



## National Unit Specification

### General information

**Unit title:** Esports: Game Performance (SCQF level 6)

**Unit code:** J744 46

**Superclass:** CC

**Publication date:** January 2023

**Source:** Scottish Qualifications Authority

**Version:** 01

### Unit purpose

The purpose of this unit is to develop learners' knowledge of PC gaming hardware and software and improve their game performance. Previous experience of Personal Computer (PC) gaming is desirable but not essential.

This unit explores the technical aspects of PC gaming and develops learners' gaming skills. The technical aspects of the unit examine the impact of hardware components on gameplay (such as framerates and latency). Learners will participate in competitive computer games and evaluate their performance. Transferable skills will be developed in the unit, such as numeracy, problem solving and digital skills.

On completion of this unit, learners could progress to further study within computer games design and development.

### Outcomes

On successful completion of the unit the learner will be able to:

1. Explain the technical aspects of PC configuration for esports gaming.
2. Explain the performance strategies used in esports.
3. Evaluate performance in an esports team.

### Credit points and level

1 National Unit credit at Scottish Credit and Qualifications Framework (SCQF) level 6: (6 SCQF credit points at SCQF level 6).

## **National Unit Specification: General information (continued)**

**Unit title:** Esports: Game Performance (SCQF level 6)

### **Recommended entry to the unit**

Entry is at the discretion of the centre. Previous experience of PC gaming is assumed but is not essential.

### **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the support notes for this unit specification.

There is no automatic certification of Core Skills or Core Skill components in this unit.

### **Context for delivery**

If this unit is delivered as part of a group award, it is recommended that it should be taught and assessed within the subject area of the group award to which it contributes.

The target cohort is school and college learners with an interest in competitive gaming or the wider esports industry.

The unit may also be of interest to learners with an interest in coaching, performance and strategy, team management and computing.

This unit is the third, and final, unit in a series of units relating to esports game performance. The unit is a mandatory component within the National Progression Award in Esports at SCQF level 6.

The Assessment Support Pack (ASP) for this unit provides assessment and marking guidelines that exemplify the national standard for achievement. It is a valid, reliable and practicable assessment. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard. A list of existing ASPs is available to download from SQA's website (<http://www.sqa.org.uk/sqa/46233.2769.html>).

### **Equality and inclusion**

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

# National Unit Specification: Statement of standards

## Unit title: Esports: Game Performance (SCQF level 6)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

### Outcome 1

Explain the technical aspects of PC configuration for esports gaming.

#### Performance criteria

- (a) Describe gaming terminology used within esports.
- (b) Describe measures of speed, time and performance.
- (c) Explain the impact of hardware, including Central Processing Unit (CPU), Graphics Processing Unit (GPU) and memory, on game performance.
- (d) Compare hardware builds used in esports.
- (e) Describe streaming platforms used within esports.
- (f) Describe streaming software used within esports.
- (g) Explain game settings for competitive gaming.
- (h) Explain how framerates and latency impact game performance.
- (i) Describe hardware and software needed to stream games.
- (j) Explain operating system configuration for gaming and streaming.

### Outcome 2

Explain the performance strategies used in esports.

#### Performance criteria

- (a) Explain the characteristics of different game genres in esports.
- (b) Explain the scoring systems used by esports titles.
- (c) Explain the in-game roles within esports teams.
- (d) Explain the importance of teamwork and team dynamics in an esports team.
- (e) Explain the qualities and skills of an effective esports team player.
- (f) Explain the performance strategies used by professional esports players and teams.
- (g) Explain the importance of sportsmanship and gaming etiquette in esports.

### Outcome 3

Evaluate performance in an esports team.

#### Performance criteria

- (a) Agree in-game roles for each player.
- (b) Select team strategy for game.
- (c) Participate in competitive gameplay in an esports team
- (d) Implement team strategy in an esports team game.
- (e) Demonstrate safe gameplay, sportsmanship and gaming etiquette.
- (f) Evaluate personal performance in an esports team game.
- (g) Evaluate team performance in an esports team game.
- (h) Evaluate game analytics.
- (i) Identify strengths and areas of improvement for self and team.

## National Unit Specification: Statement of standards (continued)

**Unit title:** Esports: Game Performance (SCQF level 6)

### Evidence requirements for this unit

Evidence is required to demonstrate that learners have achieved all outcomes and performance criteria.

Learner must provide **knowledge** and **performance** evidence.

The knowledge evidence relates to outcome 1 and outcome 2. All performance criteria must be evidenced. Minimal evidence may be used to infer competence. For outcome 1, detailed technical descriptions and explanations are required using the correct terminology and units of measurement. At least two hardware builds must be compared (performance criterion (d)) in terms of their suitability for competitive esports gameplay. For outcome 2, relatively sophisticated performance strategies are required (performance criterion (f)), based on the strategies adopted by professional players. Knowledge evidence may be produced over the life of the unit, in lightly controlled conditions, with access to reference materials.

