## **ABSTRACT**

This research focuses on the design of final SOP improvement in the Faculty of Industrial Engineering. Where the problems in this study include the first problem SOP final task on the faculty has not been referring to ISO 9001: 2015 which in its application already have to consider the risks. Where the objective of risk is considered from the outset is to minimize the risk arising from risk mitigation. So FRI can reduce excessive corrective action. The second problem is that the applicable SOPs of the Quality Assurance Unit section are not in accordance with the implementation in FRI so there are undocumented processes. Where if FRI will upgrade to ISO 9001: 2015 it becomes a problem because maintaining documented information is a requirement. The third problem is the equality in the determination of mentors due to lack of human resources in this case lecturers who have the requirements set in the academic guidelines Telkom University 2015 padal 14. So there needs to be an adjustment between the process with these requirements. Therefore, this study uses the requirements of ISO 9001: 2015 clause 8.6 and academic guidance of Telkom University 2015 article 14. Data collected in the form of eksisiting condition, risk potential, organizational structure, job description, requirement of ISO 9001: 2015 and academic guidance of Telkom University year 2015 article 14. Existing conditions compared to the requirements of ISO 9001: 2015 clause 8.6 and academic guidance of Telkom University 2015 chapter 14 so obtained Gap. Potential data of internal and external negative risk is processed using risk assessment then documented into risk register. Then do the design process with input gap result and risk register. The result of the process design is improved by business process improvement method with the step of apply improvement technique. The result of this research is final SOP that has fulfilled ISO 9001: 2015, gap, and risk register.

Keyword: ISO 9001:2015, Risk Register, Business Process Improvement, Standard Operating Procedure.