



## UNIVERSITI TEKNOLOGI MARA

### OSM602: TELECOMMUNICATION TECHNOLOGIES

<b>Course Name (English)</b>	TELECOMMUNICATION TECHNOLOGIES <b>APPROVED</b>
<b>Course Code</b>	OSM602
<b>MQF Credit</b>	
<b>Course Description</b>	This course describes the role of telecommunications and networking in business offices and organizations. It deals with the components and procedures in the applications of telecommunications and networking. In addition, the course also examines a wide range of new and emerging telecommunications technologies and networking and use of modern telecommunications and networking for strategic advantage.
<b>Transferable Skills</b>	Demonstrate analytical skills using technology. Demonstrate resilience, perseverance and positivity in multi-tasking, dealing with change and meeting new challenges. Demonstrate ability to investigate problems and provide effective solutions.
<b>Teaching Methodologies</b>	Lectures, Blended Learning, Discussion
<b>CLO</b>	CLO1 To explain data communications, networks, telecommunication technology and their roles CLO2 To determine the usage and importance of telecommunication systems in organizations. CLO3 To demonstrate the network and telecommunication system of an organization.
<b>Pre-Requisite Courses</b>	No course recommendations
<b>Topics</b>	
<b>1. 1. INTRODUCTION TO DATA COMMUNICATIONS</b> 1.1) 1.1) Definition of Data Communications 1.2) 1.2) Data Communications System Components 1.3) 1.3) Data Communications system Effectiveness 1.4) 1.4) Definition of Networks	
<b>2. 2. THE BASICS OF TELECOMMUNICATIONS</b> 2.1) 2.1) The Communications Model 2.2) 2.2) Computers and Telecommunication 2.3) 2.3) Business Telecommunications 2.4) 2.4) Competitive Advantage 2.5) 2.5) Management Information System (MIS)	
<b>3. 3. THE TECHNOLOGY AND TRANSMISSION MEDIA</b> 3.1) 3.1) Introduction 3.2) 3.2) Alternate Transmission Technologies and Media Guided/Wired Transmission Media 3.3) 3.3) Unguided/Wireless Transmission Media	
<b>4. 4. THE HISTORY OF TELEPHONE AND SWITCHING SYSTEM</b> 4.1) 4.1) Introduction The History of Telecommunications The Telegraph and Telephone System Modes of Transmission 4.2) 4.2) The Technology of Voice Communications 4.3) 4.3) The Telephone Channel Capacity Central Office and Switching Equipment Communication Circuits	
<b>5. 5. DATA CONVERSION, MODULATION AND MULTIPLEXING</b> 5.1) 5.1) Introduction 5.2) 5.2) Analog and Digital Signals 5.3) 5.3) Signal Transmission and Channels 5.4) 5.4) Binary Number Conversion	

## **6. BUSINESS APPLICATIONS OF TELECOMMUNICATIONS**

6.1) 6.1) Business Application

6.2) 6.2) Service Bureau

6.3) 6.3) Application Service Providers (ASP)

6.4) 8.4) Teleconferencing

6.5) 6.5) Telecommuting

6.6) 6.6) Electronic Data Interchange (EDI)

6.7) 6.7) Enterprise Applications Military Use of Telecommunications

<b>Assessment Breakdown</b>		<b>%</b>		
Continuous Assessment		100.00%		
<b>Details of Continuous Assessment</b>	<b>Assessment Type</b>	<b>Assessment Description</b>	<b>% of Total Mark</b>	<b>CLO</b>
	Assignment	NUMBERING SYSTEMS	20%	CLO1
	Assignment	ARTICLE REVIEW	20%	CLO2
	Individual Project	PROJECT	30%	CLO3
	Test	TEST	30%	CLO1
<b>Reading List</b>	<b>Recommended Text</b>	Carr, Houston H. and Charles A. Synder 2012, , <i>The Management of Telecommunications</i>		
<b>Article/Paper List</b>	This Course does not have any article/paper resources			
<b>Other References</b>	This Course does not have any other resources			