

RF Product Performance Characterization and Testing: Advanced RF Instrumentation and Measurement

23 & 24 February 2011 (Wednesday & Thursday)

NTTS Pre-approved
50% course fee reimbursement

Background & Objectives

The aim of this course is to provide an opportunity for participants to acquire technical insights on vital aspects on RF Instrumentation and Measurements. On completion of this module, students should be able to:

1. Understand the fundamentals of RF measurement technologies and techniques
2. Understand critical RF testing parameters related to wireless product performance
3. Perform RF equipment setup with minimum uncertainty
4. Acquire prerequisites on effective use of measurement instrumentations.
5. Use RF equipments to assist circuit and product design

The course will be conducted by RF experts with rich local and overseas industrial experience.

Who Should Attend

Field Application Engineers, Test Engineers, Business Development Engineers, RF Designers, Wireless Product Designers, Design Managers and related professionals.

Course Structure

<p>Measurement Basics</p> <ul style="list-style-type: none">➤ purpose of Instrumentation and measurement➤ understand the specification➤ identifying critical parameters➤ understand the equipments➤ cables and connectors➤ test pins and RF probes➤ fixtures and test jigs➤ equipment setup➤ improvement of testing uncertainty➤ D.C. measurement➤ purpose of Instrumentation and measurement <p>◇ Type of RF Test</p> <ul style="list-style-type: none">■ component test■ sub-circuit and module test■ complete product test■ Test for product design <p>◇ Network analyzer aided RF circuit design</p>	<p>◇ RF transmitter test</p> <ul style="list-style-type: none">■ output power, modulation, occupy bandwidth and settling time■ conductive test and radiative test <p>◇ RF receiver test</p> <ul style="list-style-type: none">■ sensitivity test■ out-band rejection test■ conductive test and radiative test <p>◇ EMC tests</p> <ul style="list-style-type: none">■ Emission tests■ Immunity tests■ ESD <p>◇ Demonstration of RF Testing</p> <ul style="list-style-type: none">■ EMC Emission test■ Receiver Sensitivity Test■ Transmitter test
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Organizer



Co-organizer



Supported by



Agilent Technologies



About the Instructors

Dr. C.M. Yuen received his B.Eng. and Ph.D degrees in Electronic Engineering from the City University of Hong Kong. His research interest mainly lies in RF and Microwave circuits design for low voltage and low power consumption wireless systems. He has twenty-one years of experience in RF product design and manufacturing in Hong Kong and Mainland China. Dr Yuen is currently an advisory engineer in the field of HDTV and IPTV.

Mr. Henry Lau received his M.Sc. and MBA degrees from the UK and USA respectively. He has more than 21 years of experience in designing RF systems, products and RFICs in both Hong Kong and the USA. He worked for Motorola and Conexant in the USA as Principal Engineer on developing RFICs for cellular phone and silicon tuner applications. Mr Lau holds five US patents and has one patent pending. He is currently running Lexiwave Technology Ltd., a fabless semiconductor company in Hong Kong and the USA designing and selling RFICs, RF modules and wireless solutions.

Course Information

Date	23-24 February 2011 (Wednesday & Thursday)
Time	9:30 – 17:00
Venue	1/F., HKPC Building, 78 Tat Chee Avenue, Kowloon.
Medium of Instruction	Cantonese (with English terminology and handouts)
Award of Certificate	A Certificate of Completion will be awarded to participants who have attended the 2-day training.

Course Fee (including course materials)

Normal: HK\$2,500 / Early Bird: HK\$2,250 (for those who enroll on or before 28/01/2011)

*The training course has been successfully pre-approved under the New Technology Training Scheme (NTTS). Each eligible trainee can obtain a **training grant of 50%** of the actual course fee.
For details, please visit: <http://ntts.vtc.edu.hk>*

Application Procedure

1. Please complete the enrolment form and send by email to hollyip@hkpc.org or fax to 2788 5350 for seat reservation.
2. Please pay the course fee via one of the methods listed in "Payment Methods".

