIVeR

As a proactive cooperation to overcome the pandemic, the Head of Center of Innovative Robot and Advanced Precision Systems (IRAPs) and the researcher team took part in the delivery of a medical robot called IRAPs SHaRE-aGIVeR, or "The Shared Robot" to the Faculty of Medicine, Vajira Hospital, Navamindradhiraj University. The invention funding to produce the medical robot was granted by PTT Global Chemical Public Company Limited (GC) and Polyfoam Group.





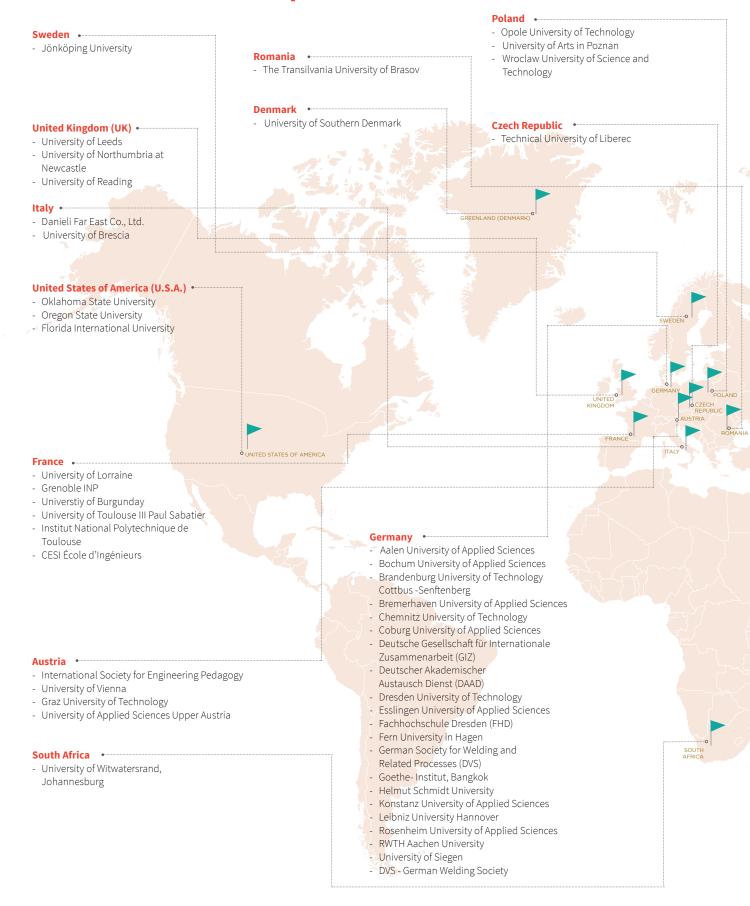
UV Sterilizers for face mask disinfection

During the ongoing COVID-19 pandemic, KMUTNB's Faculty of Applied Science and Military Technical Training School worked together to design and build UV sterilizers for sanitizing face masks. So far, over 300 face-mask disinfection devices have been provided to hospitals in Bangkok along with hospitals in the central region, Tambon Health Promotion Hospitals, Krabi Provincial Public Health Office, Phuket Provincial Public Health Office, Health offices in the three southernmost provinces, hospitals located in Northeast (Isaan region) as well as hospitals throughout the country. Thailand Post Co., Ltd. Bang Sue branch offered free-of-charge postal delivery services.





International Co-operation



China

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

Oman

German University of Technology in Oman

India

- Indian Institute of Technology, Jammu
- Manipal University Jaipur

Myanmar

- Victoria University College
- Technological University of Dawei

Malaysia

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

South Korea

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

Japan

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

- 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
- National Chung Cheng University

Lao People's Democratic Republic

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

Vietnam

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

Philippines

De La Salle University - Dasmariñas

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

Singapore

- Singapore Polytechnic
- SIA Engineering Company
- Infineon Technologies Asia Pacific Pte Ltd

Indonesia .

