

STRUCTURAL ENGINEERING OF INDUSTRIAL FACILITIES



Structural Engineering of Industrial Facilities Engineering Summer School

Our Summer School courses in Mechanical Engineering and Management offer international students the opportunity to take part in excellent science and research at RWTH Aachen University. The University is highly acclaimed internationally for its development of innovative answers to the most pressing global challenges. As a result, numerous research institutions, companies, R&D departments and start-ups have settled in and around Aachen, making RWTH the ideal setting for aspiring students.



Program Objective

The core focus of this Summer School is the analysis and design of industrial facilities in regard to exceptional and dynamic loads. During the conceptual design process of industrial structures and components, these dynamic loads give rise to problems that challenge the collaboration between mechanical and civil engineering. Both technical and socioeconomic aspects will be explored.



Academic Staff

The Center for Wind and Earthquake Engineering (CWE) of RWTH Aachen University is the leading institution behind the academic content. CWE offers longstanding expertise in structural dynamics and runs comprehensive efficient and highly specialized testing facilities. The teaching is supported by experts from Ss. Cyril and Methodius University in Skopje and the University of Pisa.



Applicant's Profile

This program is specifically tailored for B.Sc./B.E. students enrolled at top universities. Applicants need proficient knowledge of the English language and should be studying Mechanical Engineering or a related field. Completion of the first academic year is mandatory. The minimum age to participate is 18 years.



Quickfacts

Study format	Summer School
Qualification	Certificate
Language	English
Course Fees	EUR 1,990
Duration	2 weeks
Workload	60 Teaching Units



Application Information

We will evaluate applications based on the cover letter, the completion of the special requirements of each program, the overall strength of your academic record, and extracurricular experiences.

*All Summer Schools are co-funded by the RWTH International Academy in cooperation with RWTH Aachen University.



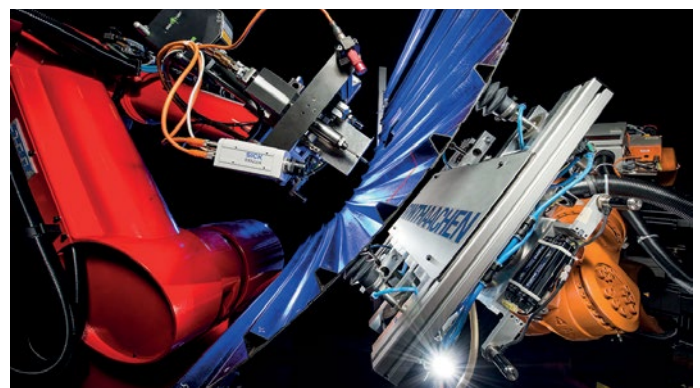
Academic Content

Modules: Lectures and Exercises	Teaching Units
Introduction to Course Content	4
Structural Analysis of Industrial Facilities	4
Global Analysis - Definition of Actions on Industrial Facilities	4
Global Analysis - Response of Structures	4
Improving and Monitoring the Dynamic Response of Structures	4
Identification and Modelling of Non-Structural Industrial Components	4
Identification and Modelling of Structures - From Buildings to Structures	8
Identification and Modelling of Structures - Integration of Components in Structures	4
Design of Silo and Tank Structures under Seismic Loading Conditions	4
Self-Management Skills for Engineers	4
Project Work - Case Study	8
Final Exam - Presentation of the Project Work	4
Modules: Company Visits and Culture	Teaching Units
Intercultural Workshop	4
Sum of Teaching Units	60



RWTH Aachen University

RWTH Aachen University is one of Germany's universities of excellence. It is a place where the future of our industrialized world is thought out. The university is proving to be a popular spot with increasing international recognition where innovative answers to global challenges are developed.



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