

# Preparing projects & portfolios for International Vocational Qualifications



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# **Preparing projects & portfolios for International Vocational Qualifications**

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# Introduction

With effect from 1 January 2000, City & Guilds revised the procedures for completing the projects and portfolios that candidates must complete in order to successfully gain their award.

The main change is that all projects and portfolios will be marked and assessed by the tutor at the centre. It will no longer be necessary to send projects and portfolios for International Vocational Qualifications (IVQs) to us for marking.

This purpose of this guide is to give additional information to tutors about the completion of projects and portfolios. This guide should be used with the relevant IVQ syllabus. In some cases this guide gives information that is different from the information in the syllabus concerning the arrangements for marking and assessing projects and portfolios. Where there is a difference you should use the marking information in this guide.

This guide will also be useful for students preparing projects and portfolios and for visiting verifiers.

## International Vocational Qualifications

Since 1995 City & Guilds has been developing International Vocational Qualifications. Our research has shown that there is a need for competence based qualifications. These are qualifications that confirm that a person has demonstrated the practical skills, as well as the necessary underpinning knowledge, to perform a range of tasks to a specific standard.

International Vocational Qualifications, or IVQs, are available in the following subject areas:

**Accommodation Operations and Services**  
**Applied Information Technology**  
**Construction Industry**  
**Food and Beverage Service**  
**Food Preparation and Culinary Arts**  
**International Assessor Award**  
**International Tourism**  
**Mechanical, Electrical and Electronic Engineering**  
**Motor Vehicle Engineering**  
**Reception Operations and Services**  
**Retailing**  
**Teaching and Training**  
**Telecommunications and Electronics Engineering**  
**Telecommunications Systems**  
**Engineering Skills**  
**Hairdressing and Beauty Therapy**  
**Electrical and Electronic Engineering**

## Ways of assessing IVQs

All IVQs are designed in the same way with two assessment methods. The first is related to the underpinning knowledge and takes the form of written tests. These can be multiple choice tests or they can take the form of short answer or structured questions.

Multiple choice tests are always used at the first or certificate level of an IVQ. Where a more detailed answer is needed, at diploma and advanced diploma levels, short answer or structured questions are used.

Some IVQs will be using a computer-based test. Here the candidate answers questions – usually multiple choice questions – which appear on the computer screen by using the mouse to click on to the right answer. The advantage of this type of test is that the candidate can receive a provisional result as soon as the test is completed.

## Practical skills

The second assessment method is related to the practical skills that a person can demonstrate as a result of successfully completing a programme of training in preparation for an IVQ.

Some IVQs use a competence checklist. This is a list of activities that a candidate must be seen to be able to do in order to be considered competent in the tasks being assessed for the qualification. The checklists are written in the same way, so that for each competence statement it is possible to say either 'Yes, the candidate successfully carried out this activity' or 'No, the candidate has not yet achieved this standard.'

Here (Fig 1) is an example of a competence checklist:

<b>2 Hygiene at work</b>	
<b>Practical competences</b>	
The candidate must be able to do the following:	
2.1 Wear appropriate protective clothing and footwear in the kitchen areas at all times.	<input type="checkbox"/>
2.2 Report wounds and treat them in accordance with hygienic practices.	<input type="checkbox"/>

(Fig 1)

In this example the candidate has to show that the tasks can be performed to the standard stated and the method of assessment is observation of performance. Observation of performance under realistic conditions, such as in the kitchen of a restaurant or a hotel, is the best method and is attractive to employers and candidates. Alternatively, performance can be observed under controlled conditions, such as a training kitchen in a college.

Some IVQs use practical assignments as an alternative way of observing performance. Practical assignments are always presented in the same way. There are instructions for the candidate to follow in order to complete the assignment, and there is a marking guide. The marking guide is an alternative to the competence checklist and is a list of the things that the candidate must successfully complete in order to demonstrate competence.

Here (Fig 2) is an example of a marking guide for a practical assignment:

Marketing		
4.1	Research carried out.	[ ]
4.2	Well structured report produced.	[ ]
4.3	Type and structure defined and described.	[ ]
4.4	Forms and types of information described and explained.	[ ]
4.5	Information flow diagrams produced.	[ ]

(Fig 2)

In this example the candidate has to show that the tasks have been performed to the standard stated. The method of assessment is known as appraisal of products. This method of assessment is sometimes used because the assignment brings together the mental, physical and social skills needed to carry out the planning, undertaking and checking of specified tasks. Practical assignments always include a practical product – something made, a plan, a design, or an item of processed information.

