



# **Internal Assessment Report: Engineering Systems**

Sector Panel or SSC:

Engineering, Science and Mathematics

The purpose of this report is to provide feedback to centres on verification which has taken place within the Engineering Systems Cognate Group (395) at Higher National level. This session encompassed the following awards: HNC/D Engineering Systems and HNC Engineering Practice.

# Higher National Units

## General comments

During their visits, and the central verification event, verifiers found evidence that:

- ◆ centres showed a good understanding of the requirements of the Units being verified
- ◆ National Standards were being met
- ◆ internal verification was in operation

## Advice on good practice and areas for further development

### Good practice observed

Within the Unit Value Engineering (DW7K 34), the use of familiar, everyday items for the assignment was considered good practice as this permitted candidates to consider fully the needs of the Outcomes being assessed.

The issue to candidates of a pro forma booklet provided a good indication to them of the required information they should record in their logbooks for Engineering: Practical Skills (F1BX 33).

Integration of delivery and assessments across the Units listed below was found to be beneficial to candidates.

Engineering Communication	DV9N 34
Engineering Measurement and System Monitoring	DV9P 34
Engineering: Practical Skills	F1BX 33
Principles of Engineering Systems	DV9R 34

### Areas for further development

Although all centres had evidence of internal verification, some employed it more effectively than others. It would help candidates if IV activity took place early enough to assist in preparation for reassessment. Additionally, comments from both assessors and IVs should be included on candidate scripts. As always, care should be taken that appropriate feedback is given to all candidates.

Candidates should include dimensions on all appropriate submitted graphical material in the Unit:

Engineering Communication DV9N 34.

Where candidates make corrections to assignments, centres should ensure that these are on additional sheets, not on the original material.

If large numbers of candidates are undertaking the Unit Value Engineering (DW7K 34), centres should ensure that sufficient staff are timetabled to support this in order to avoid study groups becoming too large.

For the majority of centres visited, these Units were being offered for the first time so there were no previous development points to be addressed.

## **Higher National Graded Units**

### **Titles/levels of HN Graded Units verified**

HNC Engineering Practice Graded Unit 1 DW92 34  
HNC Engineering Systems Graded Unit 1 DW11 34  
HND Engineering Systems Graded Unit 2 F1E8 35

### **Feedback to centres**

#### **General comments**

Graded Unit 1 scripts from four centres were centrally verified. There were different papers from each centre. Three of the papers were for the HNC Engineering Practice: Graded Unit 1 (DW92 34), the other was for the HNC Engineering Systems: Graded Unit 1 (DW11 34).

In each case marking and grading decisions were valid and consistent, with internal verification clearly having taken place.

#### **Advice on good practice and areas for further development**

One centre had issued standard sheets to aid candidates in the preparation of their notes for the case study and required candidates to sign these notes. Both of these actions are considered to be good practice as is the incorporation on scripts of comments to justify mark allocations.

All the papers had been submitted for prior verification. This is in line with SQA recommendations and is to be commended.

It was noted during prior verification that centres seemed to be relying very heavily for guidance on the specimen paper produced for the Engineering Practice Graded Unit 1. Section B of this paper has some restrictions due to the limited range of Units on which it is based. Notwithstanding this factor, centres should endeavour to produce papers which give candidates achievable opportunities to earn the grade they deserve, but should also extend the range of questions and case study scenarios.