

**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.*

	<b>Versi Bahasa Malaysia Malay Version</b>	<b>Versi Bahasa Inggeris English Version</b>
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 Muda Kejuruteraan (Elektrik)	<i>Bachelor of Engineering (Electrical)</i>
Kod Kursus* <i>Course Code*</i>	KIE4025	<i>KIE4025</i>
Tajuk Kursus* <i>Course Title*</i>	Pengecaman Pola	<i>Pattern Recognition</i>
Kredit* <i>Credit*</i>	2	2
Masa Pembelajaran Pelajar (SLT) <i>Student Learning Time (SLT)</i>	80	80
Prasyarat/Keperluan Minimum Kursus <i>Course Pre-requisite(s)/Minimum Requirement(s)</i>	Tiada	No
Hasil Pembelajaran Kursus* <i>Course Learning Outcomes*</i>	Di akhir kursus ini, pelajar dapat: <ol style="list-style-type: none"> <li>1) Menerangkan konsep asas dalam pengecaman pola dan algoritma terkini yang digunakan dalam penyelidikan pengecaman pola</li> <li>2) Menilai teori pengecaman pola seperti Bayes classifier, linear discriminant analysis menggunakan alat-alat/kaedah yang sesuai untuk</li> </ol>	<i>At the end of the course, students are able to:</i> <ol style="list-style-type: none"> <li>1) <i>Explain basic concepts in pattern recognition and state of the art algorithm used in pattern recognition research</i></li> <li>2) <i>Evaluate pattern recognition theories, such as Bayes classifier, linear discriminant analysis using suitable tools/method of assessment</i></li> </ol>

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	menganalisa 3) Menentukan teknik pengecaman pola dalam menyelesaikan masalah praktikal	3) <i>Decide pattern recognition techniques in practical problems</i>
Kemahiran Insaniah <i>Soft Skills</i>	Kemahiran Pemikiran Kritis dan Penyelesaian Masalah (CT1-CT3)	<i>Critical Thinking and Problem Solving Skills (CT1-CT3)</i>
Sinopsis Kandungan Kursus <i>Synopsis of Course Contents</i>	Teknik pengecaman pola digunakan untuk merekabentuk sistem automatik yang memperbaiki pelaksanaannya melalui pengalaman. Kursus ini meliputi kaedah, teknologi dan algoritma pengecaman pola secara statistik dari perlbagai sudut. Tajuk yang dibincangkan meliputi <i>Bayesian Decision Theory, Estimation Theory, Linear Discrimination Functions, Nonparametric Techniques, Support Vector Machines, Neural Networks, Decision Trees</i> dan <i>Clustering Algorithms</i> .	<i>Pattern recognition techniques are used to design automated systems that improve their own performance through experience. This course covers the methodologies, technologies, and algorithms of statistical pattern recognition from a variety of perspectives. Topics including Bayesian Decision Theory, Estimation Theory, Linear Discrimination Functions, Nonparametric Techniques, Support Vector Machines, Neural Networks, Decision Trees, and Clustering Algorithms etc. will be presented.</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>	Spectrum	<i>Spectrum</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>