Sometimes the practical skills needed to gain an IVQ can be better assessed if candidates are asked to complete a project or portfolio. This requirement may be an alternative to the competence checklist or practical assignments or it may be additional to these other forms of assessment. Completing a portfolio or project is an example of assessment that will involve **appraisal of products**.

The rest of this guide describes the different kinds of projects and portfolios used in IVQs, and gives advice about how to prepare them.

## Where do we use projects and portfolios?

**Candidates need to complete a project in the following IVQs:**

- Applied Information Technology (Diploma Level)**
- Electrical and Electronic Engineering (Advanced Diploma Level in programmes 2565 and 8030[2000])**
- International Tourism (Advanced Diploma Level)**
- Motor Vehicle Engineering (Advanced Diploma Level)**

A project is a single, completed piece of work that provides evidence of the candidate's abilities.

It may take the form of a written assignment, illustrated by additional material such as photographs, diagrams or video tape. This type of project is required for the IVQs in International Tourism and Motor Vehicle Engineering.

It may also take the form of a structured assignment provided by City & Guilds where the requirements, in terms of what must be produced, are specified by us. This type of project is required for the IVQs in Applied Information Technology and in Electrical and Electronic Engineering (programmes 2565 and 8030[2000] only).

**Candidates need to complete a portfolio of evidence in the following IVQs:**

- Food Preparation and Culinary Arts (Advanced Diploma Level)**
- Electrical and Electronic Engineering (Advanced Diploma Level in programme 8030)**
- Telecommunications and Electronics Engineering (Advanced Diploma Level)**

A portfolio differs from a project because it is intended to be a collection of evidence that shows a candidate is competent in the skills we specify. A portfolio can be a collection of items, of different kinds and gathered over time. It may include a project but a project would normally be only one of several different pieces of evidence. The most helpful way of thinking about a portfolio would be to think in terms of an art student or an architect, going to an interview, and carrying a selection of evidence that proves capability.

## Being prepared

No one likes to spend time doing things that are not necessary and no one likes to find out, at the last minute, that they have forgotten something really important. This is especially true when preparing for assessments.

The syllabus for every IVQ states everything that a candidate must do in order to successfully complete the requirements for assessment. It is essential, therefore, that you have an up to date and complete copy of the syllabus because this will show you exactly where a project or portfolio is required.

The syllabus will also show you all the practical competences and knowledge requirements that a candidate should have in order to successfully complete the project or portfolio. If the IVQ for which you are preparing candidates is listed under the heading 'Where do we use projects and portfolios?', then you must have all the sections of the syllabus that are relevant to that particular IVQ.

The syllabus also includes information about any particular requirements for the project or portfolio – what it must contain and how it must be presented.

In the example (Fig 3) below, you can see some of the information that we give for the project that is to be completed for the Advanced Diploma in International Tourism (IVQ).

#### Criteria for the project

- The topic is 'Tourism'. The content must include some factors and elements, which cover an international perspective.
- 5000 – 8000 words. Typed and/or word processed and desk top published material can be included.
- Visual aids accompanying the project may include photographs, graphics and design.

(Fig 3)

Make sure that you read the syllabus and understand what you will be asking your students to produce. Most questions will be answered in this guide, but if you have any doubts about what is required, you or the local examination secretary should contact the visiting verifier, or us, for more help.

You also need to be clear about when and how the project is to be assessed so that you can be sure that the assessment is completed on time.

Here are five key points to remember for all projects and portfolios:

- ✓ Make sure you and your students understand the aims of the project or portfolio so that you don't waste time; clarify any problems before you start.
- ✓ Agree how the project or portfolio should be presented, using the guidelines we give.
- ✓ Plan your time so that you can meet any deadlines, and ensure students understand the deadlines.
- ✓ Discuss work as you go along.
- ✓ Agree where projects are going to be kept to prevent accidental loss.

## Preparing for the assessment

Two people are going to be involved in the assessment of the project or portfolio. One of these will be the tutor who is responsible for teaching the candidate.

