# **IT Specialist - Software Development**

The IT Specialist - Software Development course is a solid introduction for those looking to understand programming concepts and practices better. The course focuses mainly on C# and SQL.

# IS THIS FOR YOU?

This course is for aspiring software developers who wish to design, build, and maintain software applications.

# **ABOUT THE COURSE**

The course teaches core programming concepts, software development principles, object-oriented programming, web application programming, and databases topics.

# **DOMAIN 1 - CORE PROGRAMMING CONCEPTS**

Computer storage and data types, algorithms and flowcharts, error handling, and functional programming patterns.

## DOMAIN 2 - SOFTWARE DEVELOPMENT PRINCIPLES

SDLC management, interpreting application specifications, coding with algorithms and data structures, version control systems, and secure coding concepts.

## **DOMAIN 3 - OBJECT-ORIENTED PROGRAMMING**

Classes, inheritance, polymorphism.

## **DOMAIN 4 - WEB APPLICATIONS**

Construct and analyse web applications, configure web hosting, configure web services, architectural patterns.

#### **DOMAIN 5 - DATABASES**

Design and normalise databases, SQL queries, manage transactions, database access methods, and NoSQL databases.

# **AIMS AND OBJECTIVES**

The course focuses on introducing C# and SQL and maps to the objectives of the IT Specialist Software Development Fundamentals exam.

# **PRE-REQUISITES**

This course is suitable for all but ideal for those with some introductory programming knowledge.

# **CAREER PATH**

In today's thriving software development industry, the opportunities to progress your career are numerous. With continued learning and development, you could work toward a Senior Developer role.

# **BENEFITS**

- Access to our LiveTutor service to help answer any content or learning queries you may have on a 24/7 basis
- The flexibility of a self-study course designed to enable you to learn at your own pace
- The opportunity to gain the widely recognised Pitman Training certificate.



# **CPD POINTS: 40** (Awarded CPD points upon successful completion)

**COURSE DURATION:** Approx. 40 hours (Actual duration will vary from individual to individual based on prior skills and application.)

To find out more about this or any of our courses, speak to one of our course advisors.



Building careers for 180 years.

course outline