



**UTM**  
UNIVERSITI TEKNOLOGI MALAYSIA

# ONLINE SHORT COURSE ON HIGH FREQUENCY RADIO COMMUNICATION

Online Platform \_\_\_\_\_  
BLACKBOARD COLLABORATE ULTRA

 **17-19 November 2020**

## SYNOPSIS

Before the first communications satellites were launched in the 1960s, high-frequency (HF) radio was the principal means to communicate beyond the horizon. Satellite links proved to be more reliable and over time HF was relegated to backup and disaster-recovery roles, with the military as the primary user. With the introduction of adaptive radio technology, there is a resurgence in HF radio making it reliable and low cost alternative to satellite. Today, HF radio is used by the military, amateur radio, aircraft, utilities, the oil and gas industry, short wave broadcast stations and the government agencies. The course will explain the various components that make up satellite communication system covering the propagation of signals, antennas, transmitters, receivers and signal processing.

**UTMSPACE** ESTD 1992™

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

 Centre for Professional Development,  
UTMSPACE Johor Bahru  
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 07-5205725  
 nurulain@utmspace.edu.my



Register here: <https://bit.ly/2SBtPcy>

## PREREQUISITE

Minimum SPM holder with 5 years experience in the related fields

## COURSE CONTENTS

- Radio propagation: ground wave and sky wave.
- Frequency prediction and planning
- Radio systems structure.
- Antenna types
- Radio system setup and verifications.
- Analog voice communications.
- Data communications: modulation and channel coding.
- Data formats for commercial and military applications
- Adaptive link establishment (ALE) and selective call (SELCAL)
- Spread spectrum communications

## FACILITATOR



**ASSOC. PROF. DR AHMAD ZURI BIN SHA'AMERI** obtained his B. Sc. in Electrical Engineering from the University of Missouri-Columbia, USA in 1984, and M. Eng. Electrical Engineering and Ph D both from UTM in 1991 and 2000 respectively. He was the Head of the Microelectronic and Computer

Engineering (MICE) Dept and currently the Academic Coordinator for the DSP Lab, Faculty of Electrical Engineering, UTM. His research interest includes signal theory, signal processing for radar and communications, signal analysis and classification and information security. The subjects taught at both undergraduate and postgraduate levels includes digital signal processing, advance digital signal processing, and advance digital communications. He has also conducted short courses for both government and private sectors. At present, he has published 160 papers in his areas of interest at both national and international levels in conferences and journals.

# 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 Name : **ONLINE SHORT COURSE ON HIGH FREQUENCY RADIO COMMUNICATION**

Date : **17-19 November 2020**

Fee : **RM400.00** per pax  
Inclusive of notes and e-certificate

**\*DETAILS OF PARTICIPANT ATTENDING THE COURSE :**

No.	Name of Participant	Mobile No.	Email	Fee (RM)

(Please attach a separate list if necessary)

\*UTMSPACE respects the privacy of its customers with regards to personal data. For further details, please visit: [www.utmspace.edu.my/pdpa](http://www.utmspace.edu.my/pdpa)

Total

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Co. Reg. No\* : \_\_\_\_\_

\*If applicable

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Designation : \_\_\_\_\_

Fax No. : \_\_\_\_\_

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Cancellations received in writing 30 days prior to the programme are eligible for a refund, subject to a 15% cancellation fee. Cancellations received less than 14 days from the date of the programme are not eligible for a refund. However, substitute attendees are welcome. Please note that the speakers and topics are confirmed at the time of printing. However, circumstances beyond the control of the organisers may necessitate substitutions or cancellations of speakers and/or topics. As such UTMSPACE reserves the right to alter or modify the advertised speakers and/or topics.

Authorised Signature\* : \_\_\_\_\_

Date : \_\_\_\_\_

Name : \_\_\_\_\_

Designation : \_\_\_\_\_

\* Head of Department / Approving Manager

Company Stamp

**MODE OF PAYMENT**

A. Cheque or Bank Draft

Cheque No. / Bank Draft No. : \_\_\_\_\_

Bank/ Branch : \_\_\_\_\_

All crossed cheque / bank draft should be made payable to Account Name : UTMSPACE  
Account Number : 8601518228 | Bank Name : CIMB Islamic Bank Berhad | Branch : UTM Skudai, Johor

B. Telegraphic Transfer / Local Order

Transaction Date : \_\_\_\_\_

Reference Number : \_\_\_\_\_

| Terms & Conditions Apply |

**FOR FURTHER INFORMATION, PLEASE CONTACT:**

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