UNIVERSITI MALAYA

MAKLUMAT KURSUS UNTUK SEMESTER/PENGGAL SEMASA
COURSE INFORMATION FOR CURRENT SEMESTER/TERM

Sesi Akademik *Academic Session*	2020/2021
Semester/Penggal *Semester/Term*	2
Kod Kursus *Course Code*	KIE4025
Tajuk Kursus *Course Title*	Pengecaman Pola *Pattern Recognition*
Bahasa Pengantar *Medium of Instruction*	Bahasa Inggeris *English*
Rujukan Utama *Main Reference*	1. Duda, Hart and Stork, *Pattern Classification*, Second Edition, Wiley, 2001. 2. S. Theodoridis, K. Koutroumbas, *Pattern recognition*, Academic Press, 2009.
Strategi Pembelajaran *Learning Strategies*	Kerja kursus, kuliah *Assignment, lectures*
Masa Pembelajaran Pelajar *Student Learning Time*	Bersemuka / *Face to face* : 31 jam/*hours* Tidak Bersemuka / *Non Face to face*: 0 jam/*hour* Masa Persediaan Pelajar / *Student Preparation Time*: 49 jam/*hours*
Kemahiran Boleh Pindah Transferable Skills	Pengaturcaraan MATLAB *MATLAB programming*
Pensyarah / *Lecturer* Bilik / *Room* Telefon/e-mel *Telephone/e-mail*	Prof Dr Hamzah Arof
Sesi Kuliah / *Lecture Session:* Hari/Masa / *Day/Time* Tempat / *Venue*	Rujuk kepada myum.um.edu.my. *Refer to* myum.um.edu.my.
Sesi Tutorial/Amali: *Tutorial/Practical Session:* Hari/Masa / *Day/Time* Tempat / *Venue*	Tiada *No*
Perincian Pemberatan Penilaian *Detail of Assessment Weightage*	Penilaian Berterusan / *Continuous Assessment* : 40% Peperiksaan Akhir / *Final Examination* : 60%

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Jadual Pengajaran / *Teaching Schedule*

Minggu *Week*	Topik & Aktiviti *Topic & Activities*	Rujukan *References*
1	Pengenalan: Konsep asas dalam pengecaman pola *Introduction: Basic concepts in pattern recognition*	*Textbook*
2	Teori Keputusan Bayes *Bayesian Decision Theory*	*Textbook*
3	Teori penganggaran *Estimation Theory*	*Textbook*
4	Algoritma *Expectation-maximization* (EM) *Expectation-maximization (EM) algorithm*	*Textbook*
5	Model Markov Terlindung *Hidden Markov Model*	*Textbook*
6	Teknik bukan parametrik *Nonparametric Techniques*	*Textbook*
7	Fungsi Pembeza Layan Linear *Linear Discriminant Functions*	*Textbook*
8	Mesin sokong vektor *Support vector Machine*	*Textbook*
9	Rangkaian neural *Neural Networks*	*Textbook*
10	Pembelajaran Stochastic *Stochastic Learning*	*Textbook*
11	Pembelajaran bebas algoritma *Algorithm Independent Learning*	*Textbook*
12	Pembelajaran tanpa penyeliaan *Unsupervised Learning*	*Textbook*
13	Topik lain: Penderiaan jauh, pengecaman cap jari, teks *Other topic of student interest: Remote Sensing, Fingerprint Identification, Text*	*Journals*
14	Topik lain: Pengecaman percakapan, analisa imej, antara muka manusia-komputer *Other topic of student interest:: Speech recognition, Image analysis, Human-Computer Interface*	*Journals*