

Sesi Akademik <i>Academic Session</i>	2020/2021
Semester/Penggal <i>Semester/Term</i>	1
Kod Kursus <i>Course Code</i>	KIE2004
Tajuk Kursus <i>Course Title</i>	Litar Elektronik II <i>Electronic Circuits II</i>
Bahasa Pengantar <i>Medium of Instruction</i>	Bahasa Inggeris <i>English</i>
Rujukan Utama <i>Main Reference</i>	1. 'Microelectronic Circuits', 6th edition, by Adel S. Sedra, Kenneth C. Smith, Oxford Series in Electrical & Computer Engineering. 2. Lecture Notes Prof Mahmoud Moghavvemi
Strategi Pembelajaran <i>Learning Strategies</i>	Kuliah dan Tutorial <i>Lectures and Tutorials</i>
Masa Pembelajaran Pelajar <i>Student Learning Time</i>	Bersemuka / <i>Face to face</i> : 45 jam/hours Tidak Bersemuka / <i>Non Face to face</i> : 0 jam/hour Masa Persediaan Pelajar / <i>Student Preparation Time</i> : 75 jam/hours
Kemahiran Boleh Pindah <i>Transferable Skills</i>	<i>Problem solving skills and analytical skills</i>
Pensyarah / <i>Lecturer</i> Bilik / <i>Room</i> Telefon/e-mel <i>Telephone/e-mail</i>	Prof. Dr Mahmoud Moghavvemi / Dr. Wan Amirul Bilik 5, Tingkat 1 03-79676817 / mahmoud@um.edu.my
Sesi Kuliah / <i>Lecture Session</i> : Hari/Masa / <i>Day/Time</i> Tempat / <i>Venue</i>	Rujuk kepada myum.um.edu.my. <i>Refer to myum.um.edu.my.</i>
Sesi Tutorial/Amali: <i>Tutorial/Practical Session</i> : Hari/Masa / <i>Day/Time</i> Tempat / <i>Venue</i>	Rujuk kepada myum.um.edu.my. <i>Refer to myum.um.edu.my.</i>
Perincian Pemberatan Penilaian <i>Detail of Assessment Weightage</i>	Penilaian Berterusan / <i>Continuous Assessment</i> : 40%  Peperiksaan Akhir / <i>Final Examination</i> : 60%



**Jadual Pengajaran / Teaching Schedule**

Minggu Week	LECTURE / TUTORIAL / ASSIGNMENT TOPIC	Rujukan References
1	<i>Two port network, <math>\pi</math>, Y, h, parameters, amplifier equivalent circuit</i>	<i>See main references</i>
2	<i>Midband equivalent circuits for amplifier/amplifiers gain, input and output impedances</i>	<i>As the above</i>
3	<i>Multistage amplifiers, cascade, cascode, NPN PNP.</i>	<i>As the above</i>
4	<i>Differential transistor pairs</i>	<i>As the above</i>
5	<i>Frequency response, high frequency/low frequency response</i>	<i>As the above</i>
6	<i>Bode plots, Poles/zeros, Miller capacitors</i>	<i>As the above</i>
7	<i>Ideal operational amplifier/ practical operational amplifier</i>	<i>As the above</i>
8	<i>Practical operational amplifier</i>	<i>As the above</i>
9	<i>Feedback amplifiers characteristics</i>	<i>As the above</i>
10	<i>Feedback dynamics, stability and compensation</i>	<i>As the above</i>
11	<i>Active filters</i>	<i>As the above</i>
12	<i>RC oscillators</i>	<i>As the above</i>
13	<i>LC oscillators/ Multivibrators</i>	<i>As the above</i>
14	<i>Monostable, Bistable and Astable multivibrators</i>	<i>As the above</i>