

FAKULITI KIEJURUTTERAAN ELEKTIRIK UNIVERSITI TEKNOLOGI MARA CAWANGAN PULAU PINANG 18500 PERMATANG PAUH PULAU PINANG

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DIPLOMA IN ELECTRICAL ENGINEERING

ELECTRONIC

2017 EDITION

FULAU

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STUDENT PROGRAMME HANDBOOK

BACKGROUND OF THE FACULTY

Universiti Teknologi MARA (UiTM) is an institution of higher learning (IHL) in Malaysia that offers professional programmes which integrate science, industry and technology. During its early establishment in 1968, Faculty of Electrical Engineering was one of the departments in the School of Engineering. The department started off with offering an Advanced Diploma Programme and then followed by a Diploma Programme in Electrical Engineering in 1976.

In August 1996, the Department of Electrical Engineering was upgraded to the Faculty of Electrical Engineering (FKE) and the Advanced Diploma programme was renamed as the Bachelor of Engineering with Honours (Electrical). When the university obtained its university status in October 1996 (formerly known as Institut Teknologi MARA), the faculty started to offer the post graduate programmes namely Master of Science in Electrical Engineering and Doctor of Philosophy in Electrical Engineering.

VISION AND MISSION OF UITM

Vision	:	To establish UiTM as a premier IHL of outstanding scholarship and academic excellence capable of providing leadership to Bumiputera's dynamic involvement in all professional fields of world-class standards in order to produce globally competitive graduates of sound technical standing.
Mission	:	To enhance the knowledge and expertise of Bumiputeras in all fields of study through professional programmes, research work, and community service based on moral values and professional ethics.
General Attributes for UiTM Graduates	:	Professional and versatile graduates with emphasis of 5 Pillars: P1- Entrepreneurship, P2-Communication, P3-Leadership, P4-Innovation & P5- Creativity.

VISION AND MISSION OF FKEPP

Vision	:	To be a renowned faculty based on academic excellence towards leading and realizing the vision of the nation in becoming dynamic, progressive and global in the field of electrical engineering through the world class programme offered in order to produce electrical engineers who are competitive, global and ethical.
Mission	:	To uphold and enhance the intellectual level of the nation in electrical engineering profession that assimilate between spiritual and noble values through the transfer of knowledge, research work, and community service based on moral values and professional ethics of an engineer.

FUNCTIONS OF THE FACULTY

The main functions of the faculty in upholding the government policy towards establishing Universiti Teknologi MARA as a premier university are as follows:

- a) Teaching and Learning to produce professional workforce in the area of electrical engineering.
- b) Research and Consultancy to foster a strong relationship with the industry in order to enhance the knowledge and expertise in the current technology through research and consultancy.
- c) Publication to transfer and contribute to the pool of knowledge through the publications.
- d) Community Services to serve the community, aligned with the social obligation of the university towards the nation.

DEPARTMENTS IN THE FACULTY

There are five departments in the faculty:

- a) Electronics Engineering
- b) Power Engineering
- c) System Engineering
- d) Communication Engineering
- e) Computer Engineering

PROGRAMMES OFFERED

Currently the faculty is offering the following programmes:

- a) Bachelor of Engineering (Hons.) Electrical and Electronic Engineering EE200
- b) Diploma in Electrical Engineering (Electronic) EE111
- c) Diploma in Electrical Engineering (Power) EE112



FACULTY OF ELECTRICAL ENGINEERING

DIPLOMA IN ELECTRICAL ENGINEERING (ELECTRONIC) - EE111

PROGRAM AIM

The Diploma in Electrical Engineering (Electronic) programme highly considers that every individual has the ability to excel and this programme aims to nurture competitive, multi-skilled and dynamic Electrical Technicians or Assistant Electronic Engineers to support the Malaysian Eleventh Plan in producing high-value, diverse and complex products for manufacturing sectors.

	Programme Educational Objectives (PEO)
PEO1	Electrical Technicians or Assistant Electronic Engineers who apply good
	knowledge in Electrical Engineering (Electronic) and display good practical
	skills in various engineering sectors.
PEO2	Electrical Technicians or Assistant Electronic Engineers who demonstrate
	positive values, attitudes, professionalism and apply related scientific
	methodologies with problem solving skills in-line with industry requirement.
PEO3	Electrical Technicians or Assistant Electronic Engineers who demonstrate good
	social skills and responsibility, as well as possess information management and
	lifelong learning skills for successful career advancement.
PEO4	Electrical Technicians or Assistant Electronic Engineers who have leadership
	quality, effective communication skills, managerial skills, entrepreneurship skills
	and teamwork in an organisation.

	Programme Learning Outcomes (PLO)
PO1	Ability to apply mathematics, sciences and engineering knowledge to electrical (electronic) engineering field.
PO2	Ability to display practical skills using modern tools related to electrical (electronic) engineering.
PO3	Ability to apply scientific skills and techniques to solve electrical (electronic) engineering problems.
PO4	Ability to demonstrate communication skills in both written and oral form.
PO5	Ability to demonstrate social skills, teamwork and social responsibility.
PO6	Ability to demonstrate positive values, ethics and professionalism.
PO7	Ability to demonstrate information management and lifelong learning skills.
PO8	Ability to demonstrate managerial and entrepreneurship skills for career development.
PO9	Ability to demonstrate appropriate levels of leadership skills.

Diploma in Electrical Engineering (Electronic)

Programme Structure of EE111

SEM	NO	COURSE	CODE	PRE/CO- REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
	1	PRINSIP-PRINSIP ASAS ISLAM	CTU101	NONE	2	2	0	0	2
	2	KESATRIA NEGARA I	HBU111	NONE	1	0	0	2	2
	3	INTEGRATED LANGUAGE SKILLS I	ELC121	NONE	3	4	0	0	4
И1	4	PRE-CALCULUS	MAT133	NONE	3	3	1	0	4
SEI	5	FUNDAMENTAL OF PHYSICS	PHY145	NONE	3	2	1	2	5
	6	CHEMISTRY	CHM141	NONE	3	3	1	*	5
	7	ELECTRO-TECHNOLOGY	EEE111	NONE	2	0	0	4	4
				TOTAL	17	14	3	8	25
	1	PEMIKIRAN DAN TAMADUN ISLAM	CTU151	NONE	2	2	0	0	2
	2	KESATRIA NEGARA II	HBU121	NONE	1	0	0	2	2
	3	INTEGRATED LANGUAGE SKILLS II	ELC151	ELC121	3	4	0	0	4
2	4	CALCULUS 1	MAT183	MAT133	3	3	1	0	4
EM	5	ELECTRIC CIRCUIT 1	EEE121	NONE	3	3	1	0	4
S	6	ELECTRICAL MEASUREMENT	ESE122	NONE	3	3	1	0	4
	7	INTRODUCTION TO C PROGRAMMING	ECE126	NONE	3	2	0	2	4
	8	ELECTRICAL ENGINEERING LABORATORY 1	EEE230	NONE	1	0	0	2	2
				TOTAL	19	17	3	6	26
	1	SAINS DAN TEKNOLOGI ISLAM	CTU211	NONE	2	2	0	0	2
	2	KESATRIA NEGARA III	HBU131	NONE	1	0	0	2	2
	3	INTEGRATED LANGUAGE SKILLS III	ELC231	ELC151	3	4	0	0	4
3	4	CALCULUS 2 FOR ENGINEERS	MAT235	MAT183	3	3	1	0	4
EM	5	ELECTRONICS 1	ELE232	EEE121	3	3	1	0	4
S	6	ELECTRIC CIRCUIT 2	EEE231	EEE121	3	3	1	0	4
	7	BASIC COMMUNICATION ENGINEERING	ECM241	NONE	3	3	1	0	4
	8	ELECTRICAL ENGINEERING LABORATORY 2	EEE240	NONE	1	0	0	2	2
				TOTAL	19	18	4	4	26