As a tutor, you are responsible for helping the candidate to prepare the project or portfolio, and for agreeing where it will be kept to prevent accidental loss. You are also responsible for ensuring that the project or portfolio is completed to our requirements. If these conditions are not met, then the project or portfolio is not acceptable.

We recommend that you prepare for the assessment of projects and portfolios by ensuring that the structure of each piece of work follows a standard format. The actual format required may vary according to the specifications in the syllabus for each IVQ, but as a general guide all projects and portfolios should include:

- ✓ Candidate's details
- ✓ An index with section and page references
- ✓ Dividing pages and labels to identify different sections
- ✓ Page numbering
- ✓ Clear headings to help the reader
- ✓ Clear references to the skills being demonstrated in the work produced
- ✓ The candidate's **own** work.

Organising projects and portfolios in this way will also help your visiting verifier to review the work quickly and easily.

For all projects and portfolios it is only necessary for the visiting verifier to see a representative sample. This should be about 10% of the total, but should always include the best and weakest examples, and any projects or portfolios about which you are unclear as to whether or not to award a pass. The visiting verifier can give a second opinion.

When you become familiar with the procedures and with the assessment criteria, you may agree with your visiting verifier to send representative projects, portfolios to the visiting verifier by post. If you do this, you are responsible for any loss, so please use a secure method of despatch.

## Assessing a project or portfolio

The tutor is responsible for assessing the portfolios and projects completed by students. You are the best person to do this job because:

- ✓ You are the subject expert who has been giving guidance to the students and who can assess performance against the required standards.
- ✓ You know each candidate and can confirm that each project or portfolio is a collection of evidence that is a genuine reflection of a student's own work and abilities.

Before you assess projects and portfolios it is important to make sure that each candidate understands what is required, and the way in which the project or portfolio is to be presented. This must be made clear when each candidate starts work on a project or portfolio.

You must also make clear to candidates the date by which the project or portfolio has to be completed, so that it can be handed in for assessment. This date will need to allow you enough time to assess projects and portfolios before the visiting verifier sees them.

Here is an example (Fig 4) of a suitable schedule:

<b>Advanced Diploma in Culinary Arts</b>
September 2002 – 2nd year of advanced diploma course
October 2002 – candidates agree projects with tutor
October 2002 to end April 2003 – candidates work to complete projects
15 May 2003 – final date for handing in projects
14 June 2003 – visiting verifier’s visit to review projects.

(Fig 4)

In this example it is assumed that your candidates are going to start their projects in the second year of a two-year teaching programme. You have allowed seven months for candidates to complete their projects. During this time you will help each candidate.

You must give a **specific final** date by which the projects must be handed in. This ensures that every candidate has no reason to be unclear about when the project must be handed to you. If you simply say ‘**Projects due in by May 2003**’ candidates could think this means May 1 or May 31 or any date between. Most will opt for May 31! Some candidates will say ‘**I know it’s due in May but actually mine will only be finished in June**’.

If the final date is not clear, then there is a risk that projects will be handed in late, which will cause you extra work and will probably cause a delay in results.

If large groups of students are being taught, it is important for all tutors involved to agree the final date for handing in projects. You must work as a team to agree this date, together with all other aspects of the project.

When the projects or portfolios have been handed in, you can begin to assess them. During this time it is particularly important that there is a safe place to keep them. If a project or portfolio is lost at this stage, the candidate has no evidence to show that the work has been completed and will need to repeat the exercise.

Before assessing projects or portfolios, you must prepare a marking scheme. The marking scheme must show the basis for giving marks or credit for the work being assessed. This should follow the guidelines we have given for the completion of projects and portfolios in each syllabus.

Another example (Fig 5) of a marking scheme is given below:

<b>Marking scheme</b>	
4.1 Assignment completed in 2 hours.	( )
4.2 Computer components identified correctly.	[ ]
4.3 Components connected together correctly.	[ ]
4.4 Computer switched on and Windows accessed.	[ ]
4.5 Write/Wordpad accessed and TEXT1 opened.	( )

(Fig 5)

The marking scheme is important for two reasons. Firstly, it ensures that you have objective criteria by which to assess each project or portfolio, and that these criteria are applied equally and fairly to each piece of work being assessed. Secondly, the marking scheme is also part of the evidence that you will give to the visiting verifier to support your decision about whether a project or portfolio has been successfully completed.

