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TGGS International Programs

International Master Programs:

- **Chemical Engineering and Management (CEMP)**
- **Mechanical and Automotive Engineering (MAE)**
Minor: Mechanical Engineering Simulation and Design (MESD)
Minor: Automotive Safety and Assessment Engineering (ASAE)
- **Materials and Production Engineering (MPE)**
- **Electrical and Computer Engineering (ECE)**
Minor: Communication and Smart System Engineering (CSE)
Minor: Electrical Power and Energy Engineering (EPE)
Minor: Computer Engineering (COM)
Minor: Smart Grids Engineering (SGE)
- **Railway Vehicles and Infrastructure Engineering (RVIE)**
Minor: Railway Vehicles Engineering (RVE)
Minor: Railway Infrastructure Engineering (RIE)

International Doctoral Programs:

- **Chemical Engineering and Management**
- **Mechanical and Automotive Engineering**
- **Materials and Production Engineering**
- **Electrical and Computer Engineering**

Websites

The Sirindhorn International Thai-German Graduate School of Engineering
<https://tggs.kmutnb.ac.th>

Railway Vehicles and Infrastructure Engineering
<https://rvie.tggs.kmutnb.ac.th>



The Sirindhorn International Thai-German
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Railway Vehicles and Infrastructure Engineering

วิศวกรรมยานพาหนะและ โครงสร้างพื้นฐานระบบราง

- **Language of Instruction:** English
- **Duration of Master Program:** 3 years



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RVIE—A collaboration between RWTH Aachen, CU and TGGGS

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

The Sirindhorn International Thai-German Graduate School of Engineering (TGGGS) is a public-private partnership established with strong support from the Thai and German government for engineering education, technology, innovation, and business development in Thailand and South-East Asia. 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 university.

Course Description

Joint Degree International Master of Engineering Program in Railway Vehicles and Infrastructure Engineering at TGGGS and Chulalongkorn University offers research and education opportunities in two major areas:

Railway Vehicles Engineering (RVE) focuses on rail vehicle technology, railway vehicle vibration dynami, joining and construction of railway vehicles, design for reliability and maintenance of railway vehicles, wheel/rail interactions, rolling stock condition monitoring and maintenance, railway vehicles passenger safety and comfort, and railway AC and DC traction power supplies.

Railway Infrastructure Engineering (RIE) focuses on railway track engineering, structural testing and evaluation of railway infrastructure, railway time tabling and operations, railway control and signaling systems, railway electrification, condition monitoring and maintenance of rail track and components, energy management and power quality for railway systems, and environment sustainability of railway system.



Program Structure

Master of Engineering in Railway Vehicles and Infrastructure Engineering
Plan A Type A2

Semester		Credits
1	Coursework in Thailand (KMUTNB and Chula campuses)	12 (4 course)
2	Coursework in Thailand (KMUTNB and Chula campuses)	12 (4 course)
3	Coursework in Germany (RWTH Aachen University)	12 (4 course)
4	Coursework in Germany (RWTH Aachen University)	9 (3 course)
5	Industrial Internship (18 weeks in Thailand or Germany)	4
6	Master Thesis	12
Total		61

Entrance Requirement

Railway Vehicles Engineering (RVE):

Bachelor's Degree in Mechanical Engineering or other engineering degree with background in mechanical and electrical system of rail vehicles.

Railway Infrastructure Engineering (RIE):

Bachelor's Degree in Civil Engineering, Electrical Engineering, or other engineering degree with background in rail transport system.

Applicants for both majors must receive bachelor's degree awarded by an internationally recognized university with a minimum GPA of 3.0 (or 2.75 plus adequate experience), good reading, writing and communication skills in English. To graduate with TGGGS Master of Engineering Degree, TOEFL 525+ or equivalent has to be passed.

Prospects

During their terms of study at TGGGS, outstanding students may have the opportunity to do their internships and these in Germany.

Graduates will be of great interest to a wide range of industries, as they are not only well versed in fundamental principles, but will also have learnt to apply these principles to real industrial problems. For those who want to continue their study abroad, it is very likely to be accepted by leading international universities, particularly those in Germany.



Tuition Fees

Thai Students 60,000 Baht per semester

** International Students please contact TGGGS for up-to-date tuition fee information.

Our Partners