	1	FUNDAMENTALS OF ENTREPRENEURSHIP	ENT300	NONE	3	3	0	0	3
	2	LINEAR SYSTEM	ESE241	MAT235	3	3	1	0	4
	3	BASIC POWER ENGINEERING	EPO244	EEE121	3	3	1	0	4
И 4	4	ELECTRONICS 2	ELE242	ELE232	3	3	1	0	4
SEN	5	DIGITAL SYSTEMS 1	ECE351	NONE	3	3	1	*	4
	6	FINAL YEAR PROJECT 1	EEE358	NONE	1	0	0	2	2
	7	KURSUS TERAS PROGRAM 1			3	3	1	*	4
				TOTAL	19	18	5	2	25
	1	CONTROL SYSTEM	ESE359	ESE241	3	3	1	0	4
	2	INTRODUCTION TO MICROPROCESSOR SYSTEMS	ECE354	ECE351	3	2	0	2	4
5	3	FINAL YEAR PROJECT 2	EEE368	EEE358	3	0	0	6	6
EM	4	KURSUS TERAS PROGRAM 2			3	3	1	*	4
S	5	ELECTIVE			3	3	1	*	4
	6	INDUSTRIAL TRAINING	EEE350		4				
				TOTAL	19	11	3	8	22
GRAND TOTAL			TOTAL		93	78	18	28	124

List of Elective Courses According to Areas of Field / Specialisation

		ELECTRONICS PACKAGE (EE111)	CODE	PRE/CO- REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
M 4	1	ELECTRONICS DESIGN	ELE355	ELE242	3	2	0	2	4
SEI									
	2	ELECTRONICS 3	ELE351	ELE242	3	3	1	*	4
S	3	1-DIGITAL LOGIC DESIGN WITH HDL	ELE354	ECE351	3	3	1	*	4
EM	3	2-INTRODUCTION TO MICROELECTRONICS	ELE245	ELE232	3	3	1	*	4
\mathbf{S}	3	3-DIGITAL ELECTRONICS	ELE357	ECE351	3	3	1	*	4

		COMMUNICATION PACKAGE (EE111)	CODE	PRE/CO- REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
M 4	1	COMMUNICATION SYSTEMS	ECM242	ECM241	3	3	1	*	4
SEI									
	2	DIGITAL COMMUNICATION SYSTEM	ECM351	ECM241	3	3	1	*	4
S	3 1-MICROWAVE ENGINEERING		ECM354	NONE	3	3	1	*	4
EM	3	2-MOBILE COMMUNICATIONS	ECM355	NONE	3	3	1	*	4
\mathbf{S}	3	3-FIBER OPTIC COMMUNICATION SYSTEM	ECM356	NONE	3	3	1	*	4
				DDD/CO	CDEDIT				CONTACT
		COMPUTER PACKAGE (EE111)	CODE	PRE/CO- REQUISITE	UNIT	LEC	TUT	PRAC	HOUR
M 4	1	INTRODUCTION TO NETWORKING	ECE242	NONE	3	2	0	2	4
SE									
	2	NETWORKING ROUTING FUNDAMENTALS	ECE356	ECE242	3	2	0	2	4
5	3	1-DIGITAL SYSTEMS 2	ECE355	ECE351	3	3	1	*	4
EM	3	2-WINDOWS PROGRAMMING	ECE357	NONE	3	2	0	2	4
Ś	3	3-PC HARDWARE AND SOFTWARE	ECE353	NONE	3	2	0	2	4
		SYSTEM PACKAGE (EE111)	CODE	PRE/CO- REQUISITE	CREDIT UNIT	LEC	TUT	PRAC	CONTACT HOUR
И 4	1	INDUSTRIAL INSTRUMENTATION	ESE246	ESE122	3	3	1	*	4
SEN									
	2	PROCESS CONTROL	ESE366	ESE359	3	3	1	*	4
S	3	1-PLC IN PROCESS INDUSTRY	ESE364	NONE	3	2	0	2	4
EM	3	2-COMPUTER IN PROCESS CONTROL	ESE355	NONE	3	3	1	*	4
S	3	3-INDUSTRIAL AUTOMATION	ESE358	ESE122	3	3	1	*	4
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* Embedded Lab (please refer SLT for the contact hours of practical)

COURSE DESCRIPTION

SEMESTER 1

1. <u>EEE111-Electro-Technology</u>

The course deals with basic understanding of instruments and measurements, electronic parts which include passive and active devices, generation of electricity and distribution system, consumer circuits, conductors and cables, wiring systems, wiring accessories, earthing and testing. The syllabus also includes the technique of making a Printed Circuit Board (PCB) which includes understanding of schematic diagram, component layout and PCB artwork, soldering, testing and troubleshooting a circuit.

SEMESTER 2

1. <u>EEE121- Electric Circuit 1</u>

The course covers the basic circuit theory. It deals with electrical quantities relationship in electrical circuits, basic circuit concepts, methods of circuit analysis and circuit theorems for resistive and magnetic circuits in direct current (DC). Capacitor and inductor voltage-current relationship, power and energy, series parallel connections and analysis in direct current (DC) and alternating current (AC) are also introduced.

2. ESE122- Electrical Measurement

This subject covers standards and units, errors and accuracies in measurements. The principles of operation, calibration and application of DC and AC meters, and recording instrument are also covered. The types, operation and application of bridges, and classification and operations of transducers and sensors will also be discussed.

3. ECE126- Introduction to C Programming

This course provides an introduction to C programming and its application in solving simple engineering problems.