Where large groups are being taught, all tutors responsible for teaching students must agree the marking scheme so that they can all assess projects or portfolios using the same standards. In this instance it is usual for one person, perhaps the Head of Department, to review the marking of all the tutors to ensure that it is consistent. Where this happens, the Head of Department is verifying the marking and results of a team of tutors. This process is known as **internal verification** and the Head of Department is acting as an **internal verifier**. You do not have to appoint an internal verifier, however.

Projects and portfolios are not graded. The assessment is competence based. If the candidate has met all the required criteria for successful completion, the candidate is awarded a ‘pass’ for this particular part of the assessment. If the candidate has not met all the required criteria, then the candidate is given a ‘fail’.

On completion of the assessment of projects or portfolios, you must record the results. In some IVQs we have included recording sheets in the syllabus where there is a place to put the results for projects or portfolios.

This example (Fig 6) is taken from the **Electrical and Electronic Engineering** IVQ syllabus (8030[2000]) and shows the place where project results are recorded.

<b>Advanced Technician Diploma in Applied Electrical Engineering</b>		*Candidates must complete these assignments	
Candidate's name and number			
Centre name and number			
<b>Assessment reference</b>	<b>Date completed</b>	<b>Instructor signature</b>	<b>Instructor name</b>
220/1 Engineering project			

**(Fig 6)**

You do not have to use these, but if you do not, you must keep your own records of results so that they can be inspected by the visiting verifier on our behalf. If you do use the sheets we provide, you should make a photocopy of the sheet so that you have one sheet for each student.

The final stage in the process is to have your results confirmed by the visiting verifier.

## The role of the visiting verifier

If you are preparing candidates for IVQs that require the completion of a project or portfolio, you must have a visiting verifier appointed so that your results can be confirmed.

You must ensure that a visiting verifier is appointed before you agree with students that they will prepare and complete projects or portfolios.

The visiting verifier is not the person who is going to assess the projects and portfolios. The visiting verifier is responsible for reviewing your assessment of the projects or portfolios and agreeing the results with you. To do this the visiting verifier will need to see a representative sample of the projects or portfolios, together with the records and mark sheets you have completed.

The visiting verifier needs to see a representative sample of the projects or portfolios. This should always include examples of work for which you propose a 'pass' – about 10% of the total number of projects or portfolios is sufficient but the sample should always include any borderline passes. The visiting verifier does not have to see every project but may ask to do so, if there is a query about the results. You should also include, if you have examples, projects for which you have awarded a 'fail', especially borderline cases. The purpose of including borderline cases is to ensure that you have a second opinion, so that each candidate is treated as fairly as possible.

The work undertaken to make sure each project or portfolio is structured in the same way will be helpful at this stage. It means the visiting verifier can look through projects quickly and easily and can compare the work of different candidates before confirming your results.

Please refer to 'Delivering International Qualifications – Centre Guide' for further details on the role of the Visiting Verifier.

## Sending results

The procedure for sending the results to us for projects and portfolios is always the same, and is described in more detail in the next section of this guide. In summary, results for projects and portfolios are always prepared by the tutor and recorded, agreed with the visiting verifier, and then sent to City & Guilds using Form S.

It is possible for you to send your results for projects and portfolios to us electronically, using the 'Walled Garden'. To do this you must have specific approval from us, at which time you will be given guidance and assistance on how to use this system. The advantages of electronic communication are that time can be saved, and you can receive information about results more quickly. If you do use this method, you must still have your results for projects and portfolios agreed by the visiting verifier before sending them.

## External candidates

An external candidate is a candidate who has not completed a period of learning, or followed a course of instruction at an approved centre preparing for a City & Guilds assessment, but who wishes to enter for one or more of our assessments.

Although it is technically possible for external candidates to complete projects and portfolios we do not recommend this. If you accept an external candidate for a project or portfolio it is your responsibility to ensure that the external candidate understands what is required for the project or portfolio,

completes the work within your requirements, and pays fees to you for whatever services you provide. It is also your responsibility to look after the project or portfolio after it has been handed to you, and to maintain contact with the external candidate until the result has been received and any certificate awarded.