Payment Methods

1. **Cheque:** please send the cheque to: Holly Ip, PTI 3702, 3/F, HKPC Building, 78 Tat Chee Avenue, Kowloon
**All cheques should be crossed and made payable to "Hong Kong Productivity Council"*
2. **Visa / Master:** please pay at the enrolment counter located at 1/F, HKPC Building
**Mon – Fri: 09:00-21:00 | Sat: 09:00-17:00*
3. **Online Payment:** for details, please refer to <http://www.hktrainingonline.com>
4. **Bank-in:** bank in to HKPC's account at Standard Chartered Bank (Account No. 447-107-1900-3) and fax or email the bank-in slip to HKPC.

Enquiries

Hong Kong Productivity Council

Holly Ip Tel: 2788 6366 Fax: 2788 5350 Email: hollyip@hkpc.org
Ms Yeung Tel: 2788 5833 Fax: 2788 5350 Email: mcy@hkpc.org

Lexiwave Technology (Hong Kong) Limited

Edward Lam Tel: 2144 2592 Fax: 2144 2595 Email: edward.lam@lexiwave.com

報名表 Enrolment Form

請以正楷填寫此表格 Please complete this form in BLOCK LETTERS.

課程 Programme :

課程編號 Programme Code :	課程名稱 Programme Title :	學費 Programme Fee:
40128466	RF Product Performance Characterization and Testing: Advanced RF Instrumentation and Measurement	<input type="checkbox"/> HK\$2,500 <input type="checkbox"/> HK\$2,250 (Register on or before 28/01/2011)

甲部 (Part A) 申請者資料 Applicant Information :

中文姓名 (先生/小姐/太太/女士*) : Chinese Name (Mr./Miss/Mrs./Ms*) :			
英文姓名 : Name in English :	姓 last name	名 first name	(必須與香港身份證/護照相同) Must be the same as shown on ID card/Passport
公司名稱 : Company Name :			
職位 : Position :			
辦事處電話 : Office Telephone :	手提電話 : Mobile No. :	住宅電話 : Home Telephone :	
電郵地址 : E-mail Address :		傳真 : Fax :	
通訊地址 : Correspondence Address :			
閣下從何處知悉本培訓課程? Where did you learn about this training programme?			
<input type="checkbox"/> 香港生產力促進局網頁 HKPC's Website <input type="checkbox"/> 報紙廣告 Newspaper Advertisement <input type="checkbox"/> 電郵 / 傳真推廣 Email / Fax Marketing <input type="checkbox"/> 朋友 / 公司推介 Referral by Friends / Company			
<input type="checkbox"/> 生產力大樓課程展示處 HKPC's Display at HKPC Building <input type="checkbox"/> 其他 Others:			
<input type="checkbox"/> 如閣下不想收取本局的宣傳資料，請在方格上加「✓」 Please tick the box if you don't want to receive promotion materials from HKPC			

乙部(Part B) 繳費方法 Method of Payment :

<p>請選擇一項 Please select one only</p> <input type="checkbox"/> 現金 Cash / 信用卡 Credit Card
<input type="checkbox"/> 支票號碼 Cheque No. : _____ , (公司 Company / 私人 Private*) 。 (支票請劃線，抬頭人為「香港生產力促進局」。The cheque has to be crossed and made payable to the "Hong Kong Productivity Council.")
<input type="checkbox"/> 銀行匯款 Bank-in (HKPC Standard Chartered Bank Account No. 447-107-1900-3)
<p>Is the programme fee sponsored by your employer? 課程費用由僱主贊助?</p> <p style="text-align: right;"><input type="checkbox"/> YES 是 <input type="checkbox"/> NO 否</p>

聲明 Declaration :

本人聲明在此報名表格及隨附文件所載的資料，依本人所知均屬完整真確。

I declare that all information provided in this enrolment form and the attached documents are, to the best of my knowledge, accurate and complete.

