



**Higher National Qualifications
Internal Assessment Report 2015
Electronics and Instrumentation**

The purpose of this report is to provide feedback to centres on verification in Higher National Qualifications in this subject.

Higher National Units

General comments

All centres visited were experienced with delivering the Electronics and Instrumentation Units and were able to demonstrate a clear understanding of the requirements of the national standards. In part this is due to the maturity of the qualifications, the experience of the delivering centres, and communication through the relevant Qualification Support Team (QST). Last session, as colleges merged, revised quality procedures were implemented and staff were adjusting to these. This session, centres intimated that any problems identified during external verification were largely due to implementing new quality procedures across different sites, in conjunction with changes to staffing and resources due to mergers.

Unit specifications, instruments of assessment and exemplification materials

Centres, in the main, used SQA assessment exemplars or modified assessment exemplars to suit resources. Sometimes these previously modified assessments had to be revisited when delivery changed from one campus to another.

Evidence Requirements

All centres visited demonstrated a clear understanding of the evidence requirements as given in the Unit specifications.

Administration of assessments

All centres have sufficient internal verification procedures in place, newly revised to take account of college mergers. Internal documentation sampled ranged from internal verifiers placing a tick on a form with no detail through to extensive documented comments and discussions between assessors and internal verifiers.

Similar to last session, it was sometimes difficult to audit trail candidates' reworked assessments and any feedback from assessors. Where candidates are permitted a rework of an assessment, the documentation should be clear as to what is required and when it is required. The subsequent date of completion should also be documented. In some instances this session, where the assessment was in the form of a report it was difficult to audit trail the required evidence within a report. Centres should provide detailed checklists for assessors in order that evidence can be accurately identified within a report.

General feedback

In addition to the points listed above, similar to previous sessions, there were variations in the amount of feedback given to candidates. Some centres have specific candidate feedback sections written into assessment material but there were differences in the amount of specific feedback offered by assessors. Other

centres provide feedback orally, which can be difficult to audit especially when candidates have to rework evidence. Comprehensive checklists should be used by assessors for practical activities and reports. This will add clarity to both internal and external verification. Such checklists may prove useful to candidates in order that they are clear with regard to the assessment requirements.

Areas of good practice

With college mergers resulting in revised quality systems being implemented across different sites, some centres have developed central share-point facilities for all assessment, verification and registration purposes to ensure consistency and continuity of standards across different sites. Some centres are making better use of this resource than others.

Some centres make effective use of the SQA prior verification process when they wish to modify assessments.

Specific areas for improvement

This session, the following areas for improvement were noted:

- ◆ As merged colleges now deliver awards across various sites, active communication of procedures and outcomes relating to quality has become extremely important.
- ◆ The use of quality share-point facilities is to be encouraged. There were instances this session where such facilities were available to staff but not actively used.
- ◆ It was also sometimes difficult to audit trail candidates' reworked assessments. Where candidates are permitted a rework of an assessment, the documentation should be clear as to what is required and when it is required. The subsequent completion should also be documented.
- ◆ Comprehensive checklists should be used by assessors for practical activities and reports. This will add clarity to both internal and external verification. Such checklists may also clarify assessment requirements for candidates.
- ◆ Some centres are still not stating control conditions or pass conditions on assessments. It is essential that control conditions and pass requirements are clearly stated.
- ◆ The amount of feedback given to candidates was minimal in some instances.

Higher National Graded Units

DG2T 34 Electronics: Graded Unit 1

F013 34 Measurement and Control Engineering: Graded Unit 1

DG2V 35 Electronics: Graded Unit 2

General comments

All centres visited, or subject to central verification, were experienced with delivering the above Units and were able to demonstrate a clear understanding of the requirements of the national standards. The majority of centres used Graded Unit 1 papers prepared by the relevant QST and subject to prior verification by SQA. However, the pass requirements for F013 34 were not stated on the front cover of the examination paper used by candidates. This information is essential for candidates as the examination paper consists of two sections and candidates require a minimum of marks for each section. Some candidates were gaining a high mark overall but not achieving a pass due to not meeting the minimum requirements for one section. This situation may not have been different if pass requirements had been on the front cover of the examination paper but there is no advantage to be gained by omitting the conditions from the front cover.

Unit specifications, instruments of assessment and exemplification materials

Each session the QST prepares a first and second Graded Unit 1 paper that centres use.

All candidates across centres sit the same assessment with clear marking guidelines prior verified by SQA.

Evidence Requirements

All centres have a clear understanding of the evidence requirements as given in the Unit specifications.

Administration of assessments

With regard to Graded Unit 1, strict control conditions are in place and adhered to by each centre. In addition, all centres have sufficient internal verification procedures in place to ensure consistency of marking. However, the pass requirements for F013 34 were not stated on the front cover of the examination paper used by candidates and may have had a bearing on the results.

General feedback

At the central verification event for Graded Unit 1 it became apparent that there were significant differences in the way that candidates approached the exam with some demonstrating good exam techniques while others showed a lack of examination experience. This showed the need for candidates to be suitably

coached in examination techniques and procedures. In addition, all control conditions and pass requirements should be clearly stated on any examination paper. With regard to Graded Unit 2, progress reports were not always clearly documented and sometimes there was a lack of evidence regarding candidates' presentations at the end of the project.

Areas of good practice

With regard to Graded Unit 1, the following good practice was noted:

- ◆ Some candidates demonstrated good examination techniques
- ◆ Good use of proper examination paper
- ◆ Clear and detailed assessor and internal verifier comments

With regard to Graded Unit 2, the following good practice was noted:

- ◆ Some evidence of comprehensive progress reports detailing the distance travelled by each candidate

Specific areas for improvement

- ◆ Good examination techniques are important to completing this Unit along with the technical detail required for the Unit. Centres should consider coaching candidates in such techniques.
- ◆ All control conditions and pass requirements should be clearly stated on any examination paper.
- ◆ With regard to Graded Unit 2, progress reports should be clearly documented and there should be some form of evidence regarding candidates' presentations at the end of the project.