

Announcement of the University Personnel Management Committee King Mongkut's University of Technology North Bangkok

The University Personnel Management Committee of King Mongkut's University of Technology North Bangkok (KMUTNB) seeks qualified individuals for recruitment and selection to be appointed as university staff in the lecturer positions with the position numbers 715, 1632, and 1659.

- Salary: 33,660 Baht per month
- Affiliation: The Sirindhorn International Thai-German Graduate School of Engineering (TGGS)
- Number of positions: 3 lecturer positions
- 1. Applicants must meet the qualifications specified in Section 6 of the Regulations of King Mongkut's University of Technology North Bangkok on University Personnel Administration, B.E. 2551 (2008). Additionally, applicants must have graduated from a higher education institution that is accredited by one of the following organizations:
 - Office of the Civil Service Commission (OCSC)
 - Office of the Higher Education Commission (OHEC)
 - Office of the Teacher Civil Service and Educational Personnel Commission (OTEPC)
 - Office of the Permanent Secretary (OPS), Ministry of Higher Education, Science, Research and Innovation (MHESI)
- 2. Qualifications for Application
 - 2.1 Lecturer Position No. 715 Affiliated with the Department of Mechanical and Automotive Engineering (MAE)
 - 1) Educational Qualification:
 - A Doctoral degree in Robotics Engineering, Mechatronics Engineering, Automation Systems Engineering, or a related field (Interview will be conducted in English).
 - 2) Required Knowledge and Expertise (Required Qualifications):
 - Robotics: Development and control of industrial robots and mobile robots.
 - Embedded Systems: Design and development of embedded systems for electric vehicles and automation systems.
 - 3) Additional Considerations (Preferred Qualifications): Applicants with knowledge and experience in the following areas will be given special consideration:

- Automation: Control of automation systems, including PLC programming, SCADA implementation, and real-time control system design.
- IoT and Cloud Integration: Management of data and Industrial IoT (IIoT) platforms.
- Al and Machine Learning: Development and application of artificial intelligence in industrial settings.

4) English Proficiency:

- Strong English communication skills.
- Ability to teach in international programs that use English as the primary language.
- 5) Research and Innovation Experience:
 - Experience in research or innovation related to robotics, embedded systems, automation, or artificial intelligence.
- 6) Research Publications:
 - Published research articles in international academic journals ranked SCOPUS Q1-Q2 or equivalent.
 - Demonstrated ability to produce new research work.
- 7) Applicants with the following work experience or qualifications will be given special consideration:
 - Teaching experience at the undergraduate level in related fields.
 - Industry experience in fields related to robotics, embedded systems, automation, or artificial intelligence.
 - Proficiency in Chinese or German.

2.2 Lecturer Position No. 1632 – Affiliated with the Department of Electrical and Computer Engineering (ECE)

- 1) Educational Qualification:
 - A Doctoral degree in Power Engineering or a related field (Interview will be conducted in English).
- 2) Required Knowledge and Expertise (Required Qualifications):
 - Strong knowledge and expertise in power engineering, particularly in:
 - o Distributed Generation Systems
 - o Control and Protection of Electric Power Generation
 - o Modern Grid Operation and Control
 - o Power System Reliability
- 3) English Proficiency:
 - Strong English communication skills.
 - Ability to teach in international programs that use English as the primary language.

- 4) Research Capability:
 - Ability to conduct and produce high-quality research work.
- 5) Preferred Qualifications (Special Consideration): Applicants with the following experience will be given special consideration:
 - Industry experience in relevant fields.
 - Proficiency in German.

2.3 Lecturer Position No. 1659 – Affiliated with the Department of Electrical and Computer Engineering (ECE)

- 1) Educational Qualification:
 - A Doctoral degree in Electrical Engineering, Electronics Engineering, Computer Engineering, or a related field (Interview will be conducted in English).
- 2) Required Knowledge and Expertise:
 - Strong expertise in microelectronics design engineering, with a focus on:
 - o Analog Circuit Design
 - o Mixed-Signal Circuit Design
 - o Internet of Things (IoT)
 - o Wireless Technology
- 3) English Proficiency:
 - Strong English communication skills.
 - Ability to teach in international programs that use English as the primary language.
- 4) Research Capability:
 - Ability to conduct and produce high-quality research work.
- 5) Preferred Qualifications (Special Consideration): Applicants with undergraduate teaching experience in related fields will be given special consideration.
- 3. Job Responsibilities (Term of Reference)
 - 3.1 Lecturer Position No. 715 Affiliated with the Department of Mechanical and Automotive Engineering (MAE)
 - 1) Teaching Responsibilities:
 - Core courses:
 - o Industrial Robotics
 - o Embedded System
 - Partial Teaching Contribution in other courses:
 - o Automation Control and PLC
 - o Advanced Automation Control Systems
 - o Internet of Things (IoT)

