Implementation Plan for the Graduation Thesis Project in Electrical Engineering and Automation

The selection of topics for graduation theses (or projects) aligns with the educational objectives of the Electrical Engineering and Automation major and the actual engineering requirements of the industry; these topics also correspond to the real-world project needs of enterprises. The task specifications, including task requirements, timeline, and assessment criteria, are all clearly disclosed in the official task document. This program implements a dual-supervisor system involving both university faculty and industry experts, establishing a collaborative guidance model composed of "full-time university faculty + industry experts." This approach strengthens the engineering practicality and industry relevance of the graduation projects, with a particular focus on enhancing students' ability to solve complex real-world engineering problems.

Regarding the guidance team configuration, on-campus advisors must hold intermediate or higher professional and technical titles and possess extensive experience in teaching, scientific research, and engineering practice; the number of students supervised by each individual advisor per academic year shall be strictly limited to no more than eight. Additionally, industry-senior experts from relevant fields—such as power enterprises, electrical equipment manufacturing, and automation engineering—who hold intermediate or higher engineer titles and have over five years of professional experience, shall be appointed as off-campus advisory mentors. These mentors will primarily be responsible for ensuring the engineering practicality, technical soundness, and compliance with industry standards of the graduation projects, thereby addressing the gap between purely academic instruction and real-world industrial practices. This program ensures a steady increase in the coverage rate of dual-supervisor guidance for both engineering practice-based and project-oriented graduation design topics, achieving deep integration between industrial resources and educational training.

During the guidance process, university supervisors closely monitor the students 'thesis writing progress throughout the entire process, conducting at least two progress reviews per week and providing at least two complete rounds of revision feedback to ensure that the thesis framework is standardized, the theoretical foundation is rigorous, and the logic is clear; industry

experts provide phased guidance focusing on dimensions such as engineering implementation, technical selection, industry standards, and practical feasibility; they offer professional guidance addressing engineering challenges and technical pitfalls within the student's research project, optimize design solutions by integrating current industry technical specifications and engineering case studies, and guide students through core tasks—including engineering data verification, optimization of operational schemes, and analysis of final outcomes—thereby helping students' results align with real-world industrial application scenarios. Meanwhile, industry experts participate in all key stages of the process, including the proposal defense and mid-term review sessions, where they review and comment on the research value, technical roadmap, and phased deliverables, thereby establishing a comprehensive, dual-dimensional guidance and supervision system across the entire process.

The thesis formatting, typesetting standards, and writing guidelines all strictly adhere to the university's unified requirements, ensuring that the graduation process is implemented in a standardized manner.

Upon completion of the thesis, the defense committee adopts a joint evaluation mechanism comprising both university faculty members and industry experts; this committee consists of 5–7 professionals, including no fewer than 2 senior technical experts from industry enterprises, thereby establishing a comprehensive evaluation system that integrates academic rigor with engineering practicality. During the defense review process, university faculty members focus on assessing the theoretical foundation, knowledge application, logical structure, and academic propriety of the thesis; meanwhile, industry experts focus on evaluating the engineering practicality of the research topic, the feasibility of the technical solution, the application value of the results, as well as the student's engineering practice capabilities, industry awareness, and capacity for innovative implementation. The final grade is determined by synthesizing the evaluations provided by the supervising instructor, the feedback from the peer reviewers, the recommendations from the industry experts, and the student's performance during the live defense. The final grades are uniformly entered into the university's academic management system, and the official evaluation records are archived as one of the core criteria for student graduation and degree conferral. The full participation of industry experts effectively refines the graduation project evaluation system,

ensures that the assessment results align with industry talent standards, and facilitates a precise alignment between talent cultivation and the demands of industry positions.