

PENTING / IMPORTANT:

Kandungan Pro Forma ini tidak boleh diubah tanpa kelulusan Senat bagi perkara-perkara yang telah ditandakan*. Pindaan kepada perkara lain boleh diluluskan di peringkat Akademi/Fakulti/Institut/Pusat.

*Contents of this Pro Forma shall not be changed without the Senate's approval for items indicated with *. Changes to the other items can be approved at the Academy/Faculty/Institution/Centre level.*

	Versi Bahasa Malaysia Malay Version	Versi Bahasa Inggeris English Version
Akademi/Fakulti/Institut/Pusat <i>Academy/Faculty/Institute/Centre</i>	Fakulti Kejuruteraan	<i>Faculty of Engineering</i>
Jabatan <i>Department</i>	Jabatan Kejuruteraan Elektrik	<i>Department of Electrical Engineering</i>
Nama Program Akademik <i>Name of Academic Programme</i>	Sarjana Muka Kejuruteraan (Telekomunikasi)	<i>Bachelor of Engineering (Telecommunication)</i>
Kod Kursus* <i>Course Code*</i>	KIE4016	<i>KIE4016</i>
Tajuk Kursus* <i>Course Title*</i>	Antena dan Perambatan	<i>Antenna and Propagation</i>
Kredit* <i>Credit*</i>	2	<i>2</i>
Masa Pembelajaran Pelajar (SLT) <i>Student Learning Time (SLT)</i>	80	<i>80</i>
Prasyarat/Keperluan Minimum Kursus <i>Course Pre-requisite(s)/Minimum Requirement(s)</i>	KIE4006	<i>KIE4006</i>
Hasil Pembelajaran Kursus* <i>Course Learning Outcomes*</i>	Pada akhir kursus ini, pelajar dapat: <ol style="list-style-type: none"> 1) Menilai antenna dwikutub elektrik dan antenna gelung dalam bentuk medan jarak dekat dan medan jarak jauh, dan penentuan rintangan sinaran, kehilangan dan kecekapan 2) Mengkategorikan aplikasi pelbagai jenis antenna dan ciri-ciri mereka. 	<i>At the end of the course, students are able to:</i> <ol style="list-style-type: none"> 1) <i>Evaluate the electric dipole antennas and loop antennas in terms of its near field and far field analysis as well as the determination of its radiation resistance, losses and efficiency.</i> 2) <i>Categorize the various types of antennas and its applications</i>

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	3) Menganalisa konsep teknik pengukuran antenna	3) <i>Analyse concepts of antenna measurements techniques</i>
Kemahiran Insaniah <i>Soft Skills</i>	Kritikal Pemikiran dan Penyelesaian Masalah (CT1, CT2,CT3)	<i>Critical Thinking and Problem Solving (CT1, CT2,CT3)</i>
Sinopsis Kandungan Kursus <i>Synopsis of Course Contents</i>	Pengenalan kepada prinsip asas antenna. Bermula dengan gelombang satah elektromagnetik dan hukum-hukum yang berkaitan dengan perambatan gelombang antara antenna penghantaran dan penerimaan. Parameter penting antenna seperti corak, kearahannya, dan gandaan diterangkan. Kursus ini meliputi jenis-jenis antenna seperti dwikutub elektrik, gelung dan tatasusun lurus dan termasuk juga konsep asas pengukuran antenna.	<i>Introduce the basic essentials of antenna. Starting with the plane electromagnetic waves and the laws that governs the propagation between the transmitting and receiving antennas, the important antennas parameters such as patterns, directivity and gain is explained. The course covers the antenna family that describes various antenna types, the electric dipoles, the loop antennas, uniform linear arrays and the basic concept of antenna measurements.</i>
Pemberatan Penilaian* <i>Assessment Weightage*</i>	Penilaian Berterusan: 40% Peperiksaan Akhir: 60%	<i>Continuous Assessment: 40% Final Examination: 60%</i>
Kaedah Maklum Balas Tentang Prestasi <i>Methodologies for Feedback on Performance</i>	Maklumbalas secara dalam talian dan komen secara lisan semasa seminar.	<i>Online feedback and oral comments after Seminar.</i>
Kriteria Dalam Penilaian Sumatif <i>Criteria in Summative Assessment</i>	Sila rujuk Kaedah-Kaedah Universiti Malaya (Pengajian Ijazah Pertama) 2017 dan Peraturan-Peraturan Universiti Malaya (Pengajian Ijazah Pertama) 2017	<i>Please refer to the University Of Malaya (First Degree Studies) Rules 2017 And University Of Malaya (First Degree Studies) Regulations 2017</i>