## **ELECTRICAL AND AUTOMATION ENGINEERING - MODULE MAP 2025-2026**

GROUP	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4
BEEAP25A7	Core competence Introduction to Electrical and Automation Technology Orientation to Engineering Studies EA00FP64-3001 Geometry and Linear Algebra EA00FP65-3002 Basics of Automation Technology EA00FP66-3001 Finnish 1 KM00FM66-3006	Core competence Working Methods in Electrical and Automation Engineering Algebra EA00FP67-3002 Electrical Measurement EA00FP68-3001 Laboratory Exercises in Automation Technology EA00FP69-3001 Technical English 1 KM00FM64-3002 Finnish 2 KM00FM67-3006 Sustainable Development.Now VV00EH16-3029	Core competence Introduction to Power Engineering Differential Calculus EA00FP70-3002 Theoretical Electrical Engineering - DC EA00FP71-3001 Electricity Distribution Networks EA00FP72-3001 Basics of Programming EA00FP73-3001 Electrical Measurement Laboratory Exercises EA00FP74-3001 Finnish 3 KM00FM68-3006	Core competence  Modelling Methods Integral Calculus EA00FP75-3002 Mechanics EA00FP76-3001 3D Modelling EA00FP77-3001 Production Process Modelling EA00FP78-3001 Finnish 4 KM00FM69-3006
BEEAP24A7	Core competence Automation Systems Logic Programming and User Interfaces BE00EJ21-3002 Data Networks and Data Security BE00EJ22-3002 Fluids, Heat and Thermodynamics BE00EJ23-3002	Core competence Information Technology Data Analysis BE00EJ24-3003 IoT Systems BE00EJ30-3002 Electricity, Magnetism and Waves BE00EJ26-3002 Theoretical Electrical Engineering - AC BE00EJ28-3002	Core competence Energy Efficiency of Buildings Energy Systems of Buildings BE00EJ33-3002 Electric Drives in Buildings BE00EJ34-3002 Automation of Electrical Networks in Buildings BE00EJ35-3002 Small-scale Production and Storage of Electricity BE00EJ36-3002 Developing Professional Identity BE00EM65-3002	Core competence  Data Collection and Utilisation  Working on an International Project BE00EJ29-3002  Differential Equations and Probability Calculus BE00EJ31-3002  Process Measurements BE00EJ32-3002  Technical English 2 KM00El28-3007  Industrial Internet of Things BE00El82-3002
BEEAP23A7	Profiling competence Process Automation Electrical and Field Design BE00EJ40-3001 Industrial Fieldbuses BE00EJ41-3001 Control Technology BE00EJ42-3001 Automation Design BE00EJ43-3001	Profiling competence  Modern Technology Applications  Artificial Intelligence BE00EJ37-3001  Robotics BE00EJ38-3001  Modeling and Simulation BE00EJ39-3001	Profiling competence Production Automation Machine Safety BE00EJ45-3001 Virtual Commissioning BE00EJ46-3001 Machine Vision BE00EJ47-3001 Electrical Design of the Production Process BE00EJ48-3001	Profiling competence Smart Home Home Automation SA00EH95-3002 Surveillance and Safety SA00EH96-3002 Domestic Robotics SA00EH97-3002
BEEAP22A7	Profiling competence  Maintenance  EA00DD82-3002 Introduction to Maintenance  EA00DD84-3002 Maintenance Planning  EA00DD83-3002 Maintenance Information Systems			
	Profiling competence <b>Optional studies 15 op</b>			
	Thesis 15 op			