

INDUSTRY



# MASTER PROGRAM - MECHATRONICS

Master of Mechanical Engineering of Swiss German University is committed to support the application of Industry 4.0 in Indonesia. We recognize the need of mechatronics program in the education system so the graduates will be able to implement automations in the industry to pursue smart factory. We also recognize the need of Engineering Management program so the graduates will improve their management skill and ready to support and implement the concept of industry 4.0.

Master Program – Mechatronics is designed to provide engineers the required skills to implement automations in industry as a fundamental step in the implementation of Industry 4.0. This program focuses on the technology aspect in the INDI 4.0 wheel but the students will also be prepared with soft skills in technopreneurship, innovation technology and fundamental research for better readiness to Industry 4.0



rev 10 Dec 24

# sgu.ac.id



### WHO CAN BENEFIT FROM MASTER PROGRAM – MECHATRONICS ?

Master Program – Mechatronics is suitable for engineers who want to be knowledgeable on the technology of automation in Industry and to experience mechatronic system design to apply the automation in Industry. The students will also be prepared with soft skills.

Mechatronics a multi-disciplinary study dealing with the integration of mechanical devices, actuators, sensors, electronics, intelligent controllers and computers. Many new generations of consumer or commercial products can be classified as mechatronic products as they involve mechanical as well as electronic components. The need for mechatronic education has grown due to the increase in the number and importance of such systems and devices and to support the implementation of Industry 4.0 in the technology aspect.

## **STRENGTH POINTS**

- Highly qualified faculty members with extensive industrial experiences
- Industry oriented curriculum
- Thesis topics from the industry
- Industry visitations
- Classes conducted in English for global communication skills
- Saturday classes only, suitable for professionals
- Affordable tuition fee
- Intake twice a year, every February and August

## **GRADUATE CAREER OPPORTUNITIES**

- Director in Industry
- Top Management Level
- Project Manager
- Consultant
- Research and Development
- Continuing in Phd Program
- College Lecturer

COURSE	SKS
Industrial Electronics	2
Technopreneurship	2
Algorithm Programming	2
Machine Dynamics	2
Real Time System	2
Sensor and actuator	2
Modelling and Simulation of Mechanical System	2
Programmable Logic Controller (PLC)	2
Innovation Technology Management	2
Advance Control Techniques	2
Digital Signal Processing	2
Research Methodology (Thesis Proposal)	2
Robotics	3
Mechatronics System Design	3
Master Thesis	6
Total Compulsory	36

💿 🎔 🕇 @SGUgraduateschool

# FACULTY MEMBER HIGHLIGHT



DENA HENDRIANA, B.Sc., S.M., Sc.D. Head of Master of Mechanical Engineering

Doctorate Degree from Massachusetts Institute of Technology USA <u>Research Area</u>: CFD, Fluid, Renewable Energy, Mechatronics





# Dr. Ir. HANNY J. BERCHMAN, M.Sc.

Doctorate Degree from Gunma University, Japan <u>Research Area</u>: Energy Management, Renewable Energy

#### Dr. Ir. WIDI SETIAWAN, M.Sc. Former Director in BATAN

Doctorate Degree from Fakultaet fuer Maschinenwesen Technische Hochschule Aachen, Germany <u>Research Area</u>: Mechatronic Control, Computer Vision



Dr. Ir. Gembong Baskoro, M.Sc., IPU., ASEAN Eng, ACPE, APEC Eng. PPRA 46/2100 Lemhannas Alumni

Doctorate Degree from Technische Universiteit Eindhoven, Netherland <u>Research Area</u>: Technology Management, Strategic Innovation



EDI SOFYAN, B.Eng., M.Eng., Ph.D. Former Head of Program in LAPAN

Doctorate Degree from Royal Melbourne Institute of Technology, Australia <u>Research Area</u>: Aeronautic, Machatronic Control Project

Mechatronic Control, Project Management



Dr. TANIKA DEWI SOFIANTI, S.T., M.T. Faculty Member Swiss German University

Doctorate Degree from Bandung Institute of Technology <u>Research Area</u>: Performance Assessments, Business Intelligence



#### **ADMISSION**

- Bachelor's degree in engineering, information technology or other relevant professional degree from an accreditated or reputable university or institution of higher education with a minimum of 1 (one) year working experience in a relevant field.
- Fresh graduates are welcome to apply and subject to passing an interview with the Dean of Faculty
  of Engineering or Head of the MME programme.

#### **THE PROCEDURES:**

- 1. Fill-out the registration through https://join.sgu.ac.id/master
- 2. Pay the registration fee IDR 500.000
- 3. Documents submitting & Interview
- 4. Pay the confirmation fee before the due date from Letter of Acceptance

#### **ADMISSION DOCUMENT**

- 1. 1 Copy of Bachelor's Degree Certificate
- 2. 1 Copy of Academic Transcript
- 3. 2 photographs of 4×6cm (in color, with red as background).
- 4. 1 copy of Birth Certificate (Akta Kelahiran).
- 5. 1 copy of Family Certificate (Kartu Keluarga).
- 6. 1 copy of Family Certificate (Kartu Keluarga Orang tua)
- 7. 1 copy of NISN or senior high school certificate
- 8. Copy of ID Card/Passport/KITAS
- 9. Copy of Any Other professional certificate
- 10. Curriculum Vitae.
- 11. 2 Reference Letter
- 12. Foreign Candidate/overseas graduate: legalized the certificate through the Department of National Education
- 13. Foreign Candidate: Stay/Work Permit.
- 14. Statement of Agreement stamped Rp. 10,000,-.
- 15. New Student Form

# **STUDY FEE**

REGISTRATION FEE	500.000 IDR
CONFIRMATION FEE	2.500.000 IDR
1 <sup>st</sup> SEMESTER FEE	19.000.000 IDR
2 <sup>nd</sup> SEMESTER FEE	19.000.000 IDR
3 <sup>rd</sup> SEMESTER FEE	19.000.000 IDR
TOTAL	60.000.000 IDR

Tuition fee includes: Lunch, snack, coffee/tea during coursework

- Tuition fee excludes: Repetition exams, certification, books and graduation ceremony
- \* Scholarship scheme is available after fulfilling SGU terms and conditions
- \* Tuition installment available with SGU terms and conditions

### SATURDAY CLASS (8.00 AM - 5.00 PM)

## Contact Us: SWISS GERMAN UNIVERSITY

The Prominence Tower Alam Sutera

Jl. Jalur Sutera Bar. No.Kav 15, Kota Tangerang, Banten 15143

- Email : graduateschool@sgu.ac.id
- Hotline : 0811 8010 600
- Instagram : @sgugraduateschool
- LinkedIn : Swiss German University / sgugraduateschool