

Sesi Akademik <i>Academic Session</i>	2020/2021
Semester/Penggal <i>Semester/Term</i>	2
Kod Kursus <i>Course Code</i>	KIE4026
Tajuk Kursus <i>Course Title</i>	Komunikasi Data <i>Data Communications</i>
Bahasa Pengantar <i>Medium of Instruction</i>	Bahasa Inggeris <i>English</i>
Rujukan Utama <i>Main Reference</i>	1. William Stallings, Data and Computer Communications, 10 th Ed, Pearson, 2014. 2. James Kurose and Keith Ross, Computer Networking: A top-down Approach, 7 th Ed., Pearson, 2017.
Strategi Pembelajaran <i>Learning Strategies</i>	Kuliah, Seminar, dan Perbincangan Kumpulan <i>Lectures, Seminar and Group Discussion</i>
Masa Pembelajaran Pelajar <i>Student Learning Time</i>	Bersemuka / <i>Face to face</i> : 31 jam/hours Tidak Bersemuka / <i>Non Face to face</i> : 0 jam/hour Masa Persediaan Pelajar / <i>Student Preparation Time</i> : 49 jam/hours
Kemahiran Boleh Pindah <i>Transferable Skills</i>	Pengaturcaraan Soket <i>Socket Programming</i>
Pensyarah / <i>Lecturer</i>	Assoc. Prof. Ir. Dr. Chow Chee Onn
Bilik / <i>Room</i>	Room 13, Level 2, Engineering Summit (Block Y)
Telefon/e-mel <i>Telephone/e-mail</i>	79674457 / cochow@um.edu.my
Sesi Kuliah / <i>Lecture Session:</i>	Rujuk kepada myum.um.edu.my.
Hari/Masa / <i>Day/Time</i>	<i>Refer to myum.um.edu.my.</i>
Tempat / <i>Venue</i>	
Sesi Tutorial/Amali: <i>Tutorial/Practical Session:</i>	Tiada
Hari/Masa / <i>Day/Time</i>	No
Tempat / <i>Venue</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 <i>Topic & Activities</i>	Rujukan <i>References</i>
1	Pengenalan kepada Komunikasi Data <i>Introduction to Data Communications</i>	Rujukan [1,2] <i>Reference [1,2]</i>
2	Protokol TCP/IP dan Model OSI <i>TCP/IP Protocol and OSI Model</i>	Rujukan [1,2] <i>Reference [1,2]</i>
3	Lapisan Fizikal: Pengecodan dan Media Penghantaran <i>Physical Layer: Coding and Transmission Media</i>	Rujukan [1,2] <i>Reference [1,2]</i>
4	Lapisan Link Data: Kawalan Ralat dan Kawalan Aliran <i>Data Link Layer: Error Control and Flow Control</i>	Rujukan [1,2] <i>Reference [1,2]</i>
5	Lapisan Link Data: Rangkaian Kawasan Setempat <i>Data Link Layer: Local Area Networks</i>	Rujukan [1,2] <i>Reference [1,2]</i>
6	Lapisan Rangkaian: Penghalaan dan Penghantaran <i>Network Layer: Routing and Forwarding</i>	Rujukan [1,2] <i>Reference [1,2]</i>
7	Lapisan Rangkaian: Protokol IP <i>Network Layer: IP Protocol</i>	Rujukan [1,2] <i>Reference [1,2]</i>
8	Lapisan Rangkaian: Algoritma Penghalaan (Bellman-Ford dan Dijkstra) <i>Network Layer: Routing Algorithms (Bellman-Ford and Dijkstra)</i>	Rujukan [1,2] <i>Reference [1,2]</i>
9	Lapisan Rangkaian: Protokol Penghalaan Intra-Domain (RIP dan OSPF) <i>Network Layer: Intra-Domain Routing Protocols (RIP, OSPF)</i>	Rujukan [1,2] <i>Reference [1,2]</i>
10	Lapisan Rangkaian: Protokol Penghalaan Inter-Domain (BGP) <i>Network Layer: Inter-Domain Routing Protocols (BGP)</i>	Rujukan [1,2] <i>Reference [1,2]</i>
11	Lapisan Pengangkutan: Protokol TCP <i>Transport Layer: TCP Protocol</i>	Rujukan [1,2] <i>Reference [1,2]</i>
12	Lapisan Pengangkutan: Protokol UDP <i>Transport Layer: UDP Protocol</i>	Rujukan [1,2] <i>Reference [1,2]</i>
13	Lapisan Aplikasi: Model Pelayan-Pelanggan dan Protokolnya <i>Application Layer: Client-Server Model and Its Protocols</i>	Rujukan [1,2] <i>Reference [1,2]</i>
14	Lapisan Aplikasi: Model Sebaya-ke-Sebaya dan Protokolnya <i>Application Layer: Peer-to-Peer Model and Its Protocols</i>	Rujukan [1,2] <i>Reference [1,2]</i>