ELECTRICAL AND AUTOMATION ENGINEERING - MODULE MAP 2026-2027

GROUP	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4
BEEAP26A7	Core competence **Introduction to Electrical and Automation Technology 15 cr** Orientation to Engineering Studies, 4 cr EA00FP64-3002 Geometry and Vectors, 3 cr KM00GA84-3012 Basics of Automation Technology, 5 cr EA00FP66-3002 Finnish 1, 3 cr KM00FM66-3009	Core competence **Working Methods in Electrical and Automation Engineering 15 cr** Functions and Equations, 3 cr KM00GA83-3014 Technical English 1, 2 cr KM00FM64-3005 Electrical Measurement, 5 cr EA00FP68-3002 Laboratory Exercises in Automation Technology, 3 cr EA00FP69-3002 Finnish 2, 2 cr KM00FM67-3009	Core competence **Introduction to Power Engineering Derivative, 12 cr KM00GA85-3007** Theoretical Electrical Engineering - DC, 3 cr EA00FP71-3002 Electricity Distribution Networks, 3 cr EA00FP72-3002 Basics of Coding, 2 cr EA00GE08-3001 Electrical Measurement Laboratory Exercises, 2 cr EA00FP74-3002 Finnish 3, 2 cr KM00FM68-3009	Core competence **Modelling Methods 18 cr** Integral, 2 cr KM00GA86-3007 Mechanics, 3 cr EA00FP76-3002 Finnish 4, 3 cr KM00FM69-3009 3D Model Design, 2 cr BE00GE43-3001 Innovation Project, 5 cr VV00GB64-3007 Production Process Modelling, 3 cr BE00GE44-3001
BEEAP25A7	Core competence **Automation systems 15 cr** Logic Programming and User Interfaces, 6 cr EA00FP79-3001 Process Measurements and Instrumentation, 6 cr EA00FP80-3001 Flow, Thermology and Thermodynamics, 3 cr EA00FP81-3001	Core competence **Electrical Networks in Buildings 15 cr** Installation and Inspection of Electrical Networks in Buildings, 3 cr EA00FP82-3001 Logic Programming and User Interfaces Exercises, 2 cr EA00FP83-3001 Design of Electricity Networks in Buildings, 4 cr EA00FP84-3001 Electricity, Magnetism and Wave Motion, 3 cr EA00FP86-3001 Theoretical Electrical Engineering - AC, 3 cr EA00FP87-3001	Core competence **Energy Efficiency of Buildings 13 cr** Energy Systems of Buildings, 8 cr EA00FP88-3001 Electric Drives in Buildings, 2 cr EA00FP91-3001 Electrical Safety Regulations and Standards, 2 cr EA00FP90-3001 Developing Professional Identity, 1 cr EA00FP94-3001	Core competence **Data collection and Utilization 15 cr** Working in an International Project, 2 cr EA00FQ40-3001 IoT Systems, 4 cr EA00FQ37-3001 Differential Equations and Probability Calculations, 3 cr EA00FQ38-3001 Technical English 2, 2 cr KM00FM65-3004 Computer Networks and Cybersecurity, 3 cr EA00FQ39-3001
BEEAP24A7	Profiling competence **Process Automation. 15 cr** Electrical and Field Design, 6 cr BE00EJ40-3002 Industrial Fieldbuses, 2 cr BE00EJ41-3002 Control Technology, 3cr BE00EJ42-3002 Automation Design, 4 cr BE00EJ43-3002	Profiling competence **Modern Technology Applications 15 cr** Artificial Intelligence, 5 cr BE00EJ37-3002 Robotics, 5 cr BE00EJ38-3002 Modeling and Simulation, 5 cr BE00EJ39-3002	Profiling competence **Production Automation 15 cr** Machine Safety, 3 cr BE00EJ45-3002 Virtual Commissioning, 5 cr BE00EJ46-3002 Machine Vision, 4 cr BE00EJ47-3002 Electrical Design of the Production Process, 3 cr BE00EJ48-3002	Profiling competence **Smart Home 15 cr** Home Automation, 5 cr SA00EH95-3003 Surveillance and Safety, 5 cr SA00EH96-3003 Domestic Robotics, 5 cr SA00EH97-3003
BEEAP23A7	Profiling competence **Maintenance 15 cr** Introduction to Maintenance, 5 cr BE00EJ49-3001 Maintenance Planning, 5 cr BE00EJ50-3001 Maintenance Information Systems, 5 cr BE00EJ51-3001			
	Profiling competence **Optional studies 15 op**			
	Thesis 15 op			