CLASSIFICATION OF STUDENT'S ACHIEVEMENT SMK AS'SAADAH MECHANICAL ENGINEERING BUNGAH GRESIK FIRST YEAR OF SCHOOL USING FUZZY C-MEANS METHOD

By RIRIN PRIHATIN NIM 09.621.040

Presented to Informatics Engineering Program, Faculty of Engineering Universitas Muhammadiyah Gresik on July 9, 2015
In partial degree of S-1 in Informatics Engineering Program

ABSTRACT

SMK As'saadah Bungah Gresik is a school that has a lot of students, there fore it will be established space systems consisting of featured 2 superior room, and the other are random grade, and to determine whether the evaluation of the classes are balanced then there was displacement classrooms when up grade, it is intended that the creation of a class that is balanced or heterogeneous nature of students' academic achievement is good, moderate and less.

To solve this problems in the formation of a balanced class can be done by developing a more effective system in grouping students' academic achievement, one effective way of classifying data is to use data mining clustering techniques, so as to facilitate the work for waka. The curriculum in knowing students who have good academic achievement, moderate and less, which can be used as a reference in forming a balanced class condition.

Clustering system in students achievement of SMK As'saadah Bungah Gresik using the Fuzzy C-Means method. Grouping is done by using the value of all the lesson being taught for one semester as an attribute. Based on the test results of an evaluation system with internal cluster Indek Xie Beni on a global cluster performed 9 times experiments, the best grouping occurred in experiments to-4 with a value of Indek XB = 0.015725

Keywords : SMK As'saadah Bungah Gresik, Grouping System, Data mining, Fuzzy C-Means, Cluster, Index Xie Beni.

Supervisior 1 : Harunur Rosyid, ST., M.Kom. Supervisior 2 : Eko Prasetyo, S.Kom., M.Kom.