- o Artificial Intelligence (AI)
- Other courses assigned within the Electric Vehicle and Automation Systems Engineering (EVAE) curriculum.
- Additional courses assigned within any TGGS programs
- 2) Research Responsibilities:
 - To conduct research focused primarily on robotics and embedded systems.
 - To support research in related fields such as automation, AI, and Industrial IoT (IIoT) if specialized.
 - To collaborate with industries and research organizations such as NSTDA, NRCT, TSRI, or other funding agencies.
- 3) Laboratory Development:
 - To establish and develop a robotics laboratory that also support other fields such as embedded systems, automation, AI, and IIoT if specialized.
 - The laboratory aims to enhance research quality and the learning experience while fostering collaboration with the industrial sector
- 4) Industry Collaboration:
 - To coordinate with industries on teaching, internships, and cooperative education programs.
- 5) Academic Supervision:
 - Supervise undergraduate, master's, and Ph.D. students in thesis and research projects.
- 6) Curriculum Development:
 - To contribute to the development and modernization of the bachelor's degree curriculum in Electric Vehicle and Automation Systems Engineering (EVAE) to align with industry needs.
- 7) Academic and Industrial Networking:
 - To build and strengthen collaborations with national and international academic institutions and industries, including RWTH Aachen University.
- 8) Research Planning and Funding:
 - To plan and develop research projects for faculty and students.
 - To support grant applications from domestic and international funding sources.
- 9) Student Support and Guidance:
 - To mentor and advise students on academic performance and career development, ensuring graduation within the required timeframe.

10) Other Duties:

- To perform additional tasks as assigned by the supervisor.
- 3.2 Lecturer Position No. 1632 Affiliated with the Department of Electrical and Computer Engineering (ECE)
- 1) Teaching Responsibilities:
 - To teach the following courses in the **Electrical Power and Energy Engineering (EPE)** program:
 - o Modern Power Grid Operation and Control
 - o Electric Power Generation Control and Protection
 - o Power System Reliability
 - To teach relevant undergraduate courses and other assigned subjects.
- 2) Research Responsibilities:
 - To conduct research in power system analysis and power system reliability.
 - To collaborate with industries and research organizations, such as NSTDA, TISTR, or other funding agencies.
- 3) Academic Networking:
 - To establish and expand academic collaborations at the national and international levels.
- 4) Industry Collaboration:
 - To coordinate with industries regarding teaching and student internship programs.
- 5) Research and Academic Supervision:
 - To conduct research and serve as a thesis advisor for master's and Ph.D. students in Electrical Power and Energy Engineering (EPE) program, as well as undergraduate students in TGGS.
- 6) Curriculum Development:
 - To participate in the development and improvement of the Electrical and Computer Engineering (ECE) curriculum and TGGS undergraduate programs.
- 7) Collaboration and Research Support:
 - To establish collaborations with domestic and international organizations to support research and faculty development at TGGS.
- 8) Research Planning and Development:
 - To assist in planning and developing research projects for faculty and students in **Electrical Power and Energy Engineering (EPE)** program.

9) Other Duties:

• To perform additional tasks assigned by the supervisor.

3.3 Lecturer Position No. 1659 – Affiliated with the Department of Electrical and Computer Engineering (ECE)

- 1) Teaching Responsibilities:
 - To teach Design of CMOS Mixed-Signal Integrated Circuits in the Bachelor's Degree program in Microelectronics Design and Semiconductor Engineering (MEDE).
 - To teach intelligent microelectronics-related courses in the Master's Degree program in Electrical and Computer Engineering (ECE)
 Department.
 - To teach additional courses in various programs assigned within TGGS.
- 2) Research Responsibilities:
 - To conduct research in Microelectronics design and Semiconductor.
 - To Collaborate with industries and research organizations, such as NSTDA, NRCT, TSRI, or other funding agencies.
- 3) Academic Networking:
 - To establish and expand academic collaborations at the national and international levels.
- 4) Industry Collaboration:
 - To coordinate with industries regarding teaching, internships, and cooperative education programs for students.
- 5) Research and Academic Supervision:
 - To Conduct research and serve as a thesis advisor for Master's and Ph.D. students in Electrical and Computer Engineering (ECE) department.
- 6) Curriculum Development:
 - To contribute to the development and improvement of the Bachelor's Degree program curriculum in Microelectronics Design and Semiconductor Engineering (MEDE).
- 7) Research and Faculty Development Collaboration:
 - To seek collaborations with national and international organizations to support research and to promote the development of TGGS faculty members.
- 8) Research Planning and Development:
 - To assist in planning and developing research projects for faculty and students in Microelectronics Design and Semiconductor Engineering (MEDE).

- 9) Other Duties:
 - To perform additional tasks assigned by the supervisor.
- 4. Required Documents for Application **Applicants must submit the following** documents:
 - 4.1 Academic Credentials:
 - A degree certificate or official certification approved by the University Council/Institution before the application deadline, along with one copy.
 - 4.2 Academic Transcript:
 - A transcript of academic records, along with one copy.
 - 4.3 Personal Identification:
 - A copy of the house registration and national ID card (one copy each).
 - 4.4 Military Service Documentation (if applicable):
 - A copy of Sor Dor 9 (S.D. 9) or Sor Dor 43 (S.D. 43) or other relevant military service documents.
 - 4.5 Medical Certificate:
 - A medical certificate issued within the last six months.
 - 4.6 Photographs:
 - Two (2) passport-sized photographs (1-inch), front-facing, without a hat or dark glasses.

Interested applicants should inquire and submit their applications at:

The Dean Office, 3rd Floor,

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

King Mongkut's University of Technology North Bangkok

1518 Pracharat 1 Road, Wongsawang, Bangsue, Bangkok

Phone: +66 2-555-2000 ext. 2902

Application Period: January 20 – February 28, 2025

(during office hours on working days).