Knowledge evidence may be sampled when testing is used. Testing must be carried out in timed, supervised conditions without access to reference materials. The sampling frame must always include questions from both outcomes (but not every performance criterion). Given the nature of the performance criteria (which require descriptions and explanations), constructed response (not selected response) testing should be used.

The performance evidence relates to outcome 3. The performance evidence will comprise: self-evaluation of the learner's performance (performance criterion (f)); learner evaluation of the team's performance (performance criterion (g)); game analytics (performance criterion (h)); identification of strengths and areas of improvement for self and team (performance criterion (i)); and observation of the team's performance in an esports competition (performance criteria a–e). Learners must be observed satisfying performance criteria (c), (d) and (e); performance criteria (a) and (b) will be inferred from this. The competition must be formal in terms of rules, conditions, gameplay and scoring. There is no requirement that the learner's team wins the game, however each learner must actively participate and adhere to agreed strategy on an individual and team basis. It is unlikely that the relevant performance criteria will be satisfied by any team that performs poorly although it is possible for individual learners to satisfy the criteria without the team doing so.

The performance evidence must be produced in controlled conditions in terms of location, timing and supervision, except performance criteria (f), (g), (h) and (i) which may be produced in lightly controlled conditions (outwith the competition).

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

The SCQF level of this unit provides additional context relating to the quality of evidence.



## National Unit Support Notes

**Unit title:** Esports: Game Performance (SCQF level 6)

Unit support notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 40 hours.

### Guidance on the content and context for this unit

The purpose of this specialist unit is to develop learners' knowledge of PC gaming hardware and software, and improve their game performance. Previous experience of PC gaming is assumed but is not essential.

This unit explores the technical aspects of PC gaming, and develops learners' gaming skills. The technical aspects of the unit examine the impact of hardware components on gameplay (such as framerates and latency). Learners will be able to explain different performance strategies used in esports game genres. Learners will participate in competitive computer games and evaluate their performance. Transferable skills will be developed in the unit, such as digital skills, problem solving and team working.

The unit will cover the following knowledge and skills.

Knowledge	Skills
<ul style="list-style-type: none"><li>◆ Measures of time, speed and performance.</li><li>◆ Gaming terminology.</li><li>◆ PC gaming hardware.</li><li>◆ Hardware configuration for competitive gaming.</li><li>◆ Impact of hardware components on game performance, particularly framerates and latency.</li><li>◆ Respective roles played by CPU and GPU during gaming.</li><li>◆ Operating system configuration for competitive gaming.</li><li>◆ PC gaming builds.</li><li>◆ Game genres.</li><li>◆ Game settings.</li><li>◆ Game customisations such as key mapping.</li><li>◆ Scoring systems.</li><li>◆ Importance of teamplay and team dynamics.</li></ul>	<ul style="list-style-type: none"><li>◆ Digital skills.</li><li>◆ Numeracy skills.</li><li>◆ Visual-spatial skills.</li><li>◆ Reading skills.</li><li>◆ Problem solving skills.</li><li>◆ Team working skills.</li><li>◆ Skills in using game components.</li><li>◆ Configuring hardware.</li><li>◆ Customising game software.</li><li>◆ Configuring operating system for gaming.</li><li>◆ Gameplay skills.</li><li>◆ Evaluation skills including team and self-evaluation.</li></ul>

Knowledge	Skills
<ul style="list-style-type: none"> <li>◆ Roles within a team.</li> <li>◆ Game strategies for different game genres.</li> <li>◆ Game etiquette.</li> <li>◆ Evaluation of performance and game analytics.</li> </ul>	

## Guidance on approaches to delivery of this unit

The following distribution of time is suggested.

Outcome 1: 10 hours.

Outcome 2: 10 hours.

Outcome 3: 20 hours.

Tasks should be designed to take a learner-centred, participative and practical approach. At this level, learners would be expected to work with current popular esports titles.

While the game learners are going to play would already be installed in the centre it is a good opportunity for discussion within to find out what games are played by learners.

For example, some of the popular esports titles in the table below are free to play:

Game	Age rating	Team size	Game genre	Download from
Rocket League	PEGI 3	3v3	Sports	Game Store
League of Legends	PEGI 12	5v5	Multiplayer Online Battle Arena (MOBA)	Direct from site
Valorant	PEGI 16	5v5	First Person Shooter (FPS)	Game Store
Apex Legends	PEGI 16	2v2 / 3v3	FPS battle royale	Game Store
Fortnite	PEGI 12	2v2 / 3v3	FPS battle royale	Game Store

In order to download the games to play, a game store may be needed. Steam, Epic and Origin are examples of stores. User accounts will be required for the game store; it would be advisable to work with Information Technology (IT) to create separate esports-specific accounts for staff.