4. <u>EEE230- Electrical Engineering Laboratory 1</u>

This laboratory course provides students with practical hands on experience which relates to theoretical concepts presented in classes.

SEMESTER 3

1. ELE 232 - Electronics 1

This course introduces to the theories of semiconductor materials followed by the constructions, operating concepts and characteristics of electronic devices such as diode, Bipolar Junction Transistor (BJT) and Field Effect Transistor (FET). The behavior of these devices under DC and AC conditions are studied for amplification purposes. Upon completion of this course, students are expected to be able to analyze simple electronic circuits, have a basic understanding of solid

state concept and developing their ability to predict the behavior of common electronic devices and circuits.

2. <u>EEE 231- Electric Circuit 2</u>

The course covers seven parts mainly, DC transient analysis, sinusoidal steady state analysis, application of circuit laws, methods and theorems of circuit analysis (AC analysis), AC power analysis, magnetically coupled circuits, two port networks and resonant circuits. It introduces their basics and applications.

3. ECM241- Basic Communication Engineering

The course introduces the basic concept of communication systems. It describes the basic implementation of communication system.

4. EEE240 – Electrical Engineering Laboratory 2

This laboratory course provides students with practical hands-on experience which relates to theoretical concepts presented in classes.

SEMESTER 4

1. ESE241- Linear System

This subject deals with basic concepts of linear system. The emphasis will be on continuoustime signals and systems, Fourier series, differential equations and Laplace transform. The application of differential equations and Laplace transform on electrical circuit are also covered.

2. EPO244 – Basic Power Engineering

The course introduces the principle of electrical machines that involves basic concepts, balanced 3-phase systems, transformers, induction motor, synchronous machine and dc machines. This course also covers the principle of power system that involves basic concepts, fault studies, and transmission and distribution.

3. <u>ELE242 - Electronics 2</u>

This course is to provide an understanding on the operation and analysis in various type of multistage amplifier connection such as cascade, cascode, Bi-FET, Darlington Pair and differential amplifier. The low and high frequency analysis are studied for frequency response of single stage amplifier. Students also will be introduced to the fundamental concepts and characteristics of ideal operational amplifier applications.

4. ECE351-Digital Systems 1

This course is to introduce students to number systems, basic gates, combinational logic circuit, MSI devices, sequential circuits, Digital to Analog Conversion (DAC), Analog to Digital Conversion (ADC) and Memory devices. It includes techniques necessary for the design of simple digital circuits and the analysis of sequential circuits.

5. <u>EEE 358 - Final Year Project 1</u>

The course involves project identification, targeted application areas, initial design and verification of the proposed project using suitable engineering tools or techniques. Upon completion of this course, students are expected to design and verify the project performance and its feasibility.

6. ELE355 – Electronics Design.

This course provides a clear understanding and practices on the concept of designing amplifier applications using transistors and Op-Amp for PCB based design project. At the end of this course students are expected to be able to design amplifier and produce prototype based on electronics system design.

7. <u>ECM242 – Communication Systems</u>

This course deals with the Electronics of Communication system components. The details of analogue modulation techniques are coupled with transmission techniques.

8. ECE242 - Introduction to Networking

This course is to introduce students to the network and communication includes ethernet, network layer, transport layer and IP addressing. It provides a clear understanding on the network, communication and its applications.

9. ESE246-Industrial Instrumentation

The course deal with process control system, principles operation of measuring element, and actuators used in industry. Application of signal conditioning and virtual instrumentation such as data acquisition system are also covered in this course.

SEMESTER 5

1. ESE359 - Control Systems

This subject will discuss about the concepts in control system which covers open and closed loop systems, mathematical modelling of its transfer function and system stability in time domain and frequency domain analysis up to second order systems.

2. ECE354- Introduction to Microprocessor Systems

The course covers the topics on general purpose microprocessor, its architecture and system organization. Then single chip microcomputer is taught and all aspects of the chip will be covered, from internal architecture, programming up to interfacing.

3. <u>EEE368 – Final Year Project 2</u>

The course involves literature review, planning, design, circuit analysis, troubleshooting and Printed Circuit Board (PCB) fabrication and/or software application development of an electrical and electronic system. Upon completion of this course, students are expected to

implement the design in continuation of project 1 and thus, develop and troubleshoot the hardware and its prototype.

4. EEE350 – Industrial Training

This course requires students to undergo their industrial training with learn from the observation, corporate with the organization and work colleagues, form good interaction between all parties including work colleagues, management and visiting lecturers involved, be prepared to contribute in any way deemed necessary, abide and adhered to any terms and regulations set upon by the organization. This course is intended to enable student to experience at least 8 weeks working environment in industries. Student will submit a formal report and logbook that will be based on work done during the practical training.

5. <u>ELE351 – Electronics 3</u>

This course introduces to the theories and applications of linear electronic system consisted of negative feedback amplifier, oscillator, power amplifier and voltage regulator. The behavior of these devices under direct current (DC) and alternating current (AC) conditions are studied for amplification purposes. Upon completion of this course, students are expected to be able to analyse electronic circuits, have a basic understanding of the operation of linear electronic system and its applications, and its implementation using these electronic devices in practice and theories.

6. <u>ELE354 – Digital Logic Design with HDL</u>

This course introduces to Hardware Description Language (HDLs) in modelling combinational and sequential circuits. This course is also accompanied by lab sessions to acquaint students with hands-on experience in modelling digital circuits using Electronic Design Automation (EDA) tools. Upon completion of this course, students should be able to gain an experience in digital Integrated Circuit (IC) design environment.

7. ELE245 – Introduction to Microelectronics

This course provides the basic concepts of semiconductor physics, IC layout, design rules and IC design of manufacturability and testability approach.

8. ELE357 - Digital Electronics

This course provides the basic of logic devices and the associated technology. The main digital logic families based on Bipolar Junction Transistor (BJT) and Metal Oxide Semiconductor Field Effect Transistor (MOSFET) will be analysed. The static and dynamic behaviours of CMOS are also covered in this subject.

9. ECM351- Digital Communication System

The course deals with basic concepts of digital transmission, modulation and multiplexing in communication system. The emphasis will be on Pulse Code Modulation (PCM), information theory and coding.

10. ECM354 – Microwave Engineering

The course introduces the basic concepts of EM waves, its behaviour in waveguides, basic components and devices used in microwave technology, its application in solid state, amplifier and oscillator operation, methods of microwave devices measurement and its application in radio, terrestrial, radar and satellite system.

11. ECM355 - Mobile Communications

This course provides the basic requirements for students who aim to involve themselves in mobile communication field

12. ECM356 - Fiber Optic Communication Engineering

The course introduces the basic concepts of optical fiber, optical waveguides, optical cables, optical sources, couplers and photodetectors. It also describes the power link budget, multiplexing, networking and fiber loops. Optical test equipment and different measurement in optical fiber link are described.

