

**AN ATTEMPT TO COMBINE MATHEMATICS  
AND TRADITIONAL MALAY ARTS  
A RESEARCH ON ISLAMIC GEOMETRIC PATTERN**

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## **DECLARATION BY CANDIDATE**

I hereby declare that the thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Teknologi MARA or other institutions.

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## **ABSTRACT**

Mathematical elements generally exist in every structure of building design. The mathematical structures which existed in architecture are geometry, golden ratio, Fibonacci, angle of shape, angle of triangle, and many more. The objective of this research is to combine mathematics and traditional Malay arts through utilization of Islamic geometric pattern. The Islamic geometric pattern is taken and collected from various sources in the Internet. The pattern is observed and analyzed according to their mathematical classification and the existence of mathematical elements. The mathematical elements in Islamic geometric pattern are identified and manipulated which would suit the traditional Malay arts. An interesting new concept of traditional Malay arts is prevailed at the end of this research.

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