



Laboratorium  
Sistem Kendali  
dan Instrumentasi

LSKI



# PERSONALIA





# FASILITAS RUANGAN

- ❖ Ruang untuk 10 s / d 12 mahasiswa S1
- ❖ Ruang untuk 2 s / d 4 mahasiswa S2 dan S3
- ❖ *Laboratory Sections for (1) Instrumentation Systems, (2) Robotics (KCT), and (3) Process Control Systems*
- ❖ *Workspace for Laboratory Courses*
- ❖ *At the other corner across the hall are small rooms for professors' and technician's offices, a meeting room, a room for graduate students and a storage room for laboratory equipment.*



# FASILITAS PERALATAN



The laboratory's main purpose is to facilitate students to learn how to build mathematical and physical models of several types of control systems. The models help the students to understand, define and formulate the control problems usually found in the real industrial world. A miniaturized BOILER DRUM PLANT is available to give insights on a process control system and technology in the real industrial plants with LIQUID materials, while another MINIATURIZED PLANT is built as a physical model of industrial processes involving SOLID materials.



# PERALATAN LAIN



To emphasize the importance of understanding the models of control system's plants, modular sets of a standard SERVO-MOTOR training system and a miniaturized ROOM TEMPERATURE control system's plants are also available.

SENSORS and TRANSDUCERS are essential to provide feedback functions in automatic control systems. Modular instrumentation training sets are available to give the students hands-on experience with real sensors and transducers and know-how to convert physical quantities into electrical signals, both analog and digital.

The ultimate engineering work in the area of control system studies is to design the CONTROLLER. Four units of microcontroller-based UNIVERSAL DIGITAL CONTROLLER module are prepared for students to practice with the development of simple control algorithms for digital control systems.

The laboratory section for ROBOTICS takes the space of more than one-fourth of the main hall's area, mostly used for robotic line-tracks. It becomes the homebase of the "Cyber Tech Community" (KCT), a student organization routinely participating in several regional and national events on robotics, such as The Annual Indonesian Robotics Contest (KRI), etc.

# MATA KULIAH



- 375D4103 Electronic Instrumentation Systems
- 330D4112 Process Control Technology
- 329D4113 Control Systems + Laboratory
- 372D4122 Control System Design
- 371D4123 Digital Control Systems + Laboratory
- 331D4112 Industrial Robotics
- 374D4122 Intelligent Control Systems
- 373D4122 Optimal Control Systems



# SEKIAN, .....terimakasih!