13. ECE355 – Digital Systems 2

This course applies the principles and practice of digital fundamentals to design simple digital system used in modern computers. It focuses on the analysis and design using combinational logic gates, Medium Scale Integrated (MSI) devices, flip-flops, Digital to Analog Converter (DAC) ICs, Analog to Digital Converter (ADC) ICs and data storage devices. This course includes the analysis of various types of MSI and interfacing devices. Furthermore, it provides a foundation course in memory organization and Programmable Logic Devices (PLDs) that are used for subsequent study in computer organization, architecture and VLSI design.

14. ECE356 - Networking Routing Fundamentals

This course covers the function of switch and router, configuration of network devices and application of routing in computer network. It also includes design of computer network system using dynamic routing.

15. ECE357 - Windows Programming

The course covers the topics on computing and the use of Integrated Development Environment (IDE) concepts. Then all aspects of visual programming is taught with examples and finally a simple serial communication interfacing is introduced.

16. ECE353 - PC Hardware and Software

This course will provide an in-depth exposure to Personal Computer (PC) hardware, software and operating systems with a lab-oriented approach. Students learn to identify, install and configure various computer hardware components as well as basic computer and configuration concepts. This course also provides students with an understanding of basic hardware component features of a personal computer, the communication between hardware and software, installation, maintenance and support of various hardware components.

17. ESE366 – Process Control

The course introduces students to the plant process control schemes and strategies. The topic covers the process and instrumentation diagram, process system dynamics and control strategy involves in industrial process control system. Case studies on industrial process are also covered.

18. ESE364 - PLC in Process Industry

This subject deals with basic concepts of Programmable Logic Controller (PLC). The emphasis will be on hardware and software module, interfacing and implementation of PLC in process control.

19. ESE355 - Computer in Process Control

The course deals with the functional architecture of the computer and software in dedicated microprocessor controllers. The use of computers in process control and interfacing is studied. Supervisory control and distributed control system used in industry is also covered.

20. ESE358 - Industrial Automation

The course deals with fundamental concepts in automation and building blocks of automation. The industrial logic control system and sequence control using electronic logic components, sensors and actuators in simple industrial applications is introduced. Basic computer numerical control, industrial robotics and maintenance concept and safety procedures will also be applied.

ACADEMIC REGULATION

Please refer to the booklet of *Peraturan Akademik Diploma dan Sarjana Muda UiTM: Pindaan2015 (Bilangan 1)* published by Bahagian Hal EhwalAkademik UiTM

- 1) Course registration
 - I. Registration must be done online through Student Information Gateway (*i-Student Portal*) by following the procedures prescribed by the University.
 - II. Total credit hours for student of Diploma and Degree must be between 17-23 credit units except for the semester of industrial training / final year students who will be graduating.
 - III. Undergraduate students in their final semester with status of Pass are allowed to take maximum of 25 credit units with the approval of Faculty Dean/Campus Rector for graduation.
 - IV. Diploma student with 'P' status is not allowed to register for more than twelve (12) credit units in specific semester
 - V. Undergraduate student with 'P' status is not allowed to register for more than fifth teen (15) credit units in specific semester.
- a. Add/Drop Course
 - i. Add Course

Students who have already registered for a course can apply to add course through online by following the procedures prescribed by the University.

ii. Drop Course

Student who has already registered for a course can apply to drop the respective course through online by following the procedures prescribed by the University.

- b. Course Validation
 - i. Students are required to validate the registered courses through online and print a copy of the registration within fourteen (14) days after the deadline of add/drop course. If students do not make the validation, the registration is automatically considered as valid and final.
- c. Attendance
 - i. Students are required to attend lectures and other learning activities such as workshops/tutorials/laboratories/studios/fields/practical training/practicum and clinics as stated in curriculum.
 - ii. Students who do not achieve 80% attendances of total contact hours for each course without any written permission from faculty/academic centre/ state UiTM /branch UiTM are not allowed to sit for the final examination of the course.
- iii. For the course with no final examination, the course works will not be assessed.
- iv. The students in (ii) and (iii) will be given Grade F or Fail with ZZ status and **must pay** the process fee of RM100.00.
- d. Examination
 - i. Students have to check *PenyataKelayakanMendudukiPeperiksaan (Temporary)* displayed in the UiTM web site (*i-Student Portal*). Any amendments must have the consent from the Program Head/Academic Advisor within fourteen (14) days after the deadline of add/drop course.

- ii. Students must validate *Penyata Kelayakan Menduduki Peperiksaan (Temporary)* through *i*-Student Portal. If students do not make the validation, the script is automatically considered as valid and final.
- iii. The official print of *Penyata Kelayakan Menduduki Peperiksaan* must be printed by the students through UiTM Website (*i*-Student Portal) after the process of registration and validation the *Penyata Kelayakan Menduduki Peperiksaan (Temporary)* are done. Any amendments are NOT allowed.
- iv. Student who fails to bring the *Penyata Kelayakan Menduduki Peperiksaan* for the courses which have final examination assessment will not be allowed to sit for the respective examination.
- v. Application for exemption from sitting the final exam for certain course should be addressed to the Dean/Rector with the related documents before the date of final examination of the respective course.
- vi. Application for exemption from sitting the ongoing examination should be addressed to the Dean/Rector within twenty four (24) hours after the respective examination ends, accompanied with Medical certificate from *Pusat Kesihatan UiTM/ Klinik Kerajaan/ Pusat Kesihatan Kerajaan/ Hospital Kerajaan/ Pegawai Perubatan dari panel perubatan majikan.*
- vii. Application can be made in written or using form of *HEA/RP/TMP-01* [Kebenaran Tidak Menduduki Peperiksaan Akhir].
- viii. If the application is approved, student will be given XX status for the respective course
- v. If the application is disapproved, the student will be given **YY** status in which the course work marks of the respective course will not be considered. **Students must pay the process fee of RM100.00.**

GRADING/ASSESSMENT POLICY

Please refer to the booklet of *Peraturan Akademik Diploma danSarjana Muda UiTM: Pindaan 2015 (Bilangan 1*) published by Bahagian Hal Ehwal Akademik UiTM

1) Examination Results and course evaluation is given in term of grade and grade value. Please refer Table 1.

MARK INTERVAL	GRADE	GRADE VALUE	STATUS
90-100	A+	4.00	Excellence
80-89	Α	4.00	Excellence
75-79	A-	3.67	Excellence
70-74	B+	3.33	Credit
65-69	В	3.00	Credit
60-64	B-	2.67	Credit
55-59	C+	2.33	Pass
50-54	С	2.00	Pass
47-49	C-	1.67	Fail
44-46	D+	1.33	Fail
40-43	D	1.00	Fail
30-39	Е	0.67	Fail
0-29	F	0.00	Fail

Table 1: UiTM Grading System.