The next section of this guide gives more information about the projects and portfolios in specific IVQs.

# Applied Information Technology (7235)

This IVQ has project requirements at the Diploma level and a candidate must complete the project successfully in order to be awarded the Diploma.

You can find information about the project for the Technician Diploma in Information Processing and for the Diploma in Software Applications in the 7235 Syllabus.

Both projects are of the structured type, where we have stated what we require in terms of outcomes. As a tutor you do not need to decide on the outcomes. What you must do is make sure that the project chosen will meet all the required outcomes. You will find all these outcomes in the syllabus. You may decide what the topic for the project is going to be and may require all students to do the same project. Alternatively, students may choose their own topic and agree it with you. Both are equally acceptable.

Each project has a section stating the 'Objective References' and 'Preparation'. The objective references are the objectives in the syllabus that the project is designed to assess. Obviously candidates need to be involved in a teaching programme that covers all of these objectives in order that they can complete the project. The section headed 'Preparation' is a list of things that must take place.

In the example (Fig 7) that follows, which is from the project for the Technician Diploma in Information Processing, there are a number of important guidance notes about the way in which the project should be completed.

## Preparation

### 2.1 Location of task

The training centre or other venue where supervision and appropriate working conditions will be provided (see section 2.3).

### 2.2 Requirements

Pen, pencil, paper.  
Access to a computer system with appropriate language, word processing software and printing facilities.  
Programming language manuals.  
Floppy disks and disk labels.

### 2.3 Instructor notes

Candidates may carry out research and produce notes away from the centre but the programme development, implementation and testing along with the production of documentation and the report must be the candidate's own, independent work and largely original.

Candidates may save files on floppy disk, or in a network user area. If a hard disk or network is used, instructors should ensure that candidates do not have access to previously created files which could assist them other than with library routines.

(Fig 7)

**Training centre or other venue** – 'other venue' could mean place of employment, or a place selected for work experience; it does not mean at home.

### **supervision and appropriate working conditions** –

'supervision' is needed for two reasons, so that the tutor can help and so that the tutor can be assured that the candidate is completing a project that is his own, independent work. 'Appropriate working conditions' means a suitable venue for studying and practising skills relevant to the project.

### **No time limit is set for this assignment ... candidates should be allowed a minimum of 30 hours to complete their project.**

'A minimum of 30 hours' is our suggestion about the minimum time an average candidate will need to prepare for and complete the project properly. There is no extra credit for completing the project in less time, and no penalty for taking longer.

### **Candidates should, where possible, word process their report.**

The ability to word process the report is not a specified part of the project for the Technician Diploma in Information Processing and we do not specify particular word processing software. Candidates may word process their report if they wish. This note contrasts with the note given for the project in the Technician Diploma in Software Applications which states **Candidates must word process their report.**

Both projects for the Technician Diploma awards in Applied Information Technology have a set of candidate instructions. You should do two things with these:

- ✓ Make a copy of the candidates' instructions and give one to each candidate
- ✓ Discuss the candidates' instructions with each candidate individually, or with the class as a group, and make sure that everyone understands what is required.

You may give help and guidance during the project, and may help candidates' to correctly understand what is meant by each of the instructions.

It is essential that candidates complete their projects by following all the instructions.

The next section we give is the marking scheme for the project. This is found in section 4 of these projects under the heading 'Marking'. You may also copy this section and give it to candidates because it shows them the criteria by which their projects are going to be assessed. Alternatively you could copy this sheet and put it on a notice board so that all candidates can see it. You will need one copy of the mark sheet for each candidate to put with the completed project.

Each marking scheme is a list of statements that describe what the candidate must have achieved in order to complete the project. The statements can always be answered with:

Either

**Yes, the candidate has done this in the project.**

Or

**No, the candidate has not completed this to the standard stated.**

The marking scheme is, therefore, a set of outcomes that have to be seen. If the candidate has produced what is required to the stated standard, then credit is given to the candidate by placing a tick, as in the example (Fig 8) below:

Marking scheme	
4.1 Research carried out.	[✓]
4.2 Well structured report produced.	[✓]
4.3 Type and structure defined and described.	[✓]
4.4 Forms and types of information described and explained.	[✓]
4.5 Information flow diagrams produced.	[✓]

(Fig 8)

In the projects for the Technician Diploma awards in Applied Information Technology, some of the outcomes are compulsory. The candidate must achieve these. These outcomes are marked with square brackets, thus – [ ].