- Bina Nusantara University, Jakarta
- Institut Teknologi Sepuluh Nopember
- Institute of Technology and Health Bali
- Universitas Atma Yogyakarta

Australia

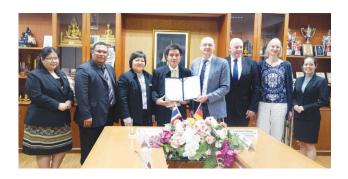
- Edith Cowan University

International Co-operation Activities



Chemnitz University of Technology, Germany: Seminar "Merge Technologies for Resource Efficiency"

On 20th February 2020, Univ.-Prof. Dr.-Ing. habil. Lothar Kroll, Director of the Institute for Structural Lightweight Construction and his team from Chemnitz University of Technology, Germany, visited King Mongkut's University of Technology North Bangkok to discuss about the progress of existing collaboration and the development of new cooperation with Prof. Dr.-Ing. habil. Suchart Siengchin, KMUTNB President. Also, he and his team delivered a keynote lecture at the seminar held at TGGS.



University of Applied Sciences Bremerhaven, Germany: Renew MoU and Block Lectures

On 26th February 2020, Prof. Dr.-Ing. habil. Suchart Siengchin, KMUTNB President, presided over the MoU on Double Degree Prpogram renewal signing ceremony between KMUTNB and University of Applied Sciences Bremerhaven. The partner side was represented by Prof. Dr. Gerhard Feldmeier, Vice President for Research and Foreign Relations. Also, the delegates from UAS Bremerhaven were invited to give a block lecture at International College during 17th - 28th February 2020.



RWTH Aachen University, Germany: Renew MoU

On 18th December 2020, Prof. Dr.-Ing. habil. Suchart Siengchin, KMUTNB President, and Prof. Dr.- Ing Nisai Fuengwarodsakul, TGGS Dean, represented KMUTNB's side to sign the renewal of MOU with RWTH Aachen University represented by its rector, Univ.-Prof. Dr. Ulrich Rüdiger. This MOU was aimed to promote and strengthen the 15-year fruitful academic partnership between both universities which had started since the establishments of TGGS in 2005.



Fern University in Hagen, Germany: Conference "Unboxing The Brain" and Opening a new Lab at KMUTNB Prachin Campus

On 9th December 2020, Prof. Dr.-Ing. habil. Suchart Siengchin, KMUTNB President, and Prof. Dr. Ada Pellert, Rector of the Fern University in Hagen, Germany, co-preside over the virtual event: Unboxing "TheBrain" organized by the cooperation between by both universities. For this conference, Prof. Dr. -Ing. habil. Herwig Unger, Chair of Communication Networks Fern University in Hagen, was the moderator. This event also marked the openning of NLP-Lab located at KMUTNB Prachinburi Campus.



Halla University & KNUT, South Korea: 3rd International Capstone Design Camp

During 27th - 31st January 2020, at Robot Academy, the Faculty of Engineering hosted the "3rd International Capstone Design Project" in collaboration with Halla University and Korea National University of Transportation (KNUT), Korea. The project was aimed to promote the KMUTNB and Korean students' skills and knowledge in robotic technology, as well as to provide an opportunity for the participants to practice their English communication skills and to exchange knowledge and culture. The project was supervized by lectuers from two Korean universities and lecturers from the faculty of Engineering, KMUTNB.

Hankyong National University, South Korea

On 14th February 2020, at Science and Technology Research Institute, Assoc. Prof. Dr. Pairote Satirayakorn, Dean of Faculty of Technical Education, and Asst. Dr. Panarit Sethakul, the dean's advisor, warmly welcomed Prof. Lee Eul Gyu, Dean of College of Engineering, Hankyong National University, Korea, and the group of lecturers and students from HKNU. This study visit was a part of the "International Academic Cooperation Program," which was the collaboration between Faculty of Technical Education and Hankyong National University. The activity included presentations of research outcome and innovations by both universites's tudents.



