Kuljira Attapreechakul 2009: Application of QFD and Risk Assessment for Graduate Quality Development Plan Case Study: Department of Industrial Engineering, Faculty of Engineering, Kasetsart University. Master of Engineering (Industrial Engineering), Major Field: Industrial Engineering, Department of Industrial Engineering. Thesis Advisor: Associate Professor Sunsanee Supapa, M.S. 175 pages.

This objective of this study was to investigate and analyze the industrial engineering students' and their prospective employers' expectations of the quality of student from industrial engineering graduate program at Kasetsart University in order to formulate the guidelines for quality assurance planning. The Quality Function Deployment (QFD) technique was applied to analyze the levels of stakeholders' satisfaction. Data on the Industrial Engineering department's operations, as reviewed by the Office for National Education Standards and Quality Assessment were also used for risk assessment analysis. A questionnaire survey and personal interviews were used for data collection. The findings revealed that students in the program had dissatisfaction regarding support facilities, physical facilities, public relations work on the curriculum, instructors and advisory service system respectively. The areas of dissatisfaction among graduates' users included analytical skill, practical ability, graduates' competence level, attitudinal and emotional maturity respectively. The QFD analyses showed that the Department's prioritization for improvement of graduates' characteristics are in the following areas: analytical skill (19%), practical ability (18%), attitudinal and emotional maturity (14%) and graduates' competence level (13%). The quality assurance characteristics were ranked by their weight as following percentages of full time equivalent students per laboratory group (1.91), percentages of job placement (1.78), success rates of professional licensing (1.71), and annual laboratory updating expenses (1.62). These factors were vital elements in designing the graduate quality development plans, both short and medium terms.

Due to the high competitiveness and dramatically change in the need of industrial engineering graduate which effects to the risk assessment analysis of the development plan. The development of graduate under the quality development plan in accordance with the employee's requirement was taken to the first priority for the risk assessment.

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