Some of the outcomes are optional. It is not essential to achieve all of these outcomes, and you can choose which ones, either by telling candidates which ones are required, or by letting candidates make their own choice. This also allows you an opportunity to give credit for differing outcomes. The optional outcomes are marked with rounded brackets, thus – ( ).

In the project for the Technician Diploma in Information Processing, there are 23 outcomes listed for the project. Of these, 8 are compulsory and 15 are optional. Candidates must complete at least 10 of the optional items. In the project for the Technician Diploma in Software Applications there are 31 outcomes listed, of which 6 are compulsory and 25 are optional. Candidates must complete at least 12 of the optional items.

These projects are marked on a pass or fail basis. Do not attempt to grade them. However, you can use the marking scheme we have given to place the projects in order of merit. Candidates who have successfully completed all of the optional items obviously rank higher than those who have failed to achieve one or more of the optional items.

Remember that the extent to which optional items have been successfully completed in a project may influence a university's decision when the project is being looked at as part of an entry interview.

The next section (section 5) states our criteria for marking and gives instructions about what to do if a candidate does not successfully complete a project.

After the projects for the Technician Diploma awards in Applied Information Technology have been completed and assessed, you must do the following:

- ✓ Keep them somewhere secure so that the visiting verifier can look at them, and so that they can be made available if a candidate needs them for an interview. Make sure the completed mark sheet is with each project.
- ✓ Make a record of each candidate's result. You can, if you wish use a record sheet based on the model we have provided in the syllabus.
- ✓ Prepare for the visiting verifier's visit by ensuring that all the projects are clearly named and labelled, and that your proposed results are clearly documented. You will need to put the results for these projects on Form S. You may do this before the visiting verifier visit, but remember that the visiting verifier must agree your proposed results.

A visiting verifier is required for the Applied Information Technology programme. The visiting verifier is particularly responsible for ensuring that the outcomes of practical work meet our standards and to ensure that you are marking projects in a way that is consistent with other centres. This is to ensure that standards are the same in all our centres.

The visiting verifier should see some of the projects, but does not have to see them all. The opportunity to look at the completed projects will probably come towards the end of your teaching programme. We would suggest, however, that you arrange the visiting verifier's visit so that other activities can take place on the same day – for example, seeing candidates undertaking practical work.

The visiting verifier needs to agree your results for the project, but is not responsible for marking the projects. You should be prepared to show the visiting verifier any and every project, but as a guide you should always select:

- ✓ the best project or projects
- ✓ all the projects about which you are unsure whether they are pass or fail – the visiting verifier can help you agree a result for these
- ✓ any project you believe does not meet the criteria for 'pass'; this allows you to get a second opinion.

At the end of the visiting verifier's visit you should be able to complete Form S with the results for the project components of the Applied Information Technology awards. The visiting verifier can then countersign it before it is sent to us.

After the visiting verifier's visit you should keep the projects for a further six months. Occasionally we may also ask to see the projects. This will normally only be the case if there is a query about the result. If candidates need their projects for an interview, you should make a copy of the project to keep on file and ask them to return the project after the interview.

# Food Preparation and Culinary Arts (7065)

This IVQ has a portfolio requirement at the Advanced Diploma level and a candidate must complete the portfolio successfully in order to be awarded either the Advanced Diploma in Cuisine Studies or the Advanced Diploma in Patisserie.

A portfolio of evidence has been selected for this particular IVQ because a portfolio gives the candidate the opportunity to provide a range of evidence to show achievement in the practical competences at this level. This means that the portfolio must:

- ✓ include enough evidence to show competence
- ✓ include evidence of an appropriate level – as this portfolio is evidence for the Advanced Diploma award, we mean evidence that shows that a person has skills and knowledge consistent with being able to work in a job that includes supervising others and giving them guidance. As a reminder, look at the City & Guilds structure of awards, which you will find in many of our publications, and note the description for level 3 or Advanced Diploma.

The description of the portfolio requirements begins with a brief description of the overall requirements for the portfolio.

