



**FACULTY OF ELECTRICAL ENGINEERING
UNIVERSITI TEKNOLOGI MARA
SHAH ALAM**

PROGRAMME	EE241: Bachelor of Engineering (Hons) in Electronics Engineering.
COURSE CODE	ECE 551
COURSE NAME	Multimedia Systems and Applications
CREDIT HOUR	3 (Lecture/Tutorial:2hr, MOOC:2hr)
SEMESTER	SEPT 2019 – JAN 2020
COURSE STATUS	Core
KOORDINATOR	Ts. Dr. MURIZAH KASSIM

COURSE DESCRIPTION:

This course provides students with the essential knowledge on multimedia systems and applications. To develop knowledge and understanding of the underlying hardware and software developments which enable multimedia technology developments.

COURSE OUTCOMES:

At the end of the study, the students should be able to:

COURSE OUTCOMES	PROGRAMME OUTCOMES			INSTRUCTIONAL METHODS	ASSESSMENT
	PO3	PO5	PO7		
1. Able to describe concepts of multimedia technology and Applications, internet and web publishing.	√			<ul style="list-style-type: none"> ▪ Lecture ▪ Tutorial ▪ Blended Learning 	<ul style="list-style-type: none"> ▪ Test ▪ Quizzes / Assignment
2. Able to perform multimedia applications, internet web application using available authoring tools.		√		<ul style="list-style-type: none"> ▪ Lecture ▪ Tutorial ▪ Lab ▪ Blended Learning 	<ul style="list-style-type: none"> ▪ 3 Projects
3. Able to utilize the concept of Intellectual Property Rights in designing multimedia applications.			√	<ul style="list-style-type: none"> ▪ Lecture ▪ Tutorial ▪ Lab ▪ Blended Learning 	<ul style="list-style-type: none"> ▪ Presentation ▪ Report

PROGRAM OUTCOMES:

PO3	Ability to design solutions for complex electronic engineering problems with appropriate consideration for public health and safety, culture, society, and environment.
PO5	Ability to create, select and apply appropriate techniques, resources, and modern engineering and IT tools, including prediction and modeling, involving complex electrical engineering activities.
PO7	Identify the impact of professional engineering solutions in societal and environmental contexts and demonstrate knowledge of and need for sustainable development.

COURSE OUTLINE: SEMESTER SEPT 2019-JAN 2020

WEEK/DATE (Feb 2019- July 2019)	CHAPTER (TEST BOOK)	TOPIC	MODE	LAB ACTIVITY
1 2 – 6 SEPT 2019	1	<ul style="list-style-type: none"> • Briefing on Course Description. • Briefing on Blended Learning & I-learn System. • Introduction to Multimedia <ul style="list-style-type: none"> • History • Multimedia/ Hypermedia • Multimedia Systems (characteristics, challenges, features, components) 	Lecture, BL	Building a linear and non-linear multimedia PPT (PowerPoint) Project 1.3 (Brief Student on Video Project using any Video Maker apps) SalamWEB Video Competition, submit on the 30 th Sept 2019.
2 9 - 13 SEPT	2	<ul style="list-style-type: none"> • Digital Representation of: <ul style="list-style-type: none"> • Text 	Lecture, lab, BL	Project 1.1 : Banner & Poster (Adobe Photoshop/PowerPoint 2016) Submit on the 6th week.
3 16- 20 SEPT	3	<ul style="list-style-type: none"> • Digital Representation of: <ul style="list-style-type: none"> • Images • Formats • Colors and resolution • Usage and Applications • Digital Animation 	Lecture, lab, BL	Project 1.2 : Animation (Powtoon) Submit on the 8th week. BL Quiz1
4 23 - 27 SEPT	4	<ul style="list-style-type: none"> • Digital Representation of: <ul style="list-style-type: none"> • Sound • Audio • Sampling Technique 	Lecture, BL	
5 30 SEPT – 4 OCT	5	<ul style="list-style-type: none"> • Digital Representation of: <ul style="list-style-type: none"> • Video • Compression and encryption techniques. 	Lecture, Lab, BL	BL Quiz 2
6 7 – 11 OCT		Review for test 1: More tutorials TEST 1 <ul style="list-style-type: none"> • Introduction to multimedia • Text • Image • Animation • Audio • video 	Set Classroom for TEST 1	
7 14 – 18 OCT	2,15,16,17, 18 and 3	<ul style="list-style-type: none"> • Steps to make multimedia project • Design principles • Multimedia and Human-Computer Interaction <ul style="list-style-type: none"> • Design Integration 	Lecture, lab, BL	<ul style="list-style-type: none"> • Project 3 HTML Coding Submit on the 10th Week BL Quiz

		<ul style="list-style-type: none"> problem • Multimedia skills • Internet and Mobile Application • Android applications, Google cloud applications, IOT 		
8 21–25 OCT	9, 10 and 11	<ul style="list-style-type: none"> • Hardware • Basic software tools • Authoring tools. 	Lecture, lab, BL	
28 OCT – 1 NOV	SEMESTER BREAK / DEEPAVALI			
9 4 - 8 NOV	9, 10 and 11	<ul style="list-style-type: none"> • Hardware • Authoring tools. 	Lecture, lab, BL	Project 4 Website Development Submit on the 13th/14th week
10 11 – 15 NOV	9, 10 and 11	Multimedia and World Wide Web	Lecture, BL	How to write report BL Quiz
11 18 – 22 NOV	12, 13 and 14	Intellectual Property	Lecture, BL	• BL Quiz 3
12 25 – 29 NOV		Review for test 2: More tutorials • TEST 2 - Step to make multimedia project - Multimedia skills - Hardware - Software - Multimedia and world wide web - Intellectual Property	Set Classroom for TEST 2	
13-14 2 – 6 DEC		Students Presentation	In Class	Presentation (Website) Report submission
16 – 22 DEC	REVISION WEEK			
23 – 28 DEC	SEMESTER BREAK / CHRISTMAS			
30 DEC – 20 JAN 2020	EXAMINATION WEEK			
21 JAN – 23 FEB 2020	SEMESTER BREAK			

COURSE EVALUATION:

Project:	50%
Individual (I), Group (G) 2-3 students	
1. Project 1: (G)	20 %
Project 1.1. Banner, Poster (5%)	
Project 1.2 Animations (5%)	
Project 1.3 Video (10%)	
2. Project 2. HTML Coding (I)	10 %
3. Project 3. Website development (G)	20%
Website on Dreamweaver / Other Apps (10%)	
Website Presentation (5%)	
Report on Website Documentation (5%)	
Test and Assignment	50%
1. Test 1	20%
2. Test 2	20%
3. Quiz/ Assignment	10%
Total Marks	100%

** 50% carry marks provide to students (Test1, Test 2, Quiz/ Assignment)

LECTURERS:

Name	Room	Tel Office
Ts. Dr. Murizah Kassim	T2 -A13-5C	03-5521 1885
Suhaili Beeran Kutty	TA-A19-8C	03-55436006
Shuria Saaidin	T2-A18-1A	03-55211897
Mohd Saufy Rohmad	T2 -A13	

TEXTBOOK:

Vaughan,T., *Multimedia Making it Work*, McGraw-Hill Osborne Media., 8th edition

REFERENCES:

Chapman, N. and Chapman, J., *Digital Multimedia*, John Wiley & Sons Ltd., 3rd edition.