Victoria University College (VUC), Myanmar

During 11th - 13th February 2020, at College of Industrial Technology (CIT), Dr. Phyo Kyar Phyu, Dean of Faculty of Engineering, Victoria University College (VUC), Myanmar, led a group of students of the Department of Mechatronics Engineering and Electronics Engineering to visit CIT for training. VUC and College of Industrial Technology has developed a fruitful partnership for many years. Each year VCU students will visit KMUTNB to attend a short training course designed to enhance the students' knowledge and improve skills in Engineering.

International Trade and Business Logistics Field Trip (Macau-Hokkaido, Japan)

During $5^{\text{th}} - 10^{\text{th}}$ January 2020, International College, KMUTNB, organized the International Trade and Business Logistics Field Trip in Macau and Japan. The students spent one week on field trips at Tomari Nuclear Power Plant and Port of Tomakomai in Hokkaido, Japan, and also they attended seminars at University of Macau and University of Tokyo. Furthermore, the students participated the



seminar on "Global Business for Competitive Advantage," at University of Tokyo, which the keynote speech was delivered by Prof. Dr. Shigeru Matsumoto. This field trip provided students with real-world experiences and an opportunity to explore novel things in work settings. The visit would increase the students' interest in production and business management and also enhance their experiences in sea transportation.



University of Applied Sciences Bremerhaven, Germany

During 19th March - 31th August 2020, Mr. Sebastian Gobel, a student from University of Applied Sciences Bremerhaven, Germany, visited KMUTNB Prachinburi Campus to conduct a research at Faculty of Agro-Industry. He conducted a research under the supervision of Dr. Wichien Sriwichai. Also, he participated in the volunteer projects to support KMUTNB's COVID-19 response.



Esslingen University of Applied Science, Germany

During March-August 2020, College of Industrial Technology cooperated with Western Digital Co., Ltd. to offer an internship program to 5 students from Esslingen University of Applied Science. On 4th March 2020, due to the pandemic outbreak, Ms. Phimvalanch Moosikaphan, Director of International Cooperation Centre and ICC team, invited the students to the office to reicieve advices on the current COVID-19 situation and prescribed practices during the self-quarantine period.



Honeywell, USA: Virtual Forum on Around Table

On 19th October 2020, Honeywell, the U.S. company with a reputation for its disruptive innovations for more than 100 years, invited Asst. Prof. Dr. Nawaporn Wisitpongphan, Assistance to the President for Research and Information Technology Development, to share her experinces about the role of tecnology in education during the pandemic situation in the virtual HONEYWELL TECH FORUM 2020.



University of Applied Sciences Bremerhaven, Germany

International College (IC), KMUTNB, together with University of Applied Sciences Bremerhaven, Germany, had launched the Double Degree Program (3+1) for students in the International Trade and Logistics Business Program. In this academic year, three selected students went to study at UAS Bremerhaven for one year. When the students graduate they will receive degrees from both universities.



Coburg University of Applied Sciences, Germany

During 4th October 2020 to 11th March 2021, College of Industrial Technology cooperated with SHAKES BKK CO., LTD. to offer an internship program for students of Coburg University of Applied Sciences, Germany. On 4th October 2020, Ms. Laura Scussolini and Mr. Tamino Tissot, the students from Germany, Mr. Prompong Hakk, the copartner of SHAKES BKK CO.,LTD., was warmly welcomed by Ms. Sikan Kulchonchan, Vice President for International Affairs.





is situated with faculties of KMUTNB Rayong Campus.

Chengdu Technological University, China

On 15th September 2020, Mrs. Thippawan Supamitkitja, Consul-General of the Royal Thai Consulate-General in Chengdu presided and delivered an opening speech in the virtual meeting between the delegations of KMUTNB and CDTU. The KMUTNB's deleagetes was led by Prof. Dr. Somrek Chandra-ambhorn, KMUTNB's Vice President for Research while CDTU's team was led by Ms. LI Xi, Director of International Office. The collaboration between both universities will contribute to the Thailand's Government's effort to develop the Eastern Economic Corridor which

On 16th October 2020, Prof. Dr. –Ing. habil. Suchart Siengchin, KMUTNB President, Ms. Sikan Kulchonchan, Vice President for International Affairs, alongside with the team of faculty members of Faculty of Engineering and Faculty of Business and Industrial Development attended the virtual meeting with Prof. Dr. Christoph Scholz, Rector of Fachhochschule Dresden and his team, to discuss about the potential areas for establishing cooperation between both universities.