**The portfolio should be well laid out** – ‘well laid out’ means the portfolio should be clearly labelled and divided into sections so that a person looking for evidence to support competence in a particular topic, for example making petits fours, can use the label to find the evidence straight away, without needing to look through the whole portfolio.

**It is important that all pieces of evidence and forms are appropriately marked, referenced** and filed within the portfolio. A number of references may be given, but references should always include the specific objective references of the practical competences and knowledge requirements. You could do this in the form of a table, as in the example (Fig 10) below, and place the table with the evidence, which may take the form of a series of photographs showing the preparation of a completed product such as a wedding cake.

**The portfolio must include evidence to support each of the compulsory topic areas and either Cuisine Studies or Patisserie Studies.**

The portfolio of evidence for the Advanced Diploma in Culinary Arts or in Patisserie must be divided into two clear sections.

Make sure you read the notes below about the visiting verifier’s visit. You do **not** need to ask the visiting verifier to authenticate every item.

- ✓ Make a copy of the instructions for preparing the portfolio and give one to each candidate
- ✓ Discuss the instructions with each candidate individually, or with the class as a group, and make sure that everyone understands what is required.

Tutors should give help and guidance to ensure that each candidate is completing a portfolio correctly. We also recommend that

- ✓ Portfolios are kept in a safe and secure place to prevent loss
- ✓ Candidates think about what they will include in their portfolio at the beginning of the teaching programme.
- ✓ Candidates collect evidence for the portfolio throughout the teaching programme. Do not under-estimate the time needed to do this properly.
- ✓ Candidates select the best evidence, with the tutor’s help, where there is more than one piece of evidence to support achievement of the objectives.
- ✓ You make a checklist to make sure every portfolio covers all the required objectives. This is most important because you will need this to assess the portfolios.

Section 1 of the portfolio is for the evidence that a candidate collects during the teaching programme and is compulsory.

Section 2 of the portfolio is not compulsory but it can be used to contain additional evidence that can be used to support a

Portfolio evidence	Objectives demonstrated
Series of photographs showing preparation and decoration and decoration of a wedding cake, with a written description of activities	Practical competences:  13.2, 13.8  Knowledge requirements  13.2, 13.5, 13.6

(Fig 10)

candidate's claim to be competent in the required areas. We have given a list of suitable evidence that could be put into section 2. Some of this evidence can come from other sources and does not have to be part of the teaching programme you are running.

For example, if a candidate already has certificates from elsewhere you could include these provided they recognise achievement at the appropriate level. In this case, school-leaving certificates for passing cookery examinations would not be suitable evidence for section 2 because the candidate for the Advanced Diploma award must be demonstrating skills and knowledge far beyond those measured in school. A certificate awarded by an organisation such as the American Culinary Federation may be appropriate because it recognises standards that are normally reached after leaving school and after completing a full time training programme.

For both sections of the portfolio there is no minimum or maximum number of items to be included but every portfolio must contain evidence to support all of the required performance outcomes (or objectives) listed in the compulsory and optional sections of the advanced diploma syllabus.

Unlike a project, where you may use a marking scheme to give credit for achievement, a portfolio is not marked in the traditional sense.

To assess a portfolio it is necessary to look at all the evidence in the portfolio and make sure that it is:

- ✓ **Complete.** The portfolio for the Advanced Diploma in Culinary Arts must include evidence to support the achievement of all of the compulsory objectives and all the objectives of one or other of the chosen options – cuisine studies or patisserie. If evidence is missing the portfolio is not complete and cannot be given a 'pass'.
- ✓ **Authentic.** The evidence in the portfolio must clearly be the candidate's own work. It is your responsibility to check this and to make sure a visiting verifier can also see that the work is the candidate's own work.
- ✓ **Relevant and reliable.** This means that the evidence in the portfolio must relate to the objectives in the advanced diploma syllabus. It also means that it must clearly show what the candidate can do at the present time. It must show what you would expect the candidate to be able to do, un-aided in employment. You may include evidence of work that was completed a long time ago, but if you do you must ask the question 'Is this still relevant?' The candidate may now be capable of better work, or may not have recently demonstrated competence in the activities represented by the evidence.

If all the above criteria have been met the portfolio should be considered complete and ready for review by the visiting verifier.

