MODULE HANDBOOK
INTRODUCTION TO ELECTRICAL TECHNOLOGY

Module name	**Introduction to Electrical Technology**	
Module level	Undergradute	
Code	EW184001	
Course (if applicable)	Introduction to Electrical Technology	
Semester	First Semester (Gasal)	
Person responsible for the module	Prof. Dr. Ir. Mohammad Nuh, DEA.	
Lecturer	Dr. Margo Pujiantara Tasripan MT Dr. M. Rameli Prof. Dr. Gamantyo Hendrantoro Prof. M. Nuh Prof. Yoyon Kusnendar	
Language	Bahasa Indonesia and English	
Relation to curriculum	Undergradute degree program, **mandatory**, 1st semester.	
Type of teaching, contact hours	Lectures, <60 students	
Workload	1. Lectures : 2 x 50 = 100 minutes per week. 2. Exercises and Assignments : 2 x 50 = 100 minutes per week. 3. Private learning : 2 x 50 = 100 minutes per week.	
Credit points	2 credit points (sks)	
Requirements according to the examination regulations	A student must have attended at least 75% of the lectures to sit in the exams.	
Mandatory prerequisites	-	
Learning outcomes and their corresponding PLOs	Course Learning Outcome (CLO) after completing this module, CLO 1: Students understand the introductory material of power system engineering. CLO 2: Students understand the introductory material of control system engineering. CLO 3: Students understand the introductory material of electronics.	PLO-09 PLO-09 PLO-09

	CLO 4: Students understand the introductory material of telecommunication engineering. CLO 5: Students understand the introductory material of computer engineering CLO 6: Students understand the introductory material of biomedical engineering. CLO 7: Students understand the history and timeline of electrical technology. CLO 8: Students understand the basic electrical and magnetical phenomenon. CLO 9: Students understand the role of physics and mathematics in electrical technology. CLO 10: Students understand the impact of electrical technology on the development of civilization. CLO 11: Students understand the importance of creativity for electrical technology undergraduates in the face of technological developments. CLO 12: Students understand the impotance of integrity for electrical technology undergraduates.	PLO-09 PLO-09 PLO-11 PLO-09 PLO-09 PLO-11 PLO-11 PLO-11
Content	Introduction to Electical Technology course studies about fundamentals of electrical technology which include the introductory material of power system engineering, control system engineering, electronics, telecommunication engineering, computer engineering, and biomedical engineering also include the history and impact of electrical technology to civilization, role of physics and mathematics in electrical technology, and the importance of creativity and integrity for electrical technology undergraduates.	
Study and examination requirements and forms of examination	• In-class exercises • Assignment 1, 2, 3 • Mid-term examination • Final examination	
Media employed	LCD, whiteboard, websites (myITS Classroom), zoom.	
Reading list	Main : 1. Anthonie Meijers, Philosophy of Technology and Engineering 2. Sciences, Elsevier, 2009. Clive Maxfield dkk, Electrical Engineering, Elsevier, 2008. 3. Don Johnson, J. D. Wise, Fundamentals of Electrical Engineering, University Press of Florida, 2009. 4. Charles Gross, Thaddeus Roppel, Fundamentals of Electrical Engineering, Taylor and Francis, 2012. 5. Stan Gibilisco, Teach Yourself Electricity and Electronics, ed. 4, McGraw-Hil, 2006.	