

Award No: **G8KA 49**

Level: **SCQF Level 9**

Award Title: **Professional Development Award in Systems Engineering at SCQF<sup>1</sup> Level 9**

## **Introduction to the Award**

This Professional Development Award (PDA) is designed to incorporate the knowledge and understanding required by popular vendor\* awards into SQA's Higher National Computing framework.

The units, which make up this PDA in Systems Engineering are contained in the HN Computer Networking framework and can assist in preparation for vendor exams by using vendor courseware. This PDA covers the knowledge and understanding associated with the Microsoft Certified System Engineer (MCSE).

World wide, vendor qualifications are increasingly popular with both candidates and employers across the computing industry sectors and all organisations employing IT specialist staff.

Embedding these PDAs into the HN frameworks allows candidates to work flexibly towards a Higher National qualification through short courses or part time study.

## **Target Audience**

As this award covers the knowledge and understanding associated with the MCSE qualification it will be attractive to candidates who are looking for employment within the technical and network support areas. It would also be suitable for those wishing to prepare for career advancement to a senior position in their organisation.

Candidates who complete this award may also want to use this PDA to progress to further study in Computing or Networking, eg a Higher National Diploma.

Successful completion of this PDA would help prepare candidates for the Microsoft Certified Systems Engineer (MCSE) examinations and would offer the opportunity to proceed to other levels of Microsoft certification.

\*Vendor Awards are those Awards designed and certificated by a product manufacturer or trade alliance organisation.

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<sup>1</sup> SCQF (Scottish Credit and Qualifications Framework) helps people to understand and compare different qualifications in Scotland. (visit the website [www.scqf.org.uk](http://www.scqf.org.uk) for more information)

## Content and Structure of the award

On successful completion of the Award, candidates will receive the Professional Development Award Diploma, in addition to the four separate units listed below, endorsed on their Scottish Qualifications Certificate (SQC).

In this seven credit award, candidates are required to take all **three** mandatory units and **one** optional unit.

UNIT TITLE (MANDATORY UNITS)	CODE	CREDIT VALUE	*SCQF LEVEL
Network Infrastructure 2: Implementation and Management	DG00 35	2	8
Directory Services Infrastructure	DG01 35	2	8
Network Design: Security	DG0E 36	1	9

UNIT TITLE (OPTIONAL UNITS)	CODE	CREDIT VALUE	SCQF LEVEL
Network Security: Implementation and Administration	DG08 35	2	8
Network Design: Directory Services and Network Infrastructure	DG0D 36	2	9
Mail Server Administration	DG07 35	2	8
Database Server Administration	DG0F 35	2	8
Database Design and Implementation	DG0G 35	2	8
Security Concepts	DG02 34	2	7

\*The Scottish Credit & Qualifications Framework (SCQF) is a way of helping people understand and compare Scottish Qualifications, by giving them credit points which shows how much learning has been achieved and a level on a scale of 12, to show how demanding the learning is. Details can be found at [www.scqf.org.uk](http://www.scqf.org.uk)

At the end of the award candidates will be able to:

- Plan implement and maintain a network infrastructure, routing and remote access, server availability, network security
- Plan and implement server roles and server security, a directory services infrastructure, user, computer and group strategies, group policy
- Manage and maintain a directory services infrastructure, group policy
- Create the conceptual design for network infrastructure security
- Create the logical design for network infrastructure security
- Create the physical design for network infrastructure security, client infrastructure security
- Design an access control strategy for data

## Centre Contact details