Chemnitz University of Technology, Germany

On 11th December 2020, Prof. Dr. -Ing. habil. Suchart Siengchin, KMUTNB President and the team of KMUTNB's executives had the virtual meeting with Univ.-Prof. Dr.-Ing. habil. Lothar Kroll, Director of the Institute for Structural Lightweight Construction and his team from Chemnitz University of Technology, Germany. The meeting discussed about the progress of collaboartion in the field of sustainable mobility and transport.



Kyutech Virtual Exchange Program

On 16th December 2020, at Robot Academy, KMUTNB cooperated with Kyushu Institute of Technology to organize the Virtual Cross Culture and Robot Academy Introduction 2020 for students of Kokura-Nishi High School. The opening remarks was dlivered by Assoc. Prof. Udomkiat Nontakaew, Dean of Faculty of Engineering. This virtual exchange program was aimed to introduce an overview of Robotics, to promote cross cultural awareness and freindship between students of two countries.



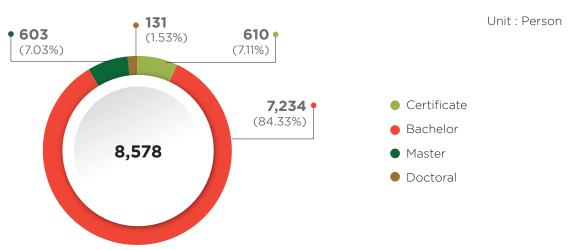
Virtual KMUTNB-Kyutech committee Meeting

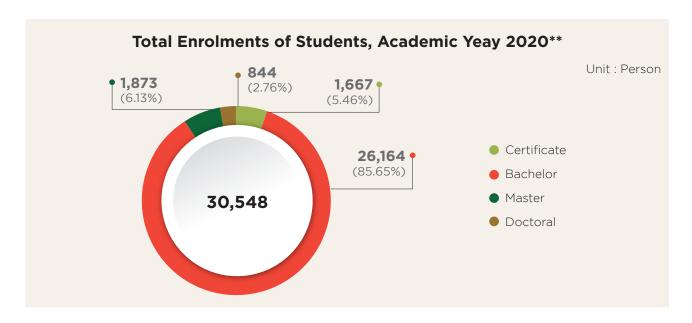
On 22nd December 2020, the 1st Liaison Committee Meeting between KMUTNB and Kyshu Institute of Technology, Japan, was held and it was co-presided by Ms. Sikan Kulchonchan, KMUTNB's Vice President, and Prof. Yasunori Mitani, Kyutech's Vice President. The meeting discussed and followed up the progress of the establisment and management of the KMUTNB-KYUTECH Collaboration Satellite Office, as well as cooperative activities in other areas.



