



**Sudan University of Science and Technology**  
**College Of Graduate Studies**



# **Design of an Extracting air Control System in Hemodialysis Machine using Microcontroller**

**نظام إستخلاص الهواء لمكينّة غسيل الكلى باستخدام  
المتحكمات**

*A Thesis Submitted Partial Fulfillment Requirement for the Degree of  
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**By:**

**Mazin Mohammed El-sir**

**Supervision:**

**Dr.Alaadeen Awadah**

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