



**Higher National Units and National Units**

**Qualification Verification Summary Report 2019**

# **Engineering Systems**

**Verification group: 395**

## **Introduction**

### **Higher National Units**

H2VY 34	Engineering Systems GU1
DW92 34	Engineering Practice GU1
F1YK 34	Renewable Energy Systems: Microgeneration Systems
F2G9 35	Farm Scale Renewable Energy
DV9R 34	Principles of Engineering Systems
DV9P 34	Engineering Measurement and Systems Monitoring
H0ET 33	Engineering: Practical Skills

### **National Unit**

F5DE 11	Engineering Project (SCQF level 5)
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### **Customised Award**

GN7C 04
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During this session, two visits took place to review HN awards and GU1 evidence for six centres was reviewed centrally. A single visit took place for a National Unit, and one centre offering a Customised Award was also visited.

In all cases the outcome decision was that of High Confidence.

Some good practice associated with course management was reported and some recommendations were made.

## **Category 2: Resources**

**Criterion 2.4: There must be evidence of initial and ongoing reviews of assessment environments; equipment; and reference, learning and assessment materials.**

Qualification verifiers were satisfied with the evidence provided by all centres for this criterion.

## **Category 3: Candidate support**

### **Criterion 3.2: Candidates' development needs and prior achievements (where appropriate) must be matched against the requirements of the award.**

Evidence reviewed at each of the four visits showed that centres deal effectively with accommodating candidate needs. An element of good practice was noted in respect of the effective use of a link from the electronic register system to candidate support plans.

### **Criterion 3.3: Candidates must have scheduled contact with their assessor to review their progress and to revise their assessment plans accordingly.**

Regular scheduled contact is programmed into both the Customised Award and the level 5 Engineering Project F5DE 11. The centres visited which deliver HN Units presented evidence indicating that candidate needs are satisfactory for this criterion.

## **Category 4: Internal assessment and verification**

### **Criterion 4.2: Internal assessment and verification procedures must be implemented to ensure standardisation of assessment.**

Again, for visiting verification and the centrally-verified graded units, qualification verifiers were satisfied that evidence reviewed showed that centres satisfied the requirements of this criterion.

Recommendations were made in respect of mapping candidates/units to help ensure that the selection of candidate evidence for internal verification (IV) includes evidence from all candidates undertaking the award. This can help provide a useful overview and avoid the risk of frequently-selected candidates feeling they are being targeted.

Consideration could also be given to introducing an interim IV stage for each assessment event for units which have more than one assessment.

### **Criterion 4.3: Assessment instruments and methods and their selection and use must be valid, reliable, practicable, equitable and fair.**

Again, for visiting verification and the centrally-verified graded units, qualification verifiers were satisfied that evidence reviewed showed that centres satisfied the requirements of this criterion.

A recommendation was made in respect of holistic assessments for HN Units — consider identifying which questions are associated with which outcome. This can aid the feedback process and facilitate re-sit arrangements.

A recommendation to review the layout of candidate logbooks used with DV9P 34 in order to provide clearer tracking of candidate achievement.

### **Criterion 4.4: Assessment evidence must be the candidate's own work, generated under SQA's required conditions.**

The review of Graded Unit 1 evidence was, as usual, undertaken centrally and it is accepted that assessment took place under the specified conditions.

For the visits, qualification verifiers were satisfied that centres met the required assessment conditions.

Good practice was noted at one centre at which discussions with candidates also help establish their knowledge and understanding of the material. This clearly supports the 'own work' identification.

**Criterion 4.6: Evidence of candidates' work must be accurately and consistently judged by assessors against SQA's requirements.**

Qualification verifiers accepted the evidence from all centres for this criterion.

Good practice was identified in the use of group-marking exercises to help standardisation in marking.

A recommendation was made for one centre to review the way markers consider the penalties applied to errors in candidates' use of engineering and scientific units.

**Criterion 4.7: Candidate evidence must be retained in line with SQA requirements.**

In all cases centres fully complied with the requirements of this criterion.

**Criterion 4.9: Feedback from qualification verifiers must be disseminated to staff and used to inform assessment practice.**

In all cases centres fully complied with the requirements of this criterion.

## **Areas of good practice reported by qualification verifiers**

The following good practice was reported during session 2018–19:

- ◆ 3.2 The use of the electronic register link to candidate support plans is classified as good practice.
- ◆ 4.2 The effective use of the course management and operation software application demonstrates good practice. This is evident across all criteria verified.
- ◆ 4.3 The inclusion of oral questioning to establish candidate understanding.
- ◆ 4.6 The centre's use of group-marking exercises to establish a standardised approach to marking.

## **Specific areas for development**

The following areas for development were reported during session 2018–19:

- ◆ For the energy units reviewed, to reflect the 'state of play' in the sector, current target figures should be incorporated into learning material and assessments rather than relying solely on historical data.
- ◆ Where candidate logbooks are used, the layout of these should clearly identify how evidence for each outcome is presented.
- ◆ Consideration should be given to the selection of candidate evidence for IV. Arrangements could be made to ensure that every candidate should have his or her work sampled at least once across the curriculum.