2) The status for each course is given as follows:

- LU: Pass
- F1 : Fail a course on first attempt
- F2 : Fail a course on second attempt
- F3 : Fail a course on third attempt
- PD : Credit Transfer
- PC : Credit Exemption
- TL : Incomplete
- UD: Audit
- FD : Disciplinary Action
- XX: Absent from final examination with permission
- YY: Absent from final examination without permission
- ZZ : Barred from taking final examination for courses with final examination; or not given the assessment marks for courses without the final examination

Note: The grade value for YY and ZZ is 0.00 and process fees of RM100.00 will be given

- 3) Incomplete Status (TL)
 - a) A TL status is for courses such as project exercise/practical training which is not completed within a specific term.
 - b) A TL status cannot be more than one (1) consecutive semester. If the student does not complete the assigned exercise/practical training within the specific time frame given, he/she is entitled to an F Grade or Fail.
 - c) Any student with a TL status is required to register as student by paying study fees and registering for the course.
- 4) Examination Results Status
 - a) Based on the CGPA achievement, students will be given the examination results status as follows:

ANC	: Completed with Vice Chancellor's Award
TS	: Completed with Dean's List Award
ТМ	: Completed
LNT	: Pass Upgrade
AD	: Dean's List Award
LU	: Pass
Р	: Probation (Unsatisfactory)
D	: Fail and Terminated

- b) Status of Completed with Vice Chancellor's Award (ANC), Completed with Dean's List Award (TS) and Dean's List Award (AD) are awarded to excellent students
- c) Status of passed (LU) and Completed (TM) are awarded to students with satisfactory performance.
- d) Status of probation (P) is awarded to students with unsatisfactory performance and it is divided into two categories:
 - i. P1: First Probation acquired CGPA of 1.80 to 1.99 in a semester.

ii. P2: Second Probation – acquired CGPA of less than 2.00 after obtaining a P1 probation in the previous final semester.

D1:	CGPA less than 1.80
D2:	CGPA less than 1.80 after the P1 status
D3:	CGPA less than 2.00 after the P2 status
D4:	Fail in a certain course for the third time
D5:	CGPA of less than 2.00 at the end of maximum period of study period and have courses which are still not completed.
D6:	Passed the entire courses required by the programme and fulfilled all of the programme's requirements but acquired CGPA of less than 2.00.
D7:	Did not sit for the examination of all registered courses without approval of the University.

e) Unsatisfactory performance for the Fail and Termination status (D):

- 5) Examination Result Slip
 - i. The examination slip that has been endorsed by the Senate will be released through online student information portal (*i-Student Portal*) and printed by student for own record. The self-printed Examination Result Slip is certified as official print where no signature required.
 - ii. The University reserves the right to retain the Examination Result Slip if students fail to observe the rules and regulations of the University.
- 6) Breach of conduct regarding Examination and Evaluation
 - i. Students who are found guilty under Article 3 (j), 3 (k) and Article 5, Academic Institution Articles (Student Conduct) 1976, will be penalised based on decision of the University Disciplinary Board.
 - ii. Students who are found guilty of an offence by the University Disciplinary Board will be given an F Grade or fail, or an FD status by the Senate.
 - iii. Students who have been proven to commit plagiarism in their academic project/assignment will be given an F Grade or fail with an FD status by the Senate.

7) Re-administration of Examination

The University reserves the right to re-administer an examination as it deems fit the following situations:

- i. A leak in the final examination question.
- ii. A candidate is not able to sit for the final examination because of natural disaster.
- iii. The Vice Chancellor's direction.

INDUSTRIAL TRAINING

(Should refer to Industrial Training Handbook for more complete information)

As part of the Diploma in Electrical Engineering course requirement, all forth semester students have to complete two months of compulsory practical attachment in either government or private sector organizations. The Malaysian Qualifications Agency (MQA) has stated that diploma students have to undergo at least eight weeks of industrial training as part of their course.

It provides an opportunity for the students to experience real working environment first hand whilst at the same time benefits them in terms of their personal and professional development. Furthermore feedbacks gathered from the participating organizations help the students as well as the faculty in improving the character and professional skills of the graduate.

The training will start immediately upon completion of the final examination in semester 4. In semester 4 the students should have passed their compulsory elective modules so that they are more prepared and have acquired necessary information/knowledge to do the training. In the event of failure to secure a placement the students are allowed to do the training upon completion of the final examinations in semester 5.

1) Objectives

- a) Acquaint with the structure of an organization and its management system.
- b) Acquaint with the various equipment used in working environment.
- c) Understanding of the organization work ethical in terms of interpersonal interaction, discipline, rules/regulations and methods of performing assigned tasks.
- d) Promote symbiotic environment that will encourage interaction.
- e) Improve self-confidence through acquired hard skill and soft skill.
- 2) Student Role
 - a) Learn from the observation, experience gained and supervision.
 - b) Corporate with the organization and work colleagues.
 - c) Form good interaction between all parties including work colleagues, management and visiting lecturers involved.
 - d) Be prepared to contribute in any way deemed necessary.
 - e) Abide by and adhered to any terms and regulations set upon by the organization.
- 3) Contribution by the Participating Organization
 - a) Prepare a suitable training programme for the students in accordance with the objectives outlined above.
 - b) Provide a suitable training staff to supervise and assist in giving a proper guidance as well as assessing the progress of the trainees.
 - c) Encourage the trainees to be involved in tasks that require responsibility.
 - d) Guide the trainees as to the health and safety issues.
- 4) Placement Duration
 - a) Minimum requirement set forth by the Malaysian Qualification Agency (MQA) is eight (8) weeks.
 - b) Once within the duration of the study preferably during the semester break between the seventh (4th) semester and eight (5th) semesters.

FINAL YEAR PROJECT

(Should refer to Final Year Project Handbook for more complete information)

The Final Year Project is a major component of the diploma course in Electrical Engineering. The main objective is to develop problem solving, analysis, synthesis and evaluation skills in the field of Electrical Engineering. While working on the project, the students would also be able to develop personal and social skills such as time management, self-confidence and interaction. The evaluation of the Final Year Project indirectly provides the students with training in technical and communication skills.

The Final Year Diploma Project is implemented in two semesters, that is, semester 4 (1 credit hour) and semester 5 (3 credit hour) of the study period. Students should prepare their work schedule and adhere to it so that the project would be completed within the two semesters. Students must keep a logbook to record their progress and the supervisor should initial the logbook. Students and supervisor should meet regularly so that the progress of the project could be monitored. Supervisors are advised to ascertain the standard and quality of projects carried out. For the degree level, a good project should include a fair amount of design and synthesis, some form of hardware or software implementation, followed by measurement and data acquisition.

