



Sesi Akademik <i>Academic Session</i>	2020/2021
Semester/Penggal <i>Semester/Term</i>	1
Kod Kursus <i>Course Code</i>	KIE2005
Tajuk Kursus <i>Course Title</i>	Analisa Litar II <i>Circuit Analysis II</i>
Bahasa Pengantar <i>Medium of Instruction</i>	Bahasa Inggeris <i>English</i>
Rujukan Utama <i>Main Reference</i>	1. JW Nilsson, SA Riedel, " <i>Electric Circuits</i> ", 10 th edition 2014, Prentice Hall 2. Alexander and Sadiku, " <i>Fundamentals of Electric Circuits</i> ", 6 th ed., 2014, McGraw Hill
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>	Kemahiran penyampaian, kemahiran menganalisa, kemahiran merekabentuk litar <i>Presentation skills, analysis skills, circuit design skills</i>
Pensyarah / <i>Lecturer</i> Bilik / <i>Room</i> Telefon/e-mel <i>Telephone/e-mail</i>	Dr. Chow Li Sze / Dr. Effariza Hanafi / Dr. Norrima Mokhtar Tingkat 2, Mercu Kejuruteraan, Fakulti Kejuruteraan 03-79675248 / 03-79674456 / 03-79672159 lschow@um.edu.my / effarizahanafi@um.edu.my / norrimamokhtar@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	Topik & Aktiviti Topic & Activities	Rujukan References
1	<i>Balance three-phase circuits: Balanced three-phase voltage, three-phase voltage source, analysis of Y-Y and Y-Δ</i>	<i>Ref [1], lecture note</i>
2	<i>Unbalanced three-phase circuits and three-phase variables</i>	<i>Ref [1], lecture note</i>
3	<i>Introduction to Laplace Transform</i>	<i>Ref [1], lecture note</i>
4	<i>Laplace transform in circuit analysis: Circuit element in s domain, application in circuit analysis</i>	<i>Ref [1], lecture note</i>
5	<i>Laplace transform in circuit analysis: Application in circuit analysis (continue)</i>	<i>Ref [1], lecture note</i>
6	<i>Fourier series: Fourier constants, applications of the series in circuit analysis</i>	<i>Ref [1], lecture note</i>
7	<i>Fourier transform: Obtaining the transform, applications in circuit analysis</i>	<i>Ref [1], lecture note</i>
8	<i>Frequency selective circuits: Low-pass filter, High-pass, Band-pass and Band-stop</i>	<i>Ref [1], lecture note</i>
9	<i>Bode diagram, Operational amplifier</i>	<i>Ref [1], lecture note</i>
10	<i>First order active low pass and high-pass filters, scaling</i>	<i>Ref [1], lecture note</i>
11	<i>Band-pass and Band-stop active filters</i>	<i>Ref [1], lecture note</i>
12	<i>Higher order active filters, Butterworth filters</i>	<i>Ref [1, 2], lecture note</i>
13	<i>Two-port circuits: terminal equations, terminal parameters, ended two-port analysis</i>	<i>Ref [1, 2], lecture note</i>
14	<i>Interconnected two-port circuits, attenuators: π-type and T-type circuits</i>	<i>Ref [2], lecture note</i>