

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 Sains Komputer dan Teknologi Maklumat	<i>Faculty of Computer Science and Information Technology</i>
Jabatan <i>Department</i>	Sistem Maklumat	<i>Information Systems</i>
Nama Program Akademik <i>Name of Academic Programme</i>	Sarjana Sains Data	<i>Master of Data Science</i>
Kod Kursus* <i>Course Code*</i>	WQD7001	<i>WQD7001</i>
Tajuk Kursus* <i>Course Title*</i>	Prinsip Sains Data	<i>Data Science Principles</i>
Kredit* <i>Credit*</i>	3	<i>3</i>
Masa Pembelajaran Pelajar (SLT) <i>Student Learning Time (SLT)</i>	120	<i>120</i>
Prasyarat/Keperluan Minimum Kursus <i>Course Pre-requisite(s)/Minimum Requirement(s)</i>	Tiada pra-syarat bagi kursus ini.	<i>There are no prerequisites for this course.</i>
Hasil Pembelajaran Kursus* <i>Course Learning Outcomes*</i>	Di akhir kursus ini, pelajar dapat: 1. Merumuskan asas bagi sains data, proses-proses bagi kitaran hayatnya, kaedah-kaedah dan teknik-teknik sains data. 2. Menentukan prinsip-prinsip bagi data kemas dan perkongsian data. 3. Mengaplikasikan kaedah paling penting sains data	<i>At the end of the course, students are able to:</i> 1. <i>Summarize the foundations of the data science, it's life cycle processes, methods and techniques.</i> 2. <i>Determine the principles of tidy data and data sharing.</i> 3. <i>Apply the most important data science methods, using open-source tools.</i>

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	menggunakan alatan-alatan sumber terbuka.	
Kemahiran Insaniah <i>Soft Skills</i>	Kemahiran Berkomunikasi (CS1, CS2, CS3, CS4) Kemahiran Pemikiran Kritis dan Menyelesaikan Masalah (CT1, CT2, CT5) Etika dan Moral Profesional (EM1, EM2)	<i>Communication Skills (CS1, CS2, CS3, CS4)</i> <i>Critical Thinking and Problem Solving Skills (CT1, CT2, CT5)</i> <i>Professional Ethics and Moral (EM1, EM2)</i>
Sinopsis Kandungan Kursus <i>Synopsis of Course Contents</i>	Kursus ini dirancang untuk membantu pelajar memaknai erti bidang sains data. Ia meliputi apa, bila, siapa, di mana, mengapa dan bagaimana (5W 1H) berkaitan sains data dalam era data raya. Turut merangkumi prinsip-prinsip asas sains data yang mendasari algoritma, proses, kaedah, dan pemikiran data analitik. Peranan, ilmu dan kemahiran saintis data juga dibentangkan. Pelbagai teknologi, bahasa pengaturcaraan dan juga alatan dalam sains data turut dibincangkan.	<i>The course is designed to help the student making sense of the field of data science. It covers the what, when, who, where, why and how (5W 1H) of data science in the era of big data. Also encompass the fundamental principles of data science that underlie the algorithms, processes, methods, and data-analytic thinking.</i> <i>The role of data scientist, the knowledge and skills required is also presented. Diverse technologies, programming languages as well as tools in data science are discussed.</i>
Pemberatan Penilaian* <i>Assessment Weightage*</i>	Penilaian Berterusan: 60% Peperiksaan Akhir: 40%	<i>Continuous Assessment: 60%</i> <i>Final Examination: 40%</i>
Kaedah Maklum Balas Tentang Prestasi <i>Methodologies for Feedback on Performance</i>	Gred-gred bagi penilaian berterusan akan diletakkan di laman web pensyarah atau di luar pintu bilik pensyarah dari masa ke semasa sebelum gred-gred akhir dikeluarkan.	<i>Grades for continuous assessment will be put up on the lecturer's website or the lecturer's room door from time to time before final grades are issued.</i>
Kriteria Dalam Penilaian Sumatif <i>Criteria in Summative Assessment</i>	Rujuk pada buku "Kaedah dan Peraturan Universiti Malaya (Pengajian Ijazah Sarjana) Tahun 2019".	<i>Refer to book "Kaedah dan Peraturan Universiti Malaya (Pengajian Ijazah Sarjana) Tahun 2019".</i>