The work progress for both semester 4 and 5 will be assessed by the project supervisor. The project work starts by students handling in their project proposals to the Project Coordinators at the beginning of semester 4. At the end of semester 4, students are required to submit a preliminary report to the supervisors for evaluation.

Upon completion of the project at the end semester 5, students will demonstrate their projects to their project supervisors and there will be a question and answer session during the demonstration. The presentation will be evaluated by a panel of evaluators from members of the Faculty. Students are also required to produce a complete report on the project conducted. The length of the report should be between 50 to 100 pages. The report will be evaluated by the supervisor and a panel of evaluators

FACILITIES

The faculty is equipped with sufficient resources, facilities with experienced laboratory assistances catering for the current needs in the curriculum of Electrical Engineering.

No	Lab No	Electronics Laboratories	Assistant Engineer
1	0.51	Printed Circuit Board (PCB) Workshop	En. Nadhar Omar
2	1.28	Surface Mount Technology (SMT) Workshop	En. Muhammad Zakwan Sa'ad
3	1.44	Soldering, Drilling and Testing (SDT) Workshop	En. Nasir Md Amin
4	1.47	Basic Electronics Laboratory	En. HafidzMohd Noor
5	1.49	Intermediate Electronics Laboratory	En. NadzirMamat
6	1.50	Advanced Electronics Laboratory	En. NadzirMamat
7	1.56	Digital Electronics Laboratory	En. HafidzMohd Noor
8	2.12	Applied Electronics Laboratory	En. Syarafi Abdul Rajab
9	2.13	Electronics System Design Laboratory	En. Syarafi Abdul Rajab
10	2.10	IC Design Laboratory	En. Muhammad Zakwan Sa'ad
No	Lab No	Power Laboratories	Assistant Engineer
11	0.41	Electrical Machines Laboratory 1	En. MohdRazmanDesa
12	0.44	Electrical Machines Laboratory 2	En. MohdRazmanDesa
13	0.45	Power Electronics Laboratory	En. MohdRazmanDesa
14	0.46	Electrical Energy Utilization Laboratory	Pn. ZalizaKaria
15	0.47	Power System Laboratory	Pn. ZalizaKaria
16	0.48	High Voltage Engineering Laboratory	En. Mohamad SarihDaud
17	0.52	Power Quality Analysis Laboratory	En. Mohamad SarihDaud
18	0.53	Electrical Installation Laboratory	En. Mohamad SarihDaud
	T 1 N ^T	System Laboratorias	Assistant Engineer
No	Lab No	System Laboratories	Assistant Engineer
No 19	Lab No 0.40	Pneumatic and Hydraulic Laboratory	En. MohdAminuddin Mat Isa
No 19 20	Lab No 0.40 0.43	Pneumatic and Hydraulic Laboratory Robotics Workshop	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa
No 19 20 21	Lab No 0.40 0.43 1.41	System Laboratories Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi
No 19 20 21 22	Lab No 0.40 0.43 1.41 1.46	System Laboratories Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory Industrial Automation Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi
No 19 20 21 22 23	Lab No 0.40 0.43 1.41 1.46 2.49	System Laboratories Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory Industrial Automation Laboratory Automatic Controls Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi
No 19 20 21 22 23 24	Lab No 0.40 0.43 1.41 1.46 2.49 2.59	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Adnan Omar
No 19 20 21 22 23 24 25	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar
No 19 20 21 22 23 24 25 26	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar En. Adnan Omar
No 19 20 21 22 23 24 25 26 No	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryCommunication Laboratories	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar En. Adnan Omar Assistant Engineer
No 19 20 21 22 23 24 25 26 No 27	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05	Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory Industrial Automation Laboratory Automatic Controls Laboratory Instrumentation and Measurement Laboratory Robotics and Automation Laboratory Biomedical Laboratory Microwave Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar
No 19 20 21 22 23 24 25 26 No 27 28	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06	Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory Industrial Automation Laboratory Automatic Controls Laboratory Instrumentation and Measurement Laboratory Robotics and Automation Laboratory Biomedical Laboratory Microwave Laboratory Mobile Radio Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said
No 19 20 21 22 23 24 25 26 No 27 28 29	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09	Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory Industrial Automation Laboratory Automatic Controls Laboratory Instrumentation and Measurement Laboratory Robotics and Automation Laboratory Biomedical Laboratory Microwave Laboratory Mobile Radio Laboratory Optical Fiber Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar En. Adnan Omar En. Adnan Omar En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said En. MohdSobri Said
No 19 20 21 22 23 24 25 26 No 27 28 29 30	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryBiomedical LaboratoryMicrowave LaboratoryMobile Radio LaboratoryOptical Fiber LaboratoryDigital Communication Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said En. MohdSoufee Ismail
No 19 20 21 22 23 24 25 26 No 27 28 29 30 31	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60 2.62	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryMicrowave LaboratoryMobile Radio LaboratoryOptical Fiber LaboratoryDigital Communication LaboratoryTelecommunication Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar En. Adnan Omar En. Adnan Omar En. Adnan Omar En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said En. MohdSoufee Ismail PnNursyazwani Mohamad Affandi
No 19 20 21 22 23 24 25 26 No 27 28 29 30 31 32	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60 2.62 9.23	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryBiomedical LaboratoryMicrowave LaboratoryMobile Radio LaboratoryOptical Fiber LaboratoryDigital Communication LaboratoryRF Shield Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said En. MohdSoufee Ismail PnNursyazwani Mohamad Affandi PnNursyazwani Mohamad Affandi
No 19 20 21 22 23 24 25 26 No 31 32 No	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60 2.62 9.23 Lab No	Pneumatic and Hydraulic Laboratory Robotics Workshop Microcontroller Laboratory Industrial Automation Laboratory Automatic Controls Laboratory Instrumentation and Measurement Laboratory Robotics and Automation Laboratory Biomedical Laboratory Microwave Laboratory Mobile Radio Laboratory Optical Fiber Laboratory Digital Communication Laboratory RF Shield Laboratory Computer Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said En. MohdSobri Said En. MohdSoufee Ismail PnNursyazwani Mohamad Affandi PnNursyazwani Mohamad Affandi
No 19 20 21 22 23 24 25 26 No 27 28 29 30 31 32 No 33	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60 2.62 9.23 Lab No 1.45	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryCommunication LaboratoryMicrowave LaboratoryMobile Radio LaboratoryOptical Fiber LaboratoryDigital Communication LaboratoryRF Shield LaboratoryEmbedded System Design Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. MohdSoufee Ismail En. MohdSobri Said En. MohdSoufee Ismail PnNursyazwani Mohamad Affandi PnNursyazwani Mohamad Affandi Assistant Engineer En. Nor HazllimHussin
No 19 20 21 22 23 24 25 26 No 27 28 29 30 31 32 No 33 34	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60 2.62 9.23 Lab No 1.45 1.55	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryMicrowave LaboratoryMobile Radio LaboratoryOptical Fiber LaboratoryDigital Communication LaboratoryRF Shield LaboratoryComputer LaboratoryMicroprocessor Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. Adnan Omar En. Adnan Omar En. Adnan Omar En. MohdSoufee Ismail En. MohdSoufee Ismail En. MohdSoufee Ismail En. MohdSoufee Ismail PnNursyazwani Mohamad Affandi PnNursyazwani Mohamad Affandi Assistant Engineer En. Nor HazllimHussin En. Nor HazllimHussin
No 19 20 21 22 23 24 25 26 No 27 28 29 30 31 32 No 33 34 35	Lab No 0.40 0.43 1.41 1.46 2.49 2.59 3.43 3.44 Lab No 2.05 2.06 2.09 2.60 2.62 9.23 Lab No 1.45 1.55 2.14	System LaboratoriesPneumatic and Hydraulic LaboratoryRobotics WorkshopMicrocontroller LaboratoryIndustrial Automation LaboratoryAutomatic Controls LaboratoryInstrumentation and MeasurementLaboratoryRobotics and Automation LaboratoryBiomedical LaboratoryOptical LaboratoryMobile Radio LaboratoryOptical Fiber LaboratoryDigital Communication LaboratoryRF Shield LaboratoryComputer LaboratoryMicroprocessor LaboratorySoftware Engineering Laboratory	En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. MohdAminuddin Mat Isa En. Mohammad TaufiqMarzukhi En. Adnan Omar En. MohdSoufee Ismail En. MohdSoufee Ismail En. MohdSoufee Ismail En. MohdSoufee Ismail PnNursyazwani Mohamad Affandi PnNursyazwani Mohamad Affandi Assistant Engineer En. Nor HazllimHussin En. Nor HazllimHussin Pn. Marieah Omar

