

# Next Generation Higher National Unit Specification

## Professional Practice and Skills (SCQF level 7)

**Unit code:** J6FE 47  
**SCQF level:** 7 (24 SCQF credit points)  
**Valid from:** session 2022–23

### **Prototype unit specification for use in pilot delivery only (version 1.0) August 2022**

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 unit provides learners with professional practice skills required to work on a farm or in a rural business, and gives them experience of using such skills in a working environment.

At SCQF level 7, the unit provides the learner with suitable knowledge and skills for progression to further study or employment in a wide range of agricultural industries.

## Unit outcomes

Learners who complete this unit can:

- 1 carry out a range of practical activities relevant to farm and rural businesses
- 2 develop meta-skills suitable for the workplace
- 3 develop academic and digital skills essential for ongoing learning and work
- 4 describe health and safety legislation, roles and responsibilities within a land-based business
- 5 participate in a work placement

## Evidence requirements

You should assess the unit through a project or portfolio of evidence that learners produce over all the learning outcomes. Learners can present their evidence in a variety of ways, including video recordings, checklists, oral recordings and in written work.

Learners can generate this evidence under unsupervised, open-book conditions.

### Outcome 1

Choose a minimum of five practical skills from each of A, B and C; and a minimum of two practical skills from each of sections D, E and F (totalling a minimum of 30 practical skills).

#### A. Mechanisation and farm maintenance

- ◆ Driving: tractors, trailers, all-terrain vehicles (ATVs), telehandlers
- ◆ Crop establishment: ploughing, rotavating, rolling
- ◆ Crop harvesting: forage harvester, combine
- ◆ Livestock: feed wagons, milking parlours
- ◆ GPS and other technology within tractors and machines
- ◆ Farm maintenance: fencing, concreting, basic plumbing (water troughs), chainsaw operation

#### B. Arable crops and grassland

- ◆ Crop protection: weeds (arable and grassland), growth stages, nutrient deficiencies, disease recognition
- ◆ Assessing crop quality: thousand grain weight (TGW, or mean values for seed size), screenings, germination capacity
- ◆ Identification: main grasses, clovers, forages
- ◆ Measuring grassland: plate meters, sward stick

### **C. Livestock**

- ◆ General handling: feeding, bedding, watering, weighing, body condition scoring (BCS), health checks and MOT's, gathering, transporting (on farm)
- ◆ Cattle: milking, clipping backs, foot trimming, disbudding, tagging, assisting with calving, castrating, vaccinating, dosing
- ◆ Pigs: teething, tailing, slap marking, assisting with farrowing, vaccinating, dosing
- ◆ Sheep: shearing, tailing and castrating, assisting with lambing, fostering lambs, vaccinating, dosing

### **D. Soils**

- ◆ Collecting a representative soil sample
- ◆ Assessing soil structure: soil pits and visual evaluation of soil structure (VESS), field sampling for analysis, pH testing, assessing texture, worm count and identification

### **E. Environment**

- ◆ Assessing farm activities and crop and livestock systems for potential environmental damage: erosion prevention, effluents, pesticide application
- ◆ Identifying habitat or environmental maintenance and improvement measures: tree-planting, hedgerow maintenance, ditch maintenance, buffer strips, wildlife crops, cover crops, ponds

### **F. Record keeping and business awareness**

- ◆ Keeping regulatory farm records: medicines, tagging, movements
- ◆ Understanding gross margins: variables, fixed costs

You must assess these practical skills according to national standards of competency, if appropriate, and in line with health and safety requirements.

## **Outcome 2**

Learners gather evidence to show that they have:

- ◆ carried out a self-assessment of their own meta-skills baseline
- ◆ created a plan for their own meta-skills development
- ◆ carried out activities to develop and demonstrate meta-skills
- ◆ used reflective practice to monitor and assess the meta-skills they have improved or developed

### **Meta-skills**

[Skills 4.0: a skills model to drive Scotland's future](#), in collaboration with the Centre for Work-based Learning in Scotland, outlines the three categories of self-management, social intelligence and innovation, each with four meta-skills and a number of sub-skills. We do not expect learners to develop or reference all of these and none is, in itself, mandatory.

There are many interrelationships and dependencies between these skills and; at SCQF level 7, the focus should be on holistic development within a vocational context.

Learners should reflect in depth on the meta-skills they are developing and the relationships between them, and include references to course projects, outputs and experiences that contribute to that development. It is the depth of reflection that is important, not the number of meta-skills referenced. You can find more information in the Educator Guide.

### **Outcome 3**

Learners focus on developing academic and digital skills.

- ◆ Academic skills: written communications, including researching for information, writing styles, referencing, and avoiding plagiarism
- ◆ Digital skills: IT skills, digital communication platforms and other professional digital technologies

Learners select one project from the mandatory units that incorporates both academic and digital skills for assessment. This can be the final written project for the work placement evaluation or any project from the mandatory units. Learners should use relevant software to present information in a professional manner, and incorporate photos and links to digital information. They can also choose to record a video and upload it to suitable social media platforms.

