

## ***ABSTRACT***

*The education system at Telkom University Surabaya (TEL-U SBY) is not only in the form of theory but also practicum material, one of which is in the Industrial Engineering Study Program. The TEL-U SBY Industrial Engineering Study Program has the most laboratories as a means of practicum activities including 5 laboratories. The practicum activities involve the role of active students who are responsible as laboratory assistants in the implementation of practicum. This makes them have two roles that can cause mental workload levels. So, in this study, a comparative measurement of the mental workload of laboratory assistants was carried out to help identify the level of workload experienced, as well as increase efficiency and productivity. The method used for measuring the mental workload of laboratory assistants is the NASA-TLX method. The results obtained from this study, it is known that the Engineering Management laboratory has the highest mean score of 65.42 and the second highest is the Optimization and System Modeling laboratory at 60.56. The most dominant indicators affecting the mental workload of laboratory assistants are the effort and temporal demand indicators. Recommendations for improvement include task and time management, work appreciation, and improving adequate practicum facilities, for the convenience and satisfaction of laboratory assistant members.*

**Keywords:** *Laboratory, Laboratory Assistant, Mental Workload, NASA-TLX.*