

A PRELIMINARY STUDY ON EFFECT OF LISTENING TO  
ALQ-URAN AND LISTENING TO CLASSICAL MUSIC  
TO BRAIN WAVE SIGNAL USING EEG

NOOR ASHWINI BT ZULKURNAINI

FACULTY OF ELECTRICAL ENGINEERING  
UNIVERSITI TEKNOLOGI MARA  
MALAYSIA

**A PRELIMINARY STUDY ON EFFECT OF LISTENING TO AL-QURAN  
AND LISTENING TO CLASSICAL MUSIC TO BRAIN WAVE SIGNAL  
USING EEG**

This thesis is presented in partial fulfillment for the award of the  
**Bachelor of Electrical Engineering (Hons.)**  
**UNIVERSITI TEKNOLOGI MARA**



**NOOR ASHIKIN BT ZULKURNAINI**  
**FACULTY ELECTRICAL ENGINEERING**  
**UNIVERSITI TEKNOLOGI MARA**  
**40450 SHAH ALAM, SELANGOR**

## ACKNOWLEDGMENT

In the name of Allah, Most Beneficent, Most Merciful. Alhamdulillah, All praised to Allah S.W.T for giving the will and strength so that I can complete this project successfully.

First of all, I like to express my gratitude and sincere appreciation to friends and to those who had gave me their hands in completing my final year project.

Then, a person who give her guidance and support in helping me during the completion of this project, my project supervisor Puan Ros Shilawani Bt S. Abd Kadir.

My appreciation also goes to Associate PM Zunairah Hj.Murat for her advice and idea that helped me during the completion of this mission. Moreover, I like to give special thank to Puan Rosnah Kassim, Puan Aisyah Hartini Jahidin, Encik Sahrim Lias, Encik Zodie Mohamed Hanafiah, Encik Norizam Sulaiman, Cik Roshakimah Mohd Isa, who assisted me at Biomedical Research Laboratory for Human potential.

Then, not forget those who were willing to participate as samples and my fellow friends, present and past, for their support and commitment.

Next, my deepest appreciation goes to my parents and family for their love, understanding and encouragement and being source of my inspiration.

Thank You

Noor Ashikin Bt Zulkurnaini

## **ABSTRACT**

This is a research mainly concern on effects of listening to al-Quran and classical music to human brain wave using EEG. The EEG patterns will be of two situations, which are before and after listening Al-Quran and classical music. This research has been carried out on 28 samples randomly picked among UiTM students with age around 20 to 28 years old. During this analysis, each sample had been exposed to the same surah of Al-Quran and same classical music. Then, brain wave pattern had been captured and analyzed which is associated with the effects of listening to Al-Quran and classical music using EEG test. Finally the results were compared and the difference of brain wave patterns while listening to classical music and Al-Quran were verified. The results demonstrate that up to 12.67% of the samples show improvement in the alpha band after listening to Al-Quran while only 9.96% improve after listening to classical music. These finding indicate that the alpha power increase when listening to Al-Quran compare to classical music. Moreover, this research has been observed for beta, theta and delta bands. The correlation for each band shows that the percentage was increased when listening to Al-Quran compared to listening to classical music. Consequently, listening to Al-Quran in particular can result in a more give benefits and advantages compare to classical music.

## TABLE OF CONTENT

CHAPTER		PAGE
	Declaration	i
	Acknowledgment	ii
	Abstract	iii
	Table of Contents	iv
	List of Figure	v
	List of Table	vi
<b>1.</b>	<b>INTRODUCTION</b>	
	1.1 Overview Study	1
	1.2 Problems statement	2
	1.3 Objectives	3
	1.4 Scope of work	3
	1.5 Significance of The Study	4
	1.6 Thesis Organization	4
<b>2.</b>	<b>LITERATURE REVIEW</b>	
	2.1 Human Brain	6
	2.2 Brain Parts	7