### **Outcome 4**

Learners identify and examine health and safety regulations and guidance for the agriculture sector, including risk assessments, and working with machines, livestock and hazardous substances. They should provide evidence of their knowledge in the portfolio of preparation for their work placement, including a risk assessment for their role. (Refer to outcome 5 for more information).

### **Outcome 5**

Learners produce a workplace learning plan, which must include all of the following:

- ◆ Organisational and business structure of the placement organisation.
- ◆ Explanation of the placement role and how this fits within the organisation and potential career pathways.
- ◆ A risk assessment of the activities to be carried out, and a description of the health and safety regulations to be aware of and complied with during the placement.
- ◆ A completed self-evaluation report for the work experience. The report must include technical analysis of one area of the business and justification of the findings and recommendations made, together with a self-evaluation on the learners' development of meta-skills (as detailed in outcome 2).
- ◆ Details of their participation in a personal development and/or career review meeting.

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For the purposes of this unit, the term 'work placement' is used in its widest sense and can include any activity that offers an experience of work. Evidence from the following sources are allowed to contribute to the work placement:

- ◆ Paid part-time employment during the learner's own time.
- ◆ A placement organised directly by the learner or with assistance from the centre.
- ◆ Voluntary work.

The work placement activity or activities used should be as flexible as possible. The activity, or activities (combined), should normally comprise a minimum of blocked time to allow learners to fully integrate within the business and be involved with a range of activities over time.

## Knowledge and skills

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

| Knowledge   | Skills  |
|---|---|
| <p><b>Outcome 1</b><br/>Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ the range of practical skills required at an operational level on farm</li> </ul>  | <p><b>Outcome 1</b><br/>Learners can:</p> <ul style="list-style-type: none"> <li>◆ carry out a number of practical skills within crop husbandry, livestock husbandry and mechanical operations to appropriate standards of competency</li> </ul>          |
| <p><b>Outcome 2</b><br/>Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ categories of self-management, social intelligence and innovation, and associated meta-skills, as described in <a href="#">Skills 4.0: a skills model to drive Scotland's future</a></li> <li>◆ the importance of developing meta-skills: employability, adaptability, effectiveness</li> <li>◆ specific meta-skills relevant to the vocational context, particularly the most relevant meta-skills in the self-management, social intelligence and innovation categories</li> <li>◆ approaches to developing meta-skills</li> <li>◆ self-awareness: analysing preferences, strengths and weaknesses, meta-skills self-assessment</li> <li>◆ goal setting and action planning</li> <li>◆ reflective practice: principles of reflective practice, and tools and approaches for effective reflective practice</li> </ul> | <p><b>Outcome 2</b><br/>Learners can:</p> <ul style="list-style-type: none"> <li>◆ plan a strategy for meta-skills development</li> <li>◆ implement and review plans for meta-skills development</li> <li>◆ assess own meta-skills development</li> </ul> |
| <p><b>Outcome 3</b><br/>Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ academic skills to support learning</li> <li>◆ digital skills for the workplace</li> </ul>   | <p><b>Outcome 3</b><br/>Learners can:</p> <ul style="list-style-type: none"> <li>◆ develop study skills to enhance learning</li> <li>◆ competently use appropriate software packages and digital technologies</li> </ul>                                  |

| Knowledge  | Skills  |
|--|---|
| <p><b>Outcome 4</b><br/>Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ health and safety legislation and responsibilities appropriate to an agricultural workplace</li> </ul>  | <p><b>Outcome 4</b><br/>Learners can:</p> <ul style="list-style-type: none"> <li>◆ identify and conform to health and safety legislation within a farm business</li> <li>◆ identify employers' and employees' responsibilities to health and safety</li> </ul>  |
| <p><b>Outcome 5</b><br/>Learners should understand:</p> <ul style="list-style-type: none"> <li>◆ how to apply professional and personal skills in a working environment</li> <li>◆ application of theory in a commercial enterprise</li> </ul> | <p><b>Outcome 5</b><br/>Learners can:</p> <ul style="list-style-type: none"> <li>◆ apply practical skills within a land-based industry</li> <li>◆ apply meta-skills in a working environment</li> <li>◆ evaluate an enterprise of the business on a technical basis</li> <li>◆ evaluate their personal development during a work placement</li> </ul> |



## Meta-skills

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

Where possible you should deliver and assess the unit holistically, in accordance with the integrated nature of agriculture, so that learners have the opportunity to gain and develop meta-skills throughout the course.

