

- 1. The applicants must be a Thai National.
- 2. The applicants must hold a Bachelor's degree in Engineering, Science, Technology or related fields accepted by the TAIST -Tokyo Tech Executive Committee.
- 3. The applicants must have a cumulative GPA of at least 2.75 (As of the application submission date), or at least two years of work experience, or sufficient relevant research experience or other achievements asspecified by the TAIST - Tokyo Tech Executive Committee.
- 4. The applicants must pass a minimum score required by TAIST-Tokyo Tech from at least one of the following English proficiency test: TU-GET, CU-TEP, TOEFL, IELTS, TOEIC, KU EPT, or English proficiency test conducted by the TAIST - Tokyo Tech program (please see the website for minimum scores)

# Required Documents:

- 1. Two 1x1-inch photographs taken within the past six months.
- 2. Official Bachelor's transcript.
- 3. Statement of purpose (Summary of senior projects, Statement of study motivation and research interest.
- 4. A letter of recommendation from applicant's academic advisor.
- 5. A letter of recommendation from applicant's Lecturer or Head of department or Company supervisor.
- 6. Two sets of copies of ID or passport and one set of copy of house registration.
- 7. Certificate of English proficiency tests (TU-GET, CU-TEP, TOEFL, IELTS, TOEIC, KU EPT) taken within two years before the application date, if available.

Apply online: https://www.nstda.or.th/taist tokyo tech/

# More Information

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### Application Information:

Thailand Advance Institute of Science and Technology - Tokyo Tech (TAIST-Tokyo Tech)

National Science and Technology Development Agency (NSTDA) 111 Thailand Science Park, Phahonyothin Road, Klong 1,

Klong Luang, Pathum Thani 12120

Tel: +66 (0) 2564-7000 ext. 1610, 1611, 1257

or +66 (0) 2564-8016 to 8 E-mail: taist@nstda.or.th

The official website for Master of Engineering Program in Sustainable Energy and Resources Engineering (International Program).

KU: https://www.nstda.or.th/taist\_tokyo\_tech/92-sere.html

SIIT: http://www.siit.tu.ac.th/graduate\_meet\_en.htm













# Sustainable **Energy and** Resources **Engineering** Program



# TAIST-Tokyo Tech



# Scholarship by NSTDA okyoTech

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November 2017

# TAIST-Tokyo Tech [Thailand Advanced Institute of Science and Technology and Tokyo Institute of Technology]

TAIST-Tokyo Tech is a cooperation program among Tokyo Institute of Technology (Tokyo Tech), King Mongkut's Institute of Technology Ladkrabang (KMITL), Sirindhorn International Institute of Technology (SIIT), King Mongkut's University of Technology Thonburi (KMUTT), Kasetsart University (KU), and the National Science and Technology Development Agency (NSTDA)

The main objective of TAIST-Tokyo Tech is to establish an academic institution for human resource development to foster and support world-class researchers and high-level engineers through a combination of advising from Tokyo Tech professors, excellent facilities and research staff from NSTDA, and established resources and professors from Thai host universities.

#### Programs offered:

- Automotive Engineering (AE)
- Information and Communication Technology for Embedded Systems (ICTES)
- Sustainable Energy and Resources Engineering (SERE)

#### Certificate offered:

• Rail transportation certificate (RT) (optional)

#### Special characteristics of the Program:

- The tuition fee is supported by NSTDA (240,000 baht/person/2 years)
- Lectures given by Professors from Tokyo Tech and host universities.
- Students conduct their research work under supervision of NSTDA researchers, Professor from Tokyo Tech and host universities, or in collaborations with industry.



# Master of Engineering Program in Sustainable Energy and Resources Engineering (SERE) (International Program)

Environmental problems, both at regional and global levels, are mostly caused by infinite demands for better living. The effects of energy and environmental problems not only exist at the moment, but are also passed to the next generations. To overcome the present problems and be protective of the future, engineers and researchers, who are creative and ethical, with a solid background of advanced knowledges on sustainable energy, materials, resources and environment, are required, to solve many technological issues.

Kasetsart University and SIIT, Thammasat University, under collaboration with the National Science and Technology Development Agency and Tokyo Institute of Technology, Japan, jointly offer a Master's degree program in Sustainable Energy and Resources Engineering (SERE) to produce such highly-qualified engineers. With a project-based learning approach under the supervision of professors and researchers from Thailand and Japan. The students in the program will be guided through a specifically-designed curriculum, emphasizing on the development of research skills. The program will also promote academic collaborations among higher education institutes, governmental agencies, and the industrial sector, in terms of research outcomes of the projects. These will lead to the global sustainablility of energy, environmental and resources.

**Degree:** Master of Engineering Program in Sustainable Energy and Resources Engineering (SERE) (International Program).

**Certificate** from TAIST-Tokyo Tech signed by the host university, Tokyo Tech and NSTDA.

## **Host University:**





#### The curriculum structures

# Year 1 (Semester 1)

- Principle of Sustainable Environment Engineering
- Sustainable Environmental Engineering Ethics
- Environment Risk Analysis
- Hazardous Wastes Treatment and Disposal
- Life Cycle Assessment
- Computational Methods for Sustainable Environment
- Project Management and Evaluation for Sustainable Environment
- Principle of Sustainable Environmental Management
- LCA and ECO design Modeling Software
- Environmental Research Methodology
- Seminar
- Alternative Energy for Sustainable Development Sustain able Biofuel
- Materials Characterization for Energy and Environmental Research
- Biopolymers

# Year 1 (Semester 2)

- Utilization of Resources and Waste for Sustainable Environment
- Advanced Environmental Pollutant Analysis
- Advanced Control of Global Environmental Problem
- Zero Emission Technology\*
- Future Power Train for Sustainable Community\*
- Process Design in Sustainable Environment Engineering
- Advanced Water and Wastewater Treatment
- Creative Designing for Sustainable Environmental Engineering
- Nanoengineering for Sustainable Development
- Railway System Components and Standards\*
- Principles of Service and Maintenance Design\*

## Year 2 (Semester 1)

- Advanced Remediation Technology
- Project Management and Evaluation for Sustainable Environment
- Seminar
- Rail Transportation and Environmental Issues\*
- Safety Engineering for Rail Transportation\*
- Thesis

# Year 2 (Semester 2)

Thesis

\*Certificate on Rail Transportation (Optional):





