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**Universiti Teknologi MARA**

**A Fuzzy MADM  
(Multiple Attribute Decision Making)  
Expert System for Job Matching**

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## **DECLARATION**

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline

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## ABSTRACT

Registered to jobs searching websites, searching the newspaper advertisement and other method are used in job searching among students. Students faced with a lot of problems to find suitable job when they graduate soon because of no facilities especially from the faculty itself that can assist in providing alternative jobs for them. So, integration between fuzzy and Multiple Attribute Decision Making (MADM) method will become the technique to solve this problem. The main purpose of this research is to develop the Fuzzy MADM expert system prototype for job matching problem. Students from four courses have been selected in this research and matched with six jobs selected. This system can assist students in finding suitable jobs that match their skills and qualifications. Weight will assign to computer knowledge and skill and additional values sub-attributes were the earliest stage before fuzzy process started. User profile information collected from system used as fuzzy inference engine inputs data. The fuzzy stage is from fuzzification to defuzzification will produce the result of system. The process of system will end with rank the fuzzy result with the weight of user preferences. The validity and reliability test was done but it is not enough to know that the fuzzy rules are valid. However the general testing using samples data can give the expectation that the fuzzy rules developed was valid. The system will produced the result but still that was not the result that student can follow hundred percent. In the future development, the construction of the fuzzy rules, can use the real expert such as employer to know the exact requirement for each job.