

**DEVELOPMENT OF A ROBOTIC WELDING MODULE (ON-LINE
LEARNING)**

NURUL AIDA SYAZRINA BT ZULKIFLI

(2007288962)

A Thesis Submitted In Partial Fulfillment Of The Requirements For The Award Of
Bachelor Of Mechanical Engineering (Manufacturing) (Hons)

**Faculty of Mechanical Engineering
Universiti Teknologi MARA (UiTM)**

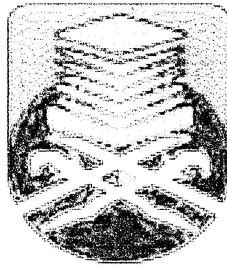
MAY 2011

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Signed : Asu
Date : 19/05/2011

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ABSTRACT

Robot welding is the use of robots which completely automate a welding process. With the use of robotics simulation software, they give predictions to the users on how components like robot and welding joint will behave during the virtual welding operation before the actual operation is carried out in real life. One of the aims of this project is to explore the welding technology through the use of robotics and welding simulation software such as RobotStudio and SYSWELD respectively. To conduct the simulation, it requires the knowledge on using both softwares. Thus, a learning module by incorporating a case study using both softwares is developed. The development of a robotic welding module for on-line learning is demonstrated through the website (website is developed using Joomla! software). The learning module is applicable for all level of users such as Mechanical Engineering students, technicians and lecturers. By applying the on-line learning system, users are able to access the learning module at any convenient time and place.