

## Purpose Statement

# SEG Awards Level 5 Diploma in Software Engineering with Artificial Intelligence - 610/4138/5

## Overview

The SEG Level 5 Diploma in Software Engineering with Artificial Intelligence aims to develop competence as a software developer. It is designed to provide an education that will develop knowledge and understanding of relevant theories and principles together with technical skills and capabilities associated with the practice of the discipline.

Learners will learn to plan, design, program, manage and test software applications and develop an understanding of the software design process. This will support development throughout a learners career. The aim of any programme of study in software engineering should be to develop expertise in software development.

The key areas covered include:

- Introduction to Artificial Intelligence
- Web Application Development
- Software Project Management
- Object-Oriented Design and Development
- Machine Learning Algorithms
- Software Project

The knowledge and skills gained will prepare learners to progress onto higher programmes of study, and related qualifications, in Computing and Information Technology.

## Who is this qualification for?

The SEG Awards Level 5 Diploma in Software Engineering with Artificial Intelligence is designed for learners, **16 years of age and over**, who are looking to develop competence as a software developer. It is designed to provide an education that will develop knowledge and understanding of relevant theories and principles together with technical skills and capabilities associated with the practice of the discipline.

There are no entry requirements for this qualification. However, learners should be working to at **least** Level 3.

## **Purpose Statement**

### **What does the qualification cover?**

Upon successful completion of the SEG Awards Level 5 Diploma in Software Engineering with Artificial Intelligence, learners will be able to:

- Develop knowledge of some of the technologies and processes used in the modern software development
- Demonstrate an awareness of modern software development methodologies and their role in software development
- Analyse client requirements to develop and test software solutions based on client requirements
- Program object-oriented applications for a web-based system which uses a database system
- Work effectively in a team environment
- Communicate effectively in written and oral form

### **What could this qualification lead to?**

Learners who achieve this qualification could progress onto further Level 5 and Level 6 qualifications in IT, Computing and Software. Learners could also progress into employment.

Centres should be aware that Reasonable Adjustments which may be permitted for assessment may in some instances limit a learner's progression into the sector. Centres must, therefore, inform learners of any limits their learning / physical difficulty may impose on future progression.

## **Further Information**

Further information on this qualification can be found on the Skills and Education Group Awards website.

[Skills and Education Group Awards](#)