

## ***Abstract***

*Process mining has been used to solve several problems in the real life. Discovery is one of process mining techniques that makes the model from the existing event log. An  $\alpha$ -algorithm can be used to perform the discovery process, which would sort the process in the event log and compare the sequence. This would result on the information of which is the causality process and the parallel process. In fact, the simplicity of this concept gives a problem when solving the real life problems. Real-life data has a high diversity and noise which could affect the result. One of method that can eliminate the outlier in data mining is to adopt a priori principles. By using this principles, the case and the relationship activities must qualify a certain requirement in order to be generated in the model.*

***Keywords*** : *student registration , process mining , discovery ,  $\alpha$  algorithm , a priori*