## Guidance on approaches to assessment of this unit

The following are suggestions only. There may be other methods that would be more suitable to learners and the type of learner assessment activities will vary depending on the resources available.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

## National Unit Support Notes (continued)

**Unit title:** Esports: Game Performance (SCQF level 6)

A traditional approach to assessment might involve the use of a test for knowledge evidence and a project for performance evidence. The test could comprise a constructed response test, comprising 10 questions, of learners' knowledge of outcome 1 and outcome 2. Sample questions could be:

*Describe the components of a typical gaming PC, explaining the impact of each component on competitive gameplay.*

*What is a GPU? Explain the role played by the GPU in rendering games.*

*What is meant by latency? Explain the impact of latency on competitive gameplay.*

*Explain the importance of teamplay and team dynamics in esports.*

*What is meant by 'sportspersonship' in the context of esports. Give ONE example of GOOD sportspersonship and ONE example of BAD sportspersonship.*

The project could require learners to compete in a formal esports competition against other teams. This would involve: identifying members, agreeing roles, selecting a strategy, and effectively competing in the competition. The project would also require learners to evaluate the performance of themselves and their team using, when appropriate, game analytics. The evidence requirements define the standards expected from learners and teams in this scenario. An observation checklist, completed by an assessor, would be required.

A more contemporary approach to assessment of knowledge might involve learners maintaining a portfolio of evidence. If this approach is adopted, every performance criterion must be evidenced (sampling of knowledge is not appropriate). The following are suggestions for presenting evidence; a mixture of evidence gathering tools could be used.

Using video recording software to gather **video evidence** of competitive gameplay which captures the performance criteria being demonstrated in practice.

Gather evidence of the performance criteria met through a **portfolio**: mixed evidence of performance clips, presentation of knowledge, analysis of gameplay through **slides, word documents, video recordings, vlogs, hand written notes, info graphs**, etcetera.

**Evidence of evaluation** could be presented as the student speaking over the top of their own gameplay (capturing gameplay in real time and allowing time to analyse and evaluate afterwards) or written notes which relate to video clips of gameplay.

## **National Unit Support Notes (continued)**

**Unit title:** Esports: Game Performance (SCQF level 6)

### **Opportunities for e-assessment**

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the evidence requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at [www.sqa.org.uk/e-assessment](http://www.sqa.org.uk/e-assessment).

### **Opportunities for developing Core and other essential skills**

This unit provides opportunities to develop Core Skills particularly Information and Communication Technology (ICT), Problem Solving and Working with Others at SCQF level 6.



## History of changes to unit

Version	Description of change	Date

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Unit template: June 2017

## General information for learners

### Unit title: Esports: Game Performance (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is designed to explore the technical aspects of PC gaming, and develop gaming skills. The technical aspects of the unit examine the impact of hardware components on gameplay (such as framerates and latency) and performance strategies used in esports game genres. Learners will participate in competitive games and evaluate their performance.

In outcome 1 you will learn about the technical aspects of configuring PCs for competitive gaming.

In outcome 2 you will learn about the different strategies that are used when playing different genres of games in esports.

In outcome 3 you will evaluate your performance as part of a team playing an esports game as well as evaluating the whole team performance.

The unit covers the following knowledge and skills.

Knowledge	Skills
<ul style="list-style-type: none"><li>◆ Measures of time, speed and performance.</li><li>◆ Gaming terminology.</li><li>◆ PC gaming hardware.</li><li>◆ Hardware configuration for competitive gaming.</li><li>◆ Impact of hardware components on game performance, particularly framerates and latency.</li><li>◆ Respective roles played by CPU and GPU during gaming.</li><li>◆ Operating system configuration for competitive gaming.</li><li>◆ PC gaming builds.</li><li>◆ Game genres.</li><li>◆ Game settings.</li><li>◆ Game customisations such as key mapping.</li><li>◆ Scoring systems.</li><li>◆ Importance of teamplay and team dynamics.</li><li>◆ Roles within a team.</li><li>◆ Game strategies for different game genres.</li><li>◆ Game etiquette.</li><li>◆ Evaluation of performance and game analytics.</li></ul>	<ul style="list-style-type: none"><li>◆ Digital skills.</li><li>◆ Numeracy skills.</li><li>◆ Visual-spatial skills.</li><li>◆ Reading skills.</li><li>◆ Problem solving skills.</li><li>◆ Team working skills.</li><li>◆ Skills in using game components.</li><li>◆ Configuring hardware.</li><li>◆ Customising game software.</li><li>◆ Configuring operating system for gaming.</li><li>◆ Gameplay skills.</li><li>◆ Evaluation skills including team and self-evaluation.</li></ul>

## **General information for learners (continued)**

**Unit title:** Esports: Game Performance (SCQF level 6)

You might be assessed through a test of your knowledge and a demonstration of your gaming and team-working skills by participating in a competitive computer game. Alternatively, in place of the test, you might be asked to maintain a portfolio of notes, video recordings of gameplay and other items.

You may wish to progress to further studies at SCQF level 7.