

## **ABSTRACT**

*To shape students' readiness in entering the world of work, universities have an important role in encouraging students to have the special skills and competencies needed. Telkom University's Industrial Engineering Study Program provides a group of expertise consisting of a number of specialization fields that will focus on equipping students with expertise that is suited to the needs of the workforce. In the choice of specialization, students are faced with the problem of choosing a specialization field not in accordance with their potential. To assist students in determining specialization areas that are in accordance with their potential, namely by conducting research in order to design a decision support system for the selection of specialization courses that have criteria for subject grades, final assignment topics, and career choices.*

*The method used in the design of this decision support system is the Analytic Hierarchy Process which performs a weighting for each criterion from the results of the pairwise comparison matrix and produces a weight value that will be included in the Profile Matching calculation. Profile Matching calculates the gap that comes from the difference in each criterion with the final results ranking ranking specialization taken from the highest to the lowest final value.*

*The results of tests on the design of decision support systems using Analytic Hierarchy Process and Profile Matching show that the criteria for the final project topic have an influence on the area of specialization recommendations. With the decision support system created, students can choose the area of interest according to their competence.*

**Keywords:** *Decision Support System, Analytic Hierarchy Process, Profile Matching, Field of Interest*