MODULE HANDBOOK

Module Name	:	Network-based Instrumentation
Module Level	:	Bachelor
Abbreviation, if applicable	:	FI3271
Sub-heading, if applicable	:	
Semester/ term	:	6
Module Coordinator(s)	:	
Lecturer(s)	:	
Language	:	Indonesia
Classification within the curriculum	:	
Teaching format/ class hours per week during the semester	:	
Workload	:	2 CU
Credits Points	:	
Requirements	:	Electonic, Instrumentation System
Leraning goals	:	Knowledge: (1) measuring and control system (2) Skill: (1) computer networks (2) programming Competencies: (1) ICT
Content	:	Things virtualization in cyber world, sensor and actuators, control systems, power-supply for IoT system. Communication channel : internet protocol, MQTT protocol, HTTP protocol, websocket. Connectivity solutions : wireless, LoRa, LoRaWAN, zigbee, Wi-Fi, bluetooth, star network, mesh network. Software : data ingestion, data processing, data storage, data analytics, data visualization. IoT infrastructure : Amazon platform, Artik, Thingspeak, open-source platform, node-red.