37	3.40	CISCO Academy	Pn. Marieah Omar
No	Lab No	Research Laboratories	Assistant Engineer
38	3.42a	Electrical Engineering Postgraduate Research Laboratory	NIL
39	3.42b	Advance Control System and Computing Research Group	NIL
40	FKE Bertam	Advance Rehabilitation Engineering and Medical Imaging Research Group	NIL
41	FKE Bertam	Rehabilitation Engineering Clinic	NIL
42	FKE Bertam	Biomedical and Medical Imaging Laboratory	NIL

APPENDIX A: LIST OF LECTURERS

Department of Electronics Engineering

NO.	LECTURER NAME	POSITION	EXT.	ROOM NO.
1	Alhan Farhanah Abd Rahim (Dr.)	SENIOR LECTURER DM52	2565	3.2 (BA)
2	Emilia Noorsal (DrIng)	SENIOR LECTURER DM52	2549	4.49 (BA)
3	Irni Hamiza Hamzah (Dr.)	SENIOR LECTURER DM52	2564	3.20 (BA)
4	Linda Mohd Kasim	SENIOR LECTURER DM52	3364	4.38
5	Lyly Nyl Ismail (Dr.)	SENIOR LECTURER DM52	3356	4.28
9	Mohammad Nizam Ibrahim (Dr.)	SENIOR LECTURER DM52	2534	4.34 (BA)
L	Mohd Hanapiah Abdullah (Dr.)	SENIOR LECTURER DM52	2634	3.24 (BA)
8	Nazirah Mohamat Kasim	SENIOR LECTURER DM52	2627	2.23 (BA)
6	Nor Shahanim Mohamad Hadis	SENIOR LECTURER DM52	7.30	2788
10	Norsabrina Sihab	SENIOR LECTURER DM52	3355	4.27
11	Rihana Yusuf	SENIOR LECTURER DM52	3419	4.74
12	Rosfariza Radzali	SENIOR LECTURER DM52	2569	3.1 (BA)
13	Yusnita Mohd Ali (Dr.)	SENIOR LECTURER DM52	2631	2.16 (BA)
14	Aida Zulia Zulhanip	LECTURER DM45	3358	4.30
15	Anith Nuraini Abd Rashid	LECTURER DM45	2513	4.13 (BA)
16	Asmalia Zanal	LECTURER DM45	3356	4.28
17	Mohaiyedin Idris	LECTURER DM45	3427	5.14
18	Mohd Hussaini Abbas	LECTURER DM45	3401	4.92
19	Musa Mohamed Zahidi	LECTURER DM45	2634	2.17 (BA)
20	Nor Fadzilah Mokhtar	LECTURER DM45	3363	4.37
21	Samsul bin Setumin	SENIOR LECTURER DM52	Study	Leave
22	Shahilah Nordin	LECTURER DM45	3384	4.67
23	Sharifah Saliha Syed Bahrom	LECTURER DM45	3405	4.98
24	Siti Zubaidah Md Saad	LECTURER DM45	2512	4.12 (BA)

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Department of Power Engineering

NO.	LECTURER NAME	POSITION	EXT.	ROOM NO.
1	Ngah Ramzi Hamzah (Prof. Madya Dr.)	SENIOR LECTURER DM54		5.25
2	Ahmad Asri Abd Samat	SENIOR LECTURER DM52	2787	7.29
Э	Kamarulazhar Daud	SENIOR LECTURER DM52	2640	2.11 (BA)
4	Mohd Affandi Shaffe	SENIOR LECTURER DM52	2618	1.18 (BA)
5	Mohd Najib Mohd Hussain (Dr.)	SENIOR LECTURER DM52	2576	3.9 (BA)
9	Noor Azila Ismail	SENIOR LECTURER DM52	3365	4.39
L	Saodah Omar	SENIOR LECTURER DM52	Study	' Leave
8	Nurfadzilah Ahmad (Dr.)	SENIOR LECTURER DM51		7.15
6	Abdul Malek bin Saidina Omar	LECTURER DM45	3411	4.104
10	Aimi IdzwanTajudin	LECTURER DM45	3427	5.14
11	Mohamad Adha Mohamad Idin	LECTURER DM45	3401	4.92
12	Nor Adni Mat Leh	LECTURER DM45	2510	4.10 (BA)
13	Norhasnelly Anuar	LECTURER DM45	3362	4.36
14	Nur Atharah Kamarzaman	LECTURER DM45	2512	4.12 (BA)
15	Nur Fadhilah Jamaludin	LECTURER DM45	3362	4.36
16	Nurlida Ismail	LECTURER DM45	3359	4.83
17	Nurul Huda Ishak	LECTURER DM45	2708	5.31
18	Siti Salwa Mat Isa	LECTURER DM45	3384	4.67
19	Siti Sarah Bt Mat Isa	LECTURER DM45	3339	4.11
20	Siti Solehah Md Ramli	LECTURER DM45	3358	4.42
21	Badrul Hisham Mat Tahir	LECTURER DM41	3391	4.75
22	Cik Nur Darina Ahmad	LECTURER DM45	3388	4.70
23	Wan Salha Saidon	LECTURER DM41	3358	4.30
24	En. Mohd Hafeez bin Abu Hassan	ASSISTANT LECTURER DM 29	2921	1.53

