

Next Generation Higher National Unit Specification

Agile Project Management (SCQF level 8)

Unit code: J6C9 48
SCQF level: 8 (16 SCQF credit points)
Valid from: session 2023–24

Prototype unit specification for use in pilot delivery only (version 1.0) September 2023

This unit specification provides detailed information about the unit to ensure consistent and transparent assessment year on year.

This unit specification is for teachers and lecturers and contains all the mandatory information required to deliver and assess the unit.

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Unit purpose

This specialist unit delivers knowledge on the tools and techniques used in agile project management. It is designed for a wide range of programmes, particularly for learners with an interest in software development.

Learners should have well-developed digital, literacy and numeracy skills before starting this unit. Previous project experience is required, preferably on complex and/or large projects.

Learners develop an understanding of agile project management tools and techniques, and gain the confidence to apply these skills in a wide range of vocational contexts.

You should introduce learners to agile project management software to enable them to apply agile methods in a project. You should also cover the limitations and criticisms of agile techniques in this unit.

On completion of the unit, learners have knowledge and skills in using a range of agile tools and techniques to improve workplace productivity. They can progress to more specialist Higher National units where they have opportunities to apply these skills.

Unit outcomes

Learners who complete this unit can:

- 1 explain the philosophy of agile project management
- 2 explain key principles, values and methods of agile management
- 3 apply agile methods in practice using an agile software
- 4 assess the limitations and criticisms of agile techniques

Evidence requirements

Learners must provide product evidence.

Evidence must demonstrate that learners can apply agile techniques to at least one project using appropriate software. It must demonstrate that they understand agile philosophy, principles, values, and methods. Additionally, learners must evaluate the limitations of agile approaches in the context of their project.

Evidence can be produced over an extended period of time in lightly controlled conditions and must be authenticated.

The standard of evidence should be consistent with the SCQF level of this unit.

You should use appropriate level descriptors when making judgements about the evidence.

Knowledge and skills

The following table shows the knowledge and skills covered by the unit outcomes:

Knowledge	Skills
<p>Learners should understand:</p> <ul style="list-style-type: none">◆ the history of project management◆ traditional project management methods◆ agile philosophy including the agile manifesto and agile values◆ responding to change◆ agile principles◆ agile methods◆ scrum◆ Kanban◆ extreme programming◆ lean development◆ agile software◆ process optimisation◆ system testing◆ agile techniques◆ agile testing◆ continuous integration◆ backlog◆ acceptance test-driven development (ATDD)◆ agile management◆ the limitations of agile techniques◆ the criticisms of agile techniques	<p>Learners can:</p> <ul style="list-style-type: none">◆ use agile project management software◆ apply agile methods in project management◆ implement agile techniques in a project◆ test agile methods◆ communicate and collaborate in a project◆ carry out evaluation and monitoring

Meta-skills

Throughout the unit, learners develop meta-skills to enhance their employability in the data science sector.

Self-management

This meta-skill includes:

- ◆ focusing: sorting, attention, filtering
- ◆ integrity: ethics
- ◆ adapting: adaptability, self-learning, resilience
- ◆ initiative: independent thinking, decision making

Social intelligence

This meta-skill includes:

- ◆ communicating: receiving information, listening
- ◆ feeling: social conscience
- ◆ collaborating: teamworking and collaboration
- ◆ leading: influencing, change catalyst

Innovation

This meta-skill includes:

- ◆ curiosity: information sourcing, problem recognition
- ◆ creativity: idea generation, visualising
- ◆ sense-making: synthesis, opportunity recognition, analysis
- ◆ critical thinking: deconstruction, logical thinking, judgement, computational thinking

Literacies

Throughout this unit, learners have opportunities to develop their literacy skills.

Communication

Learners develop communication skills by participating in discussions, collaborating with their peers and presenting their learning.

Digital

Learners develop digital literacy through all the knowledge and skills, including using agile software to apply agile methods such as Kanban in practice.

