



UNIVERSITI TEKNOLOGI MARA

CSC548: DISTRIBUTED MULTIMEDIA

Course Name (English)	DISTRIBUTED MULTIMEDIA APPROVED
Course Code	CSC548
MQF Credit	3
Course Description	The subject provides the students with an understanding of telecommunications and networking which is related to the design and implementation of multimedia applications on the network.
Transferable Skills	Demonstrate ability to identify and articulate self skills, knowledge and understanding confidently and in a variety of contexts
Teaching Methodologies	Lectures, Blended Learning, Lab Work, Discussion
CLO	CLO1 Analyse scientific skills in assessment relate to distributed multimedia. CLO2 Integrate autonomous learning distributed multimedia CLO3 Demonstrate managerial skills in distributed multimedia project.
Pre-Requisite Courses	No course recommendations
Topics	
1. Overview of Distributed Multimedia System 1.1) Basic definition 1.2) Text, Graphics, Images, Video, Animation, Sound 1.3) Enabling Technologies	
2. Multimedia Networks 2.1) Basic of Computer and Multimedia Networks 2.2) Network Protocols 2.3) Networking Requirements of Multimedia Applications	
3. Components in Distributed Multimedia 3.1) Devices Technologies 3.2) Features, Characteristics and Challenges for Multimedia System 3.3) Hypertext and Hypermedia	
4. Fundamental of Delivery 4.1) Basic Digitizing Techniques 4.2) Basic of Compression Techniques 4.3) Synchronization 4.4) Quality of Service	
5. Basic Distributed and Parallel Computing 5.1) Concept of Distributed Computing 5.2) Concept of Parallel Computing	
6. Distributed Multimedia Applications 6.1) Content Distribution 6.2) Access Technology : Broadband Network 6.3) Implementation Issues for Emerging Multimedia Technologies	

Assessment Breakdown	%
Continuous Assessment	60.00%
Final Assessment	40.00%

Details of Continuous Assessment	Assessment Type	Assessment Description	% of Total Mark	CLO
	Assignment	Assignment (2 or 3)	15%	CLO2
	Group Project	Develop using SMIL	10%	CLO3
	Group Project	Group discussion and presentation	10%	CLO3
	Online Quiz	Online Quiz	5%	CLO1
	Test	Test 1	10%	CLO1
	Test	Test 2	10%	CLO1

Reading List	Recommended Text	<ul style="list-style-type: none"> Peter Csaba Ölveczky 2018, <i>Designing Reliable Distributed Systems</i>, 1 Ed., 16, Springer [ISBN: 9781447166870]
	Reference Book Resources	<ul style="list-style-type: none"> Hans W. Barz, Gregory A. Bassett, 2016, <i>Multimedia Networks: Protocols, Design and Applications</i>, 12, Wiley U.S [ISBN: 978-1-119-090] Brenda Laurel 2013, <i>Computers as Theatre</i>, 2 Ed., 6, Pearson Education U.S [ISBN: 978-032191862] Santanu Chaudhury and Anupama Mallik 2015, <i>Multimedia Ontology: Representation and Applications</i>, 11, CRC Press U.S [ISBN: 978-148223634] Yifeng He and Ling Guan 2014, <i>Optimal Resource Allocation for Distributed Video Communication</i>, 6, CRC Press US [ISBN: 9781439875148]
Article/Paper List	This Course does not have any article/paper resources	
Other References	This Course does not have any other resources	