

## **Abstract**

Guardianship is one of the procedures that must be performed by students at registration time when new semester comes. At this stage, students submit the subjects that will be taken to the lecturer and then the lecturer examine and decide whether the student is suitable to take the subjects proposed. The lecturer can provide elective subjects recommendations for students.

This subject recommendation can be solved by the association method. Association analysis is a data mining technique to find the combination of an associative rule item. Associative rules of guardianship analysis is to determine the level of student opportunities to take subjects based on skill groups and subjects that previously taken with the values of the subjects. The technique in this final exam is a PHS (*Perfect Hashing and Data Shrinking*). The techniques used to find association subject rule with join and elimination process the subject that does not meet the prunes, so that it will shrink the data in the database.

The result of test performed is proves that the PHS algorithm can be used to complete the recommendation of elective subjects. This recommendation is based on association rules were formed. Optimum value from these tests are the minimum support=20% and minimum confidence=50%.

**Key words : Association, PHS, Support, Confidence, Knowledge**