

Electrical Engineering Delivered In English Curriculum

1 st Year	
1 st Semester	Credit
Introduction to Electrical Engineering	2
Physics Practical 1	1
Physics 1	3
Calculus 1	3
Algorithm and Programming Practicum	1
Algorithms and Programming	3
Religious and Ethics Education	2
English	2
HE I Character Formation	1
Total Credit	18
2 nd Semester	Credit
Matrix and Vector Spaces	3
Biology	3
Physics Practicum 2	1
Physics 2	3
Calculus 2	3
Introduction to Engineering and Design	3
Pancasila Education	2
Human Literacy	2
Total Credit	20

2 nd Year	
3 rd Semester	Credit
Electric Circuit A	4
Digital Systems	3
Electrical Engineering Practicum 1	1
Discrete Mathematics	3
Complex Variables	3
Differential Equations and Applications	3
Civic education	2
Total Credit	19

4 th Semester	Credit
Electronics A	4
Microcomputer	4
Electrical Engineering Practicum 2	1
Electromagnetics	3
Continuous Time Signal Processing	3
Probability and Statistics	3
Data Literacy	2
Total Credit	20

3 rd Year	
5 th Semester	Credit
Electrical Engineering Practicum 3	1
Data Acquisition System	3
Sensors and Actuators	3
New Renewable Energy System	3
Basic Control System	3
Discrete Time Signal Processing	3
Engineering Economics	2
Entrepreneurship	2
Total Credit	20
6 th Semester	Credit
Electrical Engineering Practicum 4	1
Artificial intelligence	3
Industrial Automation	3
IoT Device Programming	3
Telecommunication Systems	3
Practical Work (KKN)	2
Studium Generale	2
Project management	3
Total Credit	20

4th Year	
7th Semester	Credit
Bahasa Indonesia	2
Troubleshoot Specialization Courses: Multivariable Control Systems/ Digital Control Systems/ Control Engineering Design	3
Embedded Specialization Courses: Smart Electric Network Based on Renewable Energy/Single Chipset System/Embedded System Design	3
Elective Courses: Advanced Control/ Control System Identification and Implementation/ Machine Learning and Applications/ Renewable Energy Economics/ Switch Mode Power Supply Control Systems/ VLSI CMOS Design/ Telemetry Systems	3
Structured Design Method	2
Final Project Proposal	2
Robotics	3
Total Credit	18
8th Semester	Credit
Final Project	4
Elective Courses: Advanced Control/ Control System Identification and Implementation/ Machine Learning and Applications/ Renewable Energy Economics/ Switch Mode Power Supply Control Systems/ VLSI CMOS Design/ Telemetry Systems	3
Electronics Specialization Courses: Signal Integrity on PCBs/Power Supply Circuits/Electronic System Design	3
Total Credit	10