URBAN FLOOD STUDY USING HEC-HMS

By

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Report is submitted as the requirement for the degree of **Bachelor Engineering (Hons) (Civil)** 

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## **DECLARATION BY THE CANDIDATE**

I Wan Ahmad Zaihan B. Wan Johan, 2004 l confirm that the work is my own and that appropriate credit has been given where reference has been made to the work of others.

### **DECLARATION BY THE SUPERVISOR**

I confirm that I have read and checked this report and to my opinion the report is suitable in terms of scope and quality required for awarding the Bachelor of Civil Engineering (Hons).

| Signature                   |  |
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| Date                        |  |

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#### ABSTRACT

Flash flood is caused by thunderstorm which is localized rainfall of very high intensity and short durations 2 to 5 hours. The intense level of precipitation causes large volumes of storm run-off which often leads to drainage and river system in the localized areas being completely over loaded. HEC-HMS is the solution for prediction and evaluation of flood at water catchments especially in urban area. This study focus on how the model can simulate the catchments for present and future use. The model simulate rain fall -runoff process by determined the discharge and runoff volume produced. Rainfall data were use as main role in this research to determine the runoff and data from stream flow is for comparison and calibration. Result simulated from this study proved the increase of impervious area can contribute to increase of runoff volume and discharge.

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