ELECTRICAL AND AUTOMATION ENGINEERING - MODULE MAP 2024-2025

GROUP	PERIOD 1	PERIOD 2	PERIOD 3	PERIOD 4
BEEAP24A7	Core competence **Introduction to Electrical and Automation Technology** Orientation to Engineering Studies BE00EI78-3002 Geometry and Linear Algebra KM00CV13-3058 Basics of Automation Technology BE00EI79-3002 Sustainable Development.Now VV00EI01-3056 Finnish 1 KM00EI34-3008	Core competence **Electrical and Automation Engineering Working Methods** Algebra KM00CV11-3070 Technical English 1 KM00EI27-3004 Finnish 2 KM00EI35-3007 Electrical Measurements BE00EI80-3002 Electrical and Automation Laboratories BE00EI81-3002	Core competence **Introduction to Power Engineering** Differential Calculus KM00CV61-3050 Finnish 3 KM00EI36-3010 Theoretical Electrical Engineering - DC BE00EJ15-3002 Electricity Distribution Networks BE00EM54-3002 Basics of Programming BE00EJ17-3002	Core competence **Measurement and Modeling Skills** Integral Calculus KM00CV62-3051 Finnish 4 KM00EI37-3010 Measuring Systems BE00EJ18-3002 Mechanics BE00EJ19-3003 3D Modelling BE00EJ20-3002
BEEAP23A7	Core competence **Automation Systems** Logic Programming and User Interfaces BE00EJ21-3001 Data Networks and Data Security BE00EJ22-3001 Fluids, Heat and Thermodynamics BE00EJ23-3001	Core competence **Information Technology** Data Analysis BE00EJ24-3002 IoT Systems BE00EJ30-3001 Electricity, Magnetism and Waves BE00EJ26-3001 Theoretical Electrical Engineering - AC BE00EJ28-3001	Core competence **Energy Efficiency of Buildings** Energy Systems of Buildings BE00EJ33-3001 Electric Drives in Buildings BE00EJ34-3001 Automation of Electrical Networks in Buildings BE00EJ35-3001 Small-scale Production and Storage of Electricity BE00EJ36-3001 Developing Professional Identity BE00EM65-3001	Core competence **Data Collection and Utilisation** Working on an International Project BE00EJ29-3001 Differential Equations and Probability Calculus BE00EJ31-3001 Process Measurements BE00EJ32-3001 Technical English 2 KM00EI28-3003 Industrial Internet of Things BE00EI82-3001
BEEAP22A7	Core competence **Distributed Energy Solutions** Automation of Electrical Networks in Buildings EA00DD65-3002 Electrical Drives of Buildings EA00DD66-3002 Hybrid Systems EA00DD67-3002 Preliminary Thesis EA00DD68-3002 Small-scale Production and Storage of Electricity EA00DD69-3002	Profiling competence **Modern Technology Applications** Artificial Intelligence EA00DD72-3002 Modeling and Simulation EA00DD73-3002 Robotics EA00DD74-3002	Profiling competence **Process Automation** Control and Automation Design EA00DD75-3002 Electrical Engineering and Field Design EA00DD76-3002 Electric Drives EA00DD77-3002	Profiling competence **Production Automation** Electrical Design of Production Process EA00DD78-3002 Machine Safety EA00DD79-3002 Machine Vision EA00DD80-3002 Virtual Commissioning EA00DD81-3002
BEEAP21A7	Profiling competence **Maintenance** Introduction to Maintenance EA00DD82-3001 Maintenance Information System EA00DD83-3001 Maintenance Planning EA00DD84-3001	**Thesis 15 op**		