本人同意如本人獲取錄入學，本人當遵守學院的規則。

I consent that if admitted, I will comply with all the Rules and Regulations stipulated by the Institute.

本人已細閱報名表的重要通知，並明白所有「重要通知」內容均以本院課程單張及網頁之最後更新版本為依歸。

I have read and understood the "Important Note" in this enrolment form is subject to revisions in the course pamphlets and the latest updates in the Institute's website.

申請者簽名
Applicant's Signature : _____

日期
Date : _____

報名程序

請填妥報名表、連同相關課程需要的文件及費用，親身或以郵遞方式遞交。

郵寄地址：九龍達之路 78 號生產力大樓香港生產力促進局生產力培訓學院（請於信封面註明報讀課程名稱及編號。）

重要通知:

1. 報名表(可用影印本)必須連同學費於開課前一併繳交，否則報名無效。
2. 本局已實施個人資料(私隱)政策，有關資料單張可於報名處索閱，或閣下可與本局個人資料管理主任查詢。
3. 本局建議申請者以信用卡、易辦事或支票繳交學費。學費收據以本局機印方為有效，支票收妥作實。
4. 除非本局於課程開始前最少 5 個工作日收到申請者書面通知退學，否則已繳學費概不退還。申請者申請退還學費需繳交手續費二百元正。
5. 申請者可提名他人代替其本人出席課程，惟事先須得本局同意。
6. 香港生產力促進局保留在任何情況下及以任何原因拒絕任何入學申請的權利。申請者繳付學費後，仍須符合入學的所有條件，其申請方可獲得接納。
7. 香港生產力促進局保留在任何情況下更改課程內容、授課地點、日期及時間的權利。
8. 颱風及黑雨警告：如課堂時間是在早上(09:00-13:00)、下午(14:00-17:00)或晚間(6:30-10:00)，將在下列情況下取消：(一)八號或以上颱風訊號或黑色暴雨警告訊號在早上 6:00、11:00 或下午 4:00 仍然懸掛；或(二)香港天文台在早上 6:00、11:00 或下午 4:00 或之後，宣佈將懸掛八號或以上颱風訊號或黑色暴雨警告訊號。本局將盡早通知學員補課的日期及時間。

Enrolment Procedure :

Please complete and send the enrolment form with required documents and fee to the Institute in person / by mail.

Mailing Address: Productivity Training Institute, Hong Kong Productivity Council, HKPC Building, 78 Tat Chee Avenue, Kowloon. (Please mark the programme title and programme code on the envelope.)

IMPORTANT NOTE:

1. Course fee must be accompanied with this form (or photocopy) before course commence, otherwise enrolment would be rejected.
2. HKPC has adopted a Personal Data (Privacy) Policy. Information about the policy is available at HKPC enrolment counters for collection. You may also contact our Personal Data Controlling Officer for further details.
3. Applicants are encouraged to pay by credit cards, EPS or cheques, if possible. Amount received will be imprinted. Cheques are subject to bank clearance.
4. Enrolment fee is not refundable unless HKPC is notified in writing of your withdrawal at least 5 working days before the course commences. A handling charge of HK\$200 will also be levied.
5. An applicant may, subject to approval from HKPC, nominate a person to attend the course on his/her behalf.
6. HKPC reserves the right to reject any application in any circumstances and for whatever reasons. Payment of fees should only be construed as conditional acceptance of application.
7. HKPC reserves the right to change the contents, venue and / or time as necessary.
8. Classes in the morning, afternoon or evening will be cancelled if typhoon signal No. 8 or above OR black rainstorm warning is still hoisted after (or is announced by the Hong Kong Observatory to be hoisted at/after) 6:00 a.m., 11:00 a.m. and 4:00 p.m. respectively. Participants will be notified when the class will be made up as soon as possible.