Programme-Objective Matrix for Electrical Engineering and Automation

Programme Objectives	Intended Learning Outcomes (Mapping to Graduate Attributes and Indicators)	Corresponding Course Modules
Programme Objective 1: To enable graduates to adapt to the technological advancement and socio-economic development of the electrical engineering industry, possessing a solid foundation in mathematics, natural sciences and electrical engineering disciplines.	GR1 Engineering Knowledge (1.1, 1.2, 1.3, 1.4): Ability to integrate mathematics, natural science, engineering fundamentals and specialised knowledge to solve complex electrical engineering problems. GR2 Problem Analysis (2.1, 2.2): Ability to identify, express and analyze complex engineering problems through literature review and research methods.	Basic Science and Humanistic Literacy Module; Electrical Discipline Foundation Module; Core Electrical Engineering Professional Module
Programme Objective 2: To enable graduates to keep track of domestic and international technological development trends in electrical engineering, proficiently applying modern engineering tools and information technologies for engineering design and system optimization.	GR3 Design/Development of Solutions (3.1, 3.2): Ability to design solutions for complex engineering problems and develop system components or processes. GR5 Use of Modern Tools (5.1, 5.2, 5.3, 5.4): Ability to develop, select and utilize appropriate technologies, resources, modern engineering tools and IT tools.	Electrical Discipline Foundation Module; Core Electrical Engineering Professional Module; Professional Practice and Engineering Training Module
Programme Objective 3: To cultivate graduates' values of sustainable development and environmental protection, possessing awareness of engineering ethics, social responsibility and compliance with laws, regulations and technical standards.	GR6 Engineering and Society (6.1, 6.2): Ability to conduct reasonable analyses based on relevant background knowledge and evaluate the impact of engineering practice on society. GR7 Environment and Sustainable Development (7.1, 7.2): Ability to understand and evaluate the impact of engineering practice on environmental protection and sustainable development. GR8 Professional Standards (8.1, 8.2, 8.3): Possess humanistic and social science literacy, engineering professional ethics and social responsibility.	Basic Science and Humanistic Literacy Module; Core Electrical Engineering Professional Module; Professional Expansion and Cutting-edge Technology Module

Programme Objective 4: To require graduates to fulfil social responsibilities as engineers and citizens, possessing teamwork spirit, communication skills, project management capabilities and innovation-entrepreneurship awareness.	GR9 Individuals and Teams (9.1, 9.2): Possess a strong sense of teamwork and ability to assume individual and team responsibilities in multidisciplinary contexts. GR10 Communication (10.1): Ability to effectively communicate and interact with industry peers and the general public on complex engineering topics. GR11 Project Management (11.1, 11.2, 11.3): Understand and master engineering management principles and economic decision-making methods.	Basic Science and Humanistic Literacy Module; Communication, Cooperation and Innovation & Entrepreneurship Module; Professional Practice and Engineering Training Module
Programme Objective 5: To foster graduates' global awareness and international vision, possessing foreign language proficiency, lifelong learning ability and awareness of independent learning to adapt to technological iteration and industry transformation.	GR10 Communication (10.2, 10.3): Understand international development trends and possess language and written communication skills for cross-cultural interaction. GR12 Lifelong Learning (12.1, 12.2): Possess awareness of self-directed learning and lifelong learning, and ability to independently learn and adapt to technological development.	Foreign Language and International Communication Module; Communication, Cooperation and Innovation & Entrepreneurship Module; Graduation Internship and Graduation Design Module