



Amazing technical knowledge and retention of facts. Thank you again.



Watch our course intro video.

# Rich Communication Services

## Course Description

This course focuses on the GSMA's Rich Communication Services global initiative and in so doing provides a comprehensive understanding of the methodologies by which these services will be controlled and delivered across an IMS network. This includes the real-time services of voice, video and messaging, in addition to reviewing how services such as geolocation, converged address book and Social Presence are implemented.

**Prerequisites:** IMS and PCC System Engineering.

**1** days  
(LiveOnsite,  
LiveOnline)

**6** hours  
learning  
(OnlineAnytime)

**6**

CPD Learning  
Credits



Level: 2  
(Intermediate)

**This course will contain the following sections:**

## **1. Introduction to RCS**

### **Topic areas covered include:**

- What is RCS?
- Drivers for RCS:
  - Challenges for RCS.
  - Areas of Consideration for Service Providers.
- Standardization.
- IMS Overview.
- RCS Architectural Requirements:
  - RCS Devices.
  - RCS Implementation Options.
- RCS Initial Procedures:
  - IMS Registration.
- RCS Services:
  - Standalone Messaging.
  - IP Voice Call.
  - IP Video Call.
  - Social Presence Information.

## **2. RCS Initial Procedures**

### **Topic areas covered include:**

- First Time Provisioning.
- Establishing IMS Connectivity.
- Client Provisioning:
  - OMA Device Management.
  - HTTP Based Configuration.
  - Triggers for Providing Configuration.
  - Secondary Devices.

## **RCS Initial Procedures (cont.)**

- IMS Registration.
- RCS User Capability Discovery:
  - User Capability Discovery – SIP OPTIONS.
  - User Capability Discovery – OMA Presence.

## **3. Real Time Communications**

### **Topic areas covered include:**

- Real Time Communications in RCS:
  - Basic Architectural Requirements.
- RCS IP Voice Service:
  - IMS Multimedia Telephony Service.
  - VoLTE Call Establishment (Mobile Originated).
  - VoLTE IMS Signalling Analysis.
  - Mobile Terminated Call.
- IP Video Calling Service.
- IP Video Call Procedures.
- Real time Transport Protocol:
  - RTP Header.
  - RTP Control Protocol.
  - RTP Data Rates.
- RCS Messaging:
  - Standalone Messaging.
  - Message Delivery Process.
  - 1 to 1 Chat1.
  - Group Chat.

**6**

**CPD Learning  
Credits**

**ITP**

**ITP accredited  
course**



**LiveOnsite, LiveOnline,  
OnlineAnytime**

## 4. Enhancing RCS Services

### Topic areas covered include:

- File Transfer:
  - Audio Messaging.
- Content Share:
  - Phase 1 Video Sharing (Ongoing CS Call).
  - Phase 2 Video Sharing (Outside of Call).
- Geolocation Services:
  - Geolocation Push Service.
  - Geolocation Pull Service.
- OMA Converged Address Book:
  - CAB Architecture.
  - CAB Procedures.



## 5. Social Presence

### Topic areas covered include:

- Social Presence Information:
  - Architectural Requirements.
  - Social Presence Protocols.
- Distributing Social Presence Information:
  - Subscribing to a Presentity's Presence Information.
  - Resource List Servers.
  - Watcher Information.
  - Publishing Presence Information.
  - Presence Data Model.
  - Presence Information Processing.
  - Notification.
- Minimizing Social Presence Signalling.



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