

## ***ABSTRACT***

*Waiting Period for Graduates is one of the measurement values of a university, a university accredited "A" if the average waiting period of graduates is less than three months. Based on Telkom University tracer study data for 2016-2018, all students taking the undergraduate study program have 3466 students who experience a graduate waiting period of less than three months and there are 1660 students who experience a graduate waiting period of more than three months. The purpose of this study was to classify students based on graduate waiting period, history of type of organization, position of organization, Grade Point Average (GPA), and study period.*

*The classification method used is decision tree C5.0. Classification is a prediction method based on input variables so that Telkom University can monitor students who are indicated to have had a graduate waiting period of more than three months and provide input to students to participate in certain student activities so that they do not experience a graduate waiting period of more than three months.*

*The result of the decision tree model that has been made has an accuracy of 54.7% with three attributes that are considered, namely the GPA value, study period, and participating in educational / reasoning / arts organizations. The results of the algorithm created in identifying students experiencing a graduate waiting period of more than three months.*

*Conclusions and suggestions for the next study the number of observations and attributes used is greater because the amount of data can affect the quality of the model. The classification method is used more than one so that it can compare the results of the model results of each method so that it can be identified that the processed data can be made a model using certain classification methods.*

***Key Words: Data mining, Decision tree, Classification, Waiting period***