## **ABSTRACT**

Active Database is one of Database System which able to generate certain action when an event that fulfill certain condition detected. Having ECA rules and other functionality such as triggers, stored procedure, and jobs make it can automatically monitor the data that it more efficient. Fragmented part of ECA rules component and application made the system development easier.

There is condition in scheduling system that caused a change in the system itself such as a schedule change or schedule exchange. Common database used is a passive one, means that every changes that probably happen and information as results of application really depend on user involvement in the system.

This final project will use an *Active Database* to fulfill existing scheduling system that it can handle every condition that caused a change and conduct a right and accurate solution automatically. By adding ECA rules to database, all the business procedure such as registration, schedule change, and also schedule exchange can be done by system automatically, the application program used only for an initial input by user. Conditions that able to be handled by *Active Database* system with a solution that not break the constraint can be show at the implementation.

Keywords: Active Database, ECA rules, Triggers