

# Training Courses– HL7-V2.X

## Course Aims

This course is for HL7 programmers, interface developers and dedicated Implementers and is designed to provide the skills for the analysis testing, problem tracking and activation of phases of an HL7 project. Attendees will learn HL7 design, trigger concepts, message formatting rules, data types, enhanced acknowledgement rules, identifiers, and table translation issues. Course work includes hands on exercises.

On completion of this course, attendees will have gained a deep understanding of HL7 messaging processes and practices, with the ability to effectively read, understand, analyse, design, develop, market and test HL7 messages.

## Course Structure

- Session 1 – Healthcare Messaging Standards
- Session 2 – Concepts and Principles
- Session 3 - 7 – Building Messages and Segments
- Session 8,9 – HL7 Building Blocks (Data Types)

## Session 1 – Healthcare Messaging Standards – 90 Mins

### Objective

This session will give an understanding of why messaging is used in healthcare and the goals that are achieved. The session will conclude with a view of the scope of HL7 and the concepts and Principles used in messaging.

- Hospital Workflow
- Why HL7 - Purpose & Scope
- Development of HL7
- HL7 Messaging system
- Understanding HL7 structure
- HL7 Concepts
- Encoding Characters

## Sessions 2 – Concepts and Principles – 60 Mins

### Objective

This session gives an understanding of what HL7 is and its concepts. It introduces messaging types and trigger events and then goes into the building of HL7 messages and the elements involved in the construction. It goes into detail of the structure and the roles of each message component.

- Trigger Events
- Message Types
- Segments/Structures
  - ADT^A04 – Patient Creation and Update
    - MSH

## Session 3 - 7 – Building Messages and Segments – 240 Mins

### Objective

In this session details of messages their segments (down to the field level) will be fully discussed. Most important messages and segments shall be covered.

- Session – 3
  - Segments/Structures - Patient Creation and Update
    - ADT^A04
- Session – 4
  - Segments/Structures
    - SIU^S12 - Appointment Creation and Update
    - DFT^P03 – Charge related Message Types
- Session – 5,6,7 – 120 – 150 Mins
  - Segments/Structures
    - ORM^O01 – Order Messages
    - ORU^R01 – Result Messages
    - MDM - Document Messages
    - QRY – Query Messages
    - ACK – Acknowledgement Messages

## Session 8,9 – HL7 Building Blocks(Data Types) – 120 Mins

### Objective

This session discusses in detail concepts of data types and all-important data types with examples.

- Data Types 1 (Alphanumeric/numeric/identifiers)
- Data Types 2 (Demographic/coded)
- Data Types 3 (Date-Time/miscellaneous)