



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

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

National Courses

Applied Practical Electronics X119 (Intermediate 1)

General comments

Two centres presented candidates in this final session for the award. Last session, 10 centres delivered the award but most have moved over to the comparable National Qualifications in Practical Electronics. This is the final session for this award and it is hoped that the two centres presenting this session move over to the new National Qualifications too.

Course Arrangements, Unit specifications, instruments of assessment and exemplification materials

Last session, all centres were familiar with the current necessary documentation required to deliver this award effectively. Some centres used the cycle lights project whereas others used the traffic light controller project. This session, one of the two centres presenting was new to the delivery of this award and it is hoped that the experience gained will be re-employed with the new qualifications.

Evidence Requirements

The biggest variable has always been the accepted standard of practical work from circuit layout to soldering and then eventual testing. With regard to written submissions, the minimum acceptable standard has proved to be the norm, but it is hoped with the new awards that candidates are encouraged to be reflective and more analytical with conclusions in their written submissions.

Administration of assessments

Over the lifetime of this award there have been clear differences in the amount of detail given by assessors and internal verifiers for external verification. Not all centres were able to provide clear written detail with regard to assessment decisions but most decisions were found to be accurate when explored during the external verification process and adjustments made where necessary.

Areas of good practice

The following areas of good practice were identified in reports during the lifetime of this award and most are applicable to the new qualifications:

- ◆ 'Each candidate's work was marked by two teachers and these marks discussed and then a final mark was given.'
- ◆ 'The evidence produced by all of the candidates was working and of a high standard.'

- ◆ 'A professional numbering system used for labelling the wire loom and the use of plastic sleeving to raise the boards all added to the quality of the project.'
- ◆ 'Additional sheet produced by the centre to explain mark allocation was helpful.'
- ◆ 'The centre produced a Report Review form for the candidates which identified omissions and further evidence requirements to ensure everything was present in their final pack.'
- ◆ 'The candidates produced a very high standard of work.'
- ◆ 'The presentation of the completed project work was of a very high standard.'
- ◆ 'The candidates clearly displayed all the skills from the earlier Units in the final project.'
- ◆ 'There was a clear progression in ability from the lower graded projects to those graded at the top band.'
- ◆ 'The centre appeared to have an effective verification system in place. This system is being implemented by an enthusiastic, experienced and diligent team of staff. It is hoped that this system is further expanded to include clear standardised documentation regarding such items as team discussions regarding resources, assessments, etc.'

Specific areas for improvement

The following areas for improvement were noted in certain centres and are highlighted here in order to raise awareness where applicable. These points should prove helpful for centres moving over to the new National 4/5 Practical Electronics Courses.

- ◆ Internal verification needs to be more rigorous with agreement on acceptable standards.
- ◆ A pro forma could be developed which could be used to explain the marks awarded under each heading of the marking scheme.
- ◆ A record should be kept detailing the amount of help and support each pupil required. Candidates who worked independently should also have this noted. This record will assist the internal verifier when checking the marks awarded under each heading.