

Our course portfolio is continually being updated and enhanced as the ETSI, IETF and 3GPP specifications evolve. All courses are based on our renowned methodology and we are happy to customise the content to match the needs of participants. All courses in the portfolio are available for on-line delivery.

## **EPS (LTE/EPC)**

LTE Interoperability  
LTE Multiple Antenna Techniques  
LTE PHY Engineering  
LTE Radio Interface  
LTE Radio Planning  
LTE Signalling  
LTE/EPC System Overview  
OFDM/OFDMA Advanced  
PCC - Policy and Charging Control  
EPC Signalling  
TD-LTE PHY Engineering  
Troubleshooting of the LTE Radio Interface  
LTE Advanced  
IP QoS in LTE/EPS and HSPA  
IMS and SIP Signalling, UMTS/EPS/NGN Access and IMS Services  
Voice in LTE/EPS Networks  
Planning the LTE Radio Network  
LTE In-depth

## **UMTS**

GSM/UMTS/EPS System Overview  
PS Domain Evolution Overview  
UMTS and eHSPA Signalling  
UMTS Core Network and Service Architecture  
Core Network Signalling  
UMTS Radio Interface  
UMTS/GSM Interoperability  
UMTS and HSPA RAN KPI  
Planning the UMTS Radio for HSPA+  
Planning the UMTS/HSPA Radio Network

## **HSPA**

eHSPA – Evolved High Speed Packet Access  
In-depth Analysis for Troubleshooting and Optimisation of the UMTS/eHSPA Radio Interface  
UMTS and eHSPA Signalling  
IP QoS in LTE/EPS and HSPA  
UMTS and HSPA RAN KPI  
Planning the UMTS Radio for HSPA+  
Planning the UMTS/HSPA Radio Network

## **IMS**

IMS and SIP Signalling with NGN Access  
IMS and SIP Signalling with EPS and UMTS Access  
IMS Architecture and Services  
IMS Overview  
IMS and SIP Signalling, UMTS/EPS/NGN Access and IMS Services  
Voice in LTE/EPS Networks  
On-line: IMS and SIP Signalling with UMTS Access

## **TCP/IP**

Analysis for Troubleshooting and Optimisation of TCP/IP in Mobile Networks  
In-depth Analysis for Troubleshooting and Optimisation of TCP/IP in Mobile Networks  
TCP/IP in the Mobile World  
IP QoS in LTE/EPS and HSPA

## **General**

GSM/UMTS/EPS System Overview  
PS Domain Evolution Overview  
SS7 Signalling in Mobile Networks  
Core Network Signalling  
Mobile Broadband – Technology and Business Implications

## **GSM/GPRS**

GSM and GPRS Signalling  
GSM System Overview  
GSM/GPRS Cell Planning  
GSM/UMTS Indoor Cell Planning  
GSM/UMTS/EPS System Overview

## **Planning**

GSM/GPRS Cell Planning  
GSM/UMTS Indoor Cell Planning  
LTE Radio Planning  
Planning the LTE Radio Network  
Planning the UMTS Radio for HSPA+  
Planning the UMTS/HSPA Radio Network

## **Mobile Broadband**

eHSPA – Evolved High Speed Packet Access  
GSM/UMTS/EPS System Overview  
LTE Interoperability  
LTE Multiple Antenna Techniques  
LTE Radio Interface  
LTE Radio Planning  
LTE Signalling  
LTE/EPC System Overview  
OFDM/OFDMA Advanced  
PCC - Policy and Charging Control  
PS Domain Evolution Overview

EPC Signalling

LTE PHY Engineering

Mobile Broadband â€™ Technology and Business Implications

**On-Line Courses**

On-line: LTE/SAE System Overview

On-line: LTE Signalling

On-line: LTE Radio Interface

On-line: TCP/IP in the Mobile World

On-line: LTE-Advanced (LTE-A) Seminar

On-line: PCC-Policy and Charging Control

On-line: IMS and SIP Signalling with UMTS Access

**Business Training**

Mobile Broadband â€™ Technology and Business Implications