Delivery of unit

We suggest the following distribution of time:

Outcome 1 — Explain the philosophy of agile project management
(15 hours)

Outcome 2 — Explain key principles, values and methods of agile project management
(25 hours)

Outcome 3 — Apply agile methods in practice using an agile software
(30 hours)

Outcome 4 — Assess the limitations and criticisms of agile techniques
(10 hours)

Learners with extensive project management experience can advance quickly through the unit. For example, learners with experience of leading large and complex projects may already have some of the required knowledge and skills, and may not require additional learning and teaching. They may have some (or all) of the required evidence (see 'Evidence requirements' section).

Learners require access to a digital device, such as a laptop, to build their knowledge of agile project management software and implement agile methods in practice.

Additional guidance

The guidance in this section is not mandatory.

The focus of the unit is to provide a detailed overview of agile philosophy and how agile values, principles and methods are applied in practice. For example, the topic on agile philosophy should cover the creation of the term 'agile philosophy', a background to the agile manifesto, and a summary of key developments in agile since 2001.

It is important that learners can explain the 4 core values and 12 principles of the agile philosophy, which are of critical importance when managing and delivering projects in an agile manner (not only in the software development industry).

In terms of agile methods, learners should be able to describe key methodologies including Scrum, Kanban, extreme programming (XP) and lean development, and assess the advantages and disadvantages of applying each method in practice.

You should introduce learners to an agile project management software and give them the opportunity to use software features such as Kanban and Scrum when delivering a project. You could provide a project example, such as designing a new product and/or service or rolling out a new business system in an organisation. Learners should collect product evidence that demonstrates an understanding of how features such as Kanban and Scrum can be applied in the delivery of a project.

One approach to assessment is for learners to create and maintain digital portfolios of evidence. These could contain:

- ◆ word processed document(s)
- ◆ presentation(s)
- ◆ computer programme(s)

Learners can include other types of digital media, such as video and audio. They should include at least one example of each digital media in their portfolios, but they should create a number of different examples. Learners can add evidence as they produce it over the life of the unit.

An alternative approach to assessment could involve learners creating and maintaining a blog to record their learning activities throughout this unit. The blog should include all knowledge and skills, and meet all the evidence requirements.

Authentication is required when the evidence is produced under lightly controlled conditions.

Equality and inclusion

This unit is designed to be as fair and as accessible as possible with no unnecessary barriers to learning or assessment.

You should take into account the needs of individual learners when planning learning experiences, selecting assessment methods or considering alternative evidence.

Guidance on assessment arrangements for disabled learners and/or those with additional support needs is available on the [assessment arrangements web page](#).

Information for learners

Agile Project Management (SCQF level 8)

This information explains:

- ◆ what the unit is about
- ◆ what you should know or be able to do before you start
- ◆ what you need to do during the unit
- ◆ opportunities for further learning and employment

Unit information

This specialist unit is designed to improve your confidence in using agile techniques in a variety of different projects.

You should have well-developed digital, literacy and numeracy skills before starting this unit. Previous project experience is required, preferably on complex and/or large projects.

During this unit you develop your knowledge of agile philosophy, values, principles, and methods. You use several application packages, such as word processing, presentation and agile software. You also learn how to use agile project management software to manage projects and develop practical knowledge of agile methods including Kanban and Scrum. For example, you might use agile software to deliver a specific project set by your lecturer and, following completion of the project, present your product evidence to them and your peers.

Although this unit is mostly practical, theory is covered to increase your understanding.

On completion, you should be able to:

- 1 explain the philosophy of agile project management
- 2 explain key principles, values and methods of agile management
- 3 apply agile methods in practice using an agile software
- 4 assess the limitations and criticisms of agile techniques

Assessment can take a number of forms. For example, you might be asked to maintain a portfolio of your work, where you would keep your documents, presentations and programmes. Alternatively, you may need to carry out practical assignments.

As this unit provides specialist knowledge and skills in agile project management, you can progress to a number of more advanced units, such as those specialising in agile coaching and lean development.

The unit covers a wide range of meta-skills and literacies. The meta-skills you develop cover self-management, social intelligence and innovation. For example, you improve your innovation skills by using various agile methods to improve the delivery and efficiency of projects. You also develop your communication and digital skills throughout this unit, particularly your digital literacy.

Administrative information

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Superclass: AG

History of changes

Version	Description of change	Date

Note: please check [SQA's website](#) to ensure you are using the most up-to-date version of this document.