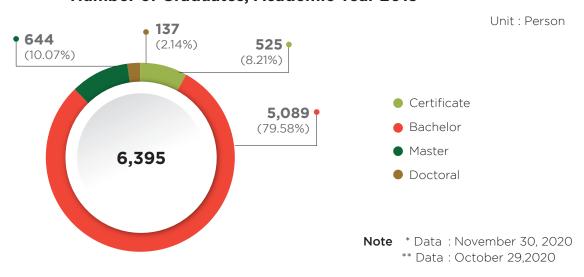
General Information

New Students, Academic Year 2020*



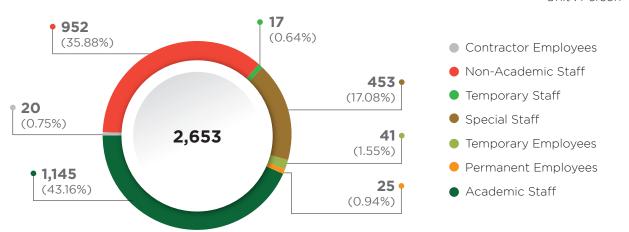


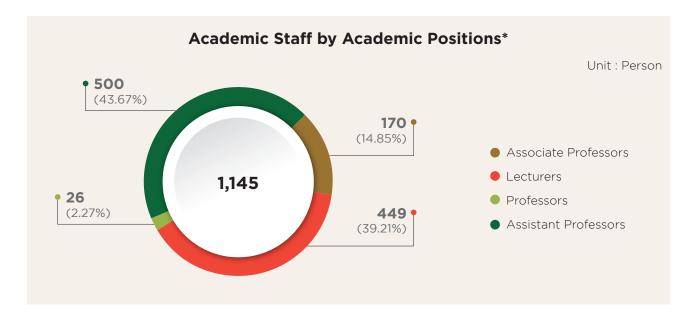
Number of Graduates, Academic Year 2019**



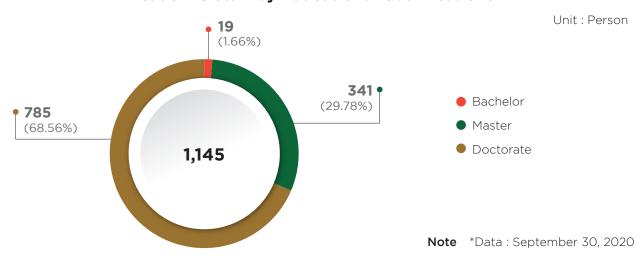
Personnel Categorization in the Fiscal Year 2020, by Lines of Duty*

Unit: Person

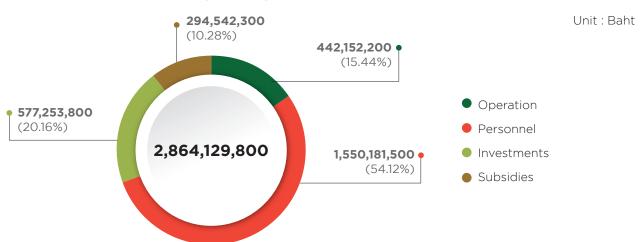


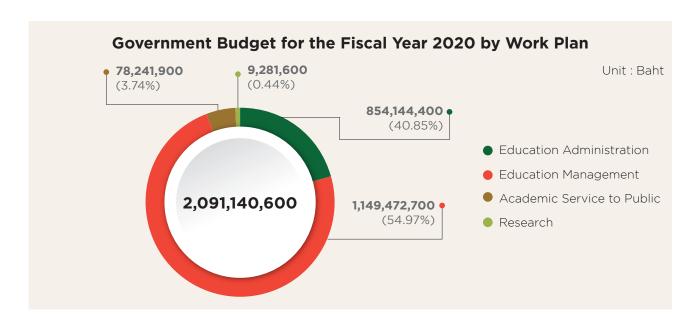


Academic Staff by Educational Qualifications*

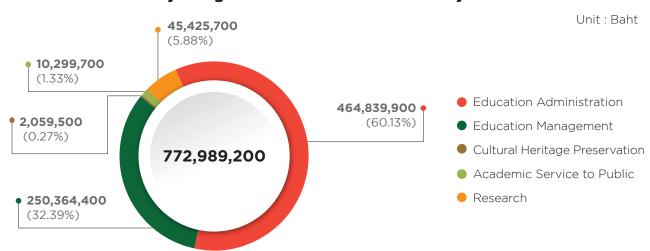


Total Budget Snapshots for the Fiscal Year 2020





University Budget for the Fiscal Year 2020 by Work Plan









KMUTNB's 2020-2021 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. 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 and Secretary

Committee member and Assistant Secretary

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



Robocup 2006



Robocup 2007



Robocup 2009



Robocup <u>2010</u>



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
- \bullet By Subject rankings: Engineering and technology the world's 801-1000; the 7^{th} 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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