## Self-management

This meta-skill includes:

- ◆ focusing: ensuring skills and knowledge are appropriate to the work placement
- ◆ adapting: learning to be more flexible through teamwork, critical reflection and self-learning during the work placement
- ◆ initiative: demonstrating decision making, self-motivation and responsibility during learning, and in preparation for and during the work placement

## Social intelligence

This meta-skill includes:

- ◆ communicating: developing skills in giving and receiving information during practical skills activities
- ◆ collaborating and leading: building relationships while working together, taking the lead in team sessions, influencing and inspiring team members

## Innovation

This meta-skill includes:

- ◆ curiosity: observing and taking part in practical activities, recognising and explaining problems, working to generate ideas and solutions
- ◆ critical thinking and sense-making: developing holistic and logical thinking to understand and recognise problems and analyse potential solutions in a working environment

## **Literacies**

Learners develop core skills in the following literacies:

### **Numeracy**

Learners develop numeracy skills by:

- ◆ using data from the farm to evaluate a technical aspect of the business; exploring and manipulating the data in the report in which their IT skills are assessed

### **Communication**

Learners develop communication skills by:

- ◆ seeking constructive criticism on their written communication during study skills components and assessments
- ◆ discussing aspects of the unit with other learners; talking with team members during the practical skills activities and while on placement, where relationship building is particularly important

### **Digital**

Learners develop digital skills and computer literacy by:

- ◆ building on IT skills and mastering other digital technologies within the unit

## **Delivery of unit**

The unit is normally delivered alongside the Principles of Livestock Production at SCQF level 7 and Principles of Crop Production at SCQF level 7 units, and academic skills are incorporated in all of them. This allows learners to apply practical skills as they learn the theory, ideally as close to the seasonality of production cycles as possible.

## **Additional guidance**

The guidance in this section is not mandatory.

This unit is designed to be delivered in parallel with the other mandatory units to allow learners to integrate practical and academic skills with the theory-based teaching.

The practical skills should be suitable for each learner and, where possible, tailored to their aspirations for future employment and/or career.

While the teaching of practical skills complies with National Occupational Standards (NOS) where applicable, note that although the certificating of the skill through Lantra and other awarding bodies may be possible, it is not necessary to meet the competency for that skill. The competency is assessed during training, but is not necessarily certificated.

Work placement opportunities should be appropriate to the learner and the centre, and may take place on a block- or day-release basis, depending on what is more suitable. The work placement should be a new experience: it should not be on the learner's family farm or business, or one at which the learner is regularly employed. It may be possible to organise a student exchange to ensure all learners gain valuable experience at a new farm, and allow the family farms to be supported with labour.

## **Approaches to assessment**

You can assess outcomes 2, 4 and 5 through a written portfolio of approximately 1,500 words.

Outcome 3 can be incorporated within any written report in the mandatory units (including outcome 5 of this unit, in which they show academic skills relevant to successful learning).

Your assessment of learners' evidence should include appraising their:

- ◆ quality of research
- ◆ writing style
- ◆ referencing
- ◆ avoidance of plagiarism
- ◆ digital skills, including the learners' IT skills, use of digital communication platforms and other professional digital technologies

## **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:

[www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## Information for learners

### Professional Practice and Skills (SCQF level 7)

This section 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 unit gives you the knowledge and skills to allow you to:

- ◆ carry out some practical tasks on a farm to a safe and suitable level
- ◆ experience working on a farm or rural business
- ◆ develop skills to help you study and learn, be successful in the written assessments and progress to higher-level courses
- ◆ develop meta-skills

You study the unit in a practical setting, allowing you to become competent in a range of farm-related skills in livestock husbandry, crop husbandry and mechanical operations. You do not need any prior practice or experience before starting the unit. If you do have lots of practical experience, the unit offers opportunities for you to improve your skills and learn new ones.

You also carry out a work placement, allowing you to gain and improve practical and personal skills, and better understand the professional requirements of working in agriculture.

The unit offers considerable opportunities to develop a breadth of meta-skills, to reflect on your personal and professional progress in these, and to understand how this translates to your future employability. Specifically, you develop meta-skills within the categories of self-management, social intelligence and innovation through teamwork, practical activities, and in preparation for and during your work placement.

### Assessment

You are assessed using a variety of methods, including:

- ◆ being observed and checked against standards during practical activities
- ◆ providing a written reflection of a period of work on a farm from a personal development point of view
- ◆ producing a written evaluation of a technical part of that farm business
- ◆ presenting a risk assessment detailing your knowledge of the relevant health and safety legislation and workplace regulations in relation to your work placement

### **Future progression and employment**

During the unit you develop your study skills and gain competence in software packages and other digital technologies, which is useful for your studies and when you work on a farm. These skills give you confidence in your learning, and the ability to progress to a Higher National Diploma (HND) or degree-level course in agriculture or other related subject. Once you complete the Higher National Certificate (HNC), your skills and knowledge can lead to employment at the operational level on a farm as, for example, a stockperson, general farm worker or tractor operations worker.

# Administrative information

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**Superclass:** SK

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## History of changes

| Version | Description of change | Date |
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