

Abstract

Choosing a KBK is one of the problem that student have to solve. Choosing a correct KBK is an important problem, each student have to solve it carefully and smartly. When a student take a wrong decision, they will face a bigger problem later. This problem will be easier if we have a system that can help the student to choose their KBK.

When talking about feeling and intuition there's a system that can adopt those thing, the System is Fuzzy System. By using Fuzzy System, can support in making a KBK's decision. But there is still a problem about fuzzy system, that how to choose the membership function which could give the best solution.

In this Final Project, Fuzzy System is builded by using Genetic Algorithm, which produce a membership function that can give the best solution. This final project, determine the best parameter of Genetic Algorithm which is used by Fuzzy System.

From the analyze, Genetic Algorithm best parameter is population with 100 members, three cutting point, $P_c=90\%$ dan $P_m=10\%$. And from the testing, the Fuzzy System's accuration is 92%. This accuration means that there are 92% of the test's data from the student which are the student KBK's data have the same output with the fuzzy system's output.

Keywords : KBK, Fuzzy System, Genetic Algorithm