

ONLINE SHORT COURSE ON COMMUNICATIONS

Online Platform **BLACKBOARD COLLABORATE ULTRA**



10 20-22 OCTOBER 2020

SYNOPSIS

Data communications allow autonomous computers to exchange information through a network. The elements of the network are the computers themselves, the protocols that govern the communication and the transmission medium. This course gives an overview of TCP/IP and other related protocols as most computers today connect through the Internet. A top-down approach is taken where the application layer is covered first. The course covers the network layer which serves as an intermediary between the transport layer and the data link layer.

The next half of the course provides the means to detect and possibly correct errors that may occur in the physical layer. Finally, the course covers the physical layer which consists of the electronic circuits which transmit raw bits rather than logical data packets over a physical data link. Changes in technologies occur rapidly here. Short-range Bluetooth piconets, medium-range wireless 802.11 local area networks (WLANs) and wire-area 4G/5G wireless cellular networks will be covered.

LEARNING OUTCOMES

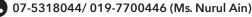
At the end of this course, the participants will be able to:

- Acquire the advance knowledge data and computer communication.
- Provide an overview of advance data and computer communication and its basic components.
- Understand of present day application and future development.

UTMSPACE

IN-HOUSE Courses can be designed in accordance with organizational requirements.

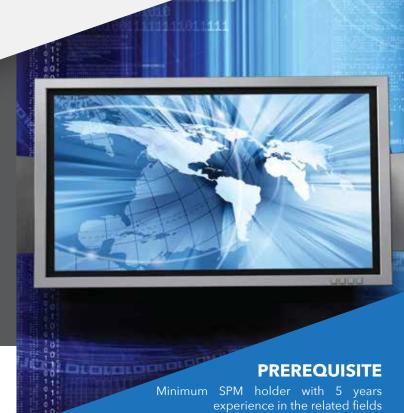
Centre for Professional Development, **UTMSPACE** Johor Bahru





nurulain@utmspace.edu.my





COURSE CONTENTS

- Data communications, data networking, and the Internet
- Layered architecture
- Transport Services Provided by the Internet
- Transport-layer services
- Multiplexing and demultiplexing
- UDP and TCP protocols
- Congestion control
- Circuit switching and packet switching
- IPv4, IPv6 forwarding and addressing
- Services provided by link layer
- Error detection and correction
- Multiple access protocols
- Local area networks (wired and wireless)
- Multimedia networking
- Networking for sensor integration ASTERIX protocol from Eurocontrol



FACILITATOR



ASSOC. PROF. MUHAMMAD MUN'IM BIN AHMAD ZABIDI received his double Bachelor's of Science degrees in Computer Engineering and Electrical Engineering from the University of Missouri-Columbia, USA, in 1985 and Master's of Science in Computer Engineering from the University of Bridgeport,

Connecticut, USA, in 1988. He was the Deputy Director of Academic Computing at the Center for Information and Communications Technology (CICT), UTM from 2005-2008. He teaches digital systems design, embedded systems and software engineering. His research work is mainly on artificial intelligence, digital signal processing and Internet-of-Things.

Io confirm y including pa	REGISTRATION FORM To confirm your registration, please complete this form including payment.			YES! Please register the following participant(s for this course I am interested but unable to attend. Please put me on your mailing list	
Please tick (/)	where applicable				
Course Na	ame : ON	LINE SHORT COURSE	ON DATA AND COM	IPUTER COMMUNICATION	ONS
Date		22 October 2020			
Fee		400.00 per pax sive of notes and e-certificate			
ETAILS OF PARTIC	IPANT ATTENDING				
No.	Name of Particip	pant	Mobile No.	Email	Fee (RM)
DNSORSHIP: DIVIDUAL / COMPA Organisation Address	Self-Sponso ANY DETAILS (for is: :		-Sponsored		
Contact Person			Co. Req.	No*	
Tel No.			*If applica	ole	
Fax No. :					
Fax No.					
	ed in writing 30 days pri refund. However, substi rs may necessitate subs	ior to the programme are eligible for a itute attendees are welcome. Please no ititutions or cancellations of speakers an	refund, subject to a 15% cancellation fee te that the speakers and topics are confi ad/or topics. As such UTMSPACE reserve	e. Cancellations received less than 14 days fror rmed at the time of printing. However, circums is the right to alter or modify the advertised sp	n the date of the programm stances beyond the control c eakers and/or topics.
		ior to the programme are eligible for a i titute attendees are welcome. Please no stitutions or cancellations of speakers an	_	e. Cancellations received less than 14 days fror rmed at the time of printing. However, circums is the right to alter or modify the advertised sp	n the date of the programm stances beyond the control c eakers and/or topics.
Cancellations receive are not eligible for a the organiser Authorised Signature* Name	:			:	n the date of the programm tances beyond the control o eakers and/or topics.
Cancellations receive are not eligible for a the organiser Authorised Signature* Name * Head of Departmen	: : nt / Approving Manage:		Date	:ion :	n the date of the programm stances beyond the control of eakers and/or topics.
Cancellations receive are not eligible for a the organiser Authorised Signature* Name * Head of Departmen	: :nt / Approving Manager		Date	:ion :	
Cancellations receive are not eligible for a the organiser the organiser Authorised Signature* Name * Head of Department	: : nt / Approving Manage IT ink Draft		Date Designat	:ion :Compa	

Reference Number :_

Transaction Date

| Terms & Conditions Apply |