

## **ABSTRACT**

*Telkom University provides research lab facilities for all specializations in the Industrial Engineering Faculty to be taken in the last year of study. One of the research labs from the Faculty of Industrial Engineering, namely Enterprise Systems and Solution (ESS) research lab. The competence of graduates, as well as measuring tools and methods of measurement can be the basis for the ESS research lab to increase the human resources of the research lab students so that students have competencies that are in accordance with what is expected, increase the percentage of industry satisfaction with students who graduate from the ESS research lab and of course the industry will be more competitive in facing the current intense competition. Therefore, this research will design measurement tools and measurement methods competence of ESS research lab students' graduates.*

*SECI method is short for Socialization, Externalization, Combination, and Internalization. This method is one type of knowledge conversion that is used to manage the knowledge possessed by tacit knowledge experts regarding the competencies of graduates of ESS research lab students. In the Socialization stage, identification of tacit knowledge, measuring tools and measurement methods of student graduate's competence is carried out. The Externalization stage is carried out by documenting tacit into explicit knowledge. The Combination stage is a combination of measuring tools and measurement methods of competence knowledge provided by each respondent. The Internalization stage is a process of informing the results of combining measuring tools and measurement methods of student graduate's competence. After using the SECI method, knowledge is obtained about the competency results of selected graduates.*

*The results of this study are best practice measurement tools and measurement methods of student graduate's competences with nine and seven competences of graduates from ESS research lab students for the Information Systems major and Industrial Engineering major. In this study also designing activities to improve the competence of ESS research lab students.*

*Keywords: Competence of Graduates, Knowledge Conversion, Measurement Method, Measurement Tools, SECI Method*