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Department of System Engineering

NO.	LECTURER NAME	POSITION	EXT.	ROOM NO.
1	Zakaria Hussain (Prof. Madya Dr.)	SENIOR LECTURER DM54	3336	4.08
2	Afaf Rozan Mohd Radzol	SENIOR LECTURER DM52	2789	7.31
3	Iza Sazanita Isa	SENIOR LECTURER DM52	Study	Leave
4	Mohamad Faizal Abd Rahman (Dr.)	SENIOR LECTURER DM52	3335	4.07
5	Muhammad Khusairi Osman (Dr.)	SENIOR LECTURER DM52	3337	4.09
9	Nor Azlan Othman (Dr.)	SENIOR LECTURER DM52	2781	7.33
L	Nor Salwa Damanhuri (Dr.)	SENIOR LECTURER DM52	2551	4.51 (BA)
8	Norhazimi Hamzah (Dr.)	SENIOR LECTURER DM52	3359	4.83
6	Rozan Boudville	SENIOR LECTURER DM52	NIL	3.42a
10	Saiful Zaimy Yahaya	SENIOR LECTURER DM52	2537	4.37 (BA)
11	Siti Noraini Sulaiman (Dr.)	SENIOR LECTURER DM52	2628	2.24 (BA)
12	Zuraidi Saad	SENIOR LECTURER DM52	2531	4.31 (BA)
13	Zuraida Muhammad (Dr.)	SENIOR LECTURER DM51	2647	2.14 (BA)
14	Adi Izhar Bin Che Ani	LECTURER DM45	3342	4.87
15	Anis Diyana Rosli	SENIOR LECTURER DM52	3363	4.37
16	Belinda Chong Chiew Meng	LECTURER DM45	2542	4.42 (BA)
17	Khairul Azman Ahmad	SENIOR LECTURER DM52	3352	4.05
18	Mohd Firdaus Abdullah	SENIOR LECTURER DM52	3335	4.07
19	Nadiah Ismail	LECTURER DM45	2510	4.10 (BA)
20	Rizal Mat Jusoh	LECTURER DM45	3391	4.75
21	Rohaiza Baharudin	SENIOR LECTURER DM52	3348	4.88
22	Sarah Addyani Shamsuddin	LECTURER DM45	3360	4.34
23	Shaiful Faizal Abd Wahab	ASSISTANT LECTURER DM 29	12921	1.53
24	Siti Saffura Sharipuddin	ASSISTANT LECTURER DM 29	3409	4.102

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Department of Communication Engineering

NO.	LECTURER NAME	POSITION	EXT.	ROOM NO.
1	Ahmad Rashidy Razali (Dr.)	SENIOR LECTURER DM52	2630	2.18 (BA)
2	Ali Othman (Dr.)	SENIOR LECTURER DM52	2579	3.22 (BA)
3	Aslina Abu Bakar (Dr.)	SENIOR LECTURER DM52	2568	3.3 (BA)
4	Norhayati Mohamad Noor	SENIOR LECTURER DM52	3374	4.51
5	Aiza Mahyuni Mozi	LECTURER DM45	2629	2.6 (BA)
9	Amiruddin Ibrahim	LECTURER DM45	3342	4.87
7	Azwati Azmin	LECTURER DM45	2629	2.6 (BA)
8	Dayang Suhaida Awang Damit	SENIOR LECTURER DM52	3339	4.11
6	Fatimah Zaharah Ali	LECTURER DM45	2632	2.9 (BA)
10	Hasnain Abdullah@Idris (Haji)	LECTURER DM45	3422	5.09
11	Ida Rahayu Mohamed Nordin	SENIOR LECTURER DM52	3348	4.88
12	Juliana Md. Sharif	SENIOR LECTURER DM52	2789	7.31
13	Najwa Mohd Faudzi	LECTURER DM45	2553	4.53 (BA)
14	Najwa Rawaida Ahmad $@$ Ahmad Fauzi	LECTURER DM45	2632	2.9 (BA)
15	Normasni Ad Fauzi	LECTURER DM45	3369	4.43
16	Roslan Seman	LECTURER DM45	2533	4.33 (BA)
17	Samihah Abdullah	LECTURER DM45	4.42	2542 (BA)
18	Zafirah Binti Faiza	LECTURER DM45	2708	5.31
19	Mohd Khairill Nizam Mohd Fazil	ASSISTANT LECTURER DM 29	2921	1.53

Department of Computer Engineering

NO.	LECTURER NAME	POSITION	EXT.	ROOM NO.
1	Ahmad Puad Ismail	SENIOR LECTURER DM52	2636	2.7 (BA)
2	Fadzil Dato' Ahmad	SENIOR LECTURER DM52	2567	3.4 (BA)
3	Intan Rahayu Ibrahim (Dr.)	SENIOR LECTURER DM52	2509	4.9 (BA)
4	Mohd Daud bin Alang Hassan	SENIOR LECTURER DM52	2654	3.10 (BA)
5	Zainal Hisham Che Soh (Dr.)	SENIOR LECTURER DM52	2532	4.32(BA)
9	Aini Hafizah Mohd Saod	LECTURER DM45	2517	4.17 (BA)
L	Azizah Ahmad	SENIOR LECTURER DM52	3360	4.34
8	Faridah Abdul Razak	LECTURER DM45	3340	4.12
6	Mohd Halim Mohd Noor	LECTURER DM45		7.16
10	Mohd Ikmal Fitri Marzuki	LECTURER DM45	Study	Leave
11	Muhammad Farris Khyasudeen	LECTURER DM45	3352	4.05
12	Nur Athiqah Haron	LECTURER DM45	2517	4.17 (BA)
13	Saiful Fadzli Salian	LECTURER DM45	2830	7.27
14	Shabinar Abd Hamid	LECTURER DM45	Study	Leave
15	Shahidah Sadimin	LECTURER DM45	3340	4.12
16	Siti Azura Ramlan	LECTURER DM45	2831	7.28
17	Abdul Rahim Ahmad (Haji)	LECTURER DM41	3411	4.104
18	Mahizan Ab. Manan	ASSISTANT LECTURER DM 29	3409	4.102