After the portfolios for the Advanced Diploma in Culinary Arts have been completed and assessed for completeness and achievement of the required standards, you must do the following:

- ✓ **Keep them somewhere secure** so that the visiting verifier may look at them, and they can be made available if a candidate needs them for an interview. Make sure your completed

evaluation (pass or fail) is with each portfolio, together with any notes you have made to justify your decision.

- ✓ **Make a record of each candidate's result.**
- ✓ **Prepare for the visiting verifier's visit** by ensuring that all the portfolios are clearly named and labelled, and that your proposed results are clearly documented. You will need to put the results for the portfolios on Form S. You may do this before the visiting verifier visit, but remember that the visiting verifier must agree your proposed results.

A visiting verifier is required for the Advanced Diploma in Culinary Arts programme if you are making candidate entries for practical assessments. The visiting verifier is particularly responsible for ensuring that the outcomes of practical work meet our standards and to ensure that you are assessing portfolios in a way that is consistent with other centres. This is to ensure that standards are the same in all our centres.

The visiting verifier should see some of the portfolios, but does not have to see them all. The opportunity to look at the completed portfolios will probably come towards the end of your teaching programme. We would suggest, however, that you arrange the visiting verifier's visit so that other activities can take place on the same day – for example, seeing candidates undertaking practical work.

The visiting verifier needs to agree your results for the portfolio. The visiting verifier is not responsible for assessing the portfolios. You should be prepared to show the visiting verifier any and every portfolio, but as a guide you should always select:

- ✓ the best portfolio or portfolios
- ✓ all the portfolios about which you are unsure whether they are pass or fail – the visiting verifier can help you agree a result for these
- ✓ any portfolio you believe does not meet the criteria for 'pass'; this allows you to get a second opinion.

At the end of the visiting verifier's visit you should be able to complete Form S with the results for the portfolio components of the Advanced Diploma in Culinary Arts. The visiting verifier can then countersign Form S before it is sent to us. Remember, you must not send portfolios to us with Form S.

After the visiting verifier's visit you should keep the portfolios for a further six months. Occasionally we may also ask to see the portfolios. This will be the case if there is a query about the result. If candidates need their portfolios for an interview, you should agree arrangements for their return after the interview, until the period of six months has passed.

# International Tourism (4865)

This IVQ has project requirements at the Advanced Diploma level and a candidate must complete the project successfully in order to be awarded the Advanced Diploma.

The description of the project in the syllabus begins with an outline of the criteria for the project.

The subject of the project, 'Tourism', is intentionally open but we have stated that the content of the project must cover an international perspective. By this we mean that it is quite acceptable for candidates to base their project on what they are familiar with in their local area, region or country. However, at advanced diploma level we do expect candidates to do research that extends beyond their own country. For example, candidates may want to look at the background and culture of people from other countries, and consider what their own culture has to offer visitors from other countries. Candidates may want to compare their own area with similar or contrasting areas in other countries. The project cannot be considered for a 'pass' if there is no attention given to the international perspective.

We have suggested that the project is between 5000 and 8000 words in length. You must keep within these guidelines. A project of 3000 words in length is not acceptable. However, there is no advantage in producing 8000 words in the belief that 8000 words will make the project more satisfactory. The criteria for awarding the project a 'pass' are based on successful achievement of the required outcomes, and not on the length of the project within the 5000 – 8000 words range given. Of course, the content of the project should be substantially the candidate's own work. Material obtained from text books, from available software and from the internet may be acceptable but it should be used to illustrate a point being made by the candidate. Large pieces of copied text are not acceptable. Candidates must also be aware of and respect copyright restrictions.

You will see that it is acceptable to illustrate the project with visual aids such as a video presentation or using a computer and presentation software.

The next section of the project guidance notes explains the structure that we require for the project. As a tutor you must make sure that every project is prepared using the structure we have suggested. You may include additional features but you should consider that our suggestions are the minimum expected:

- ✓ Make a copy of the guidance notes given in the syllabus and give one to each candidate
- ✓ Discuss the guidance notes with each candidate individually, or with the class as a group, and make sure that everyone understands what is required.

The tutor may decide what the topic for the project is going to be and may require all students to do the same project. Alternatively, students may choose their own topic and agree it with the tutor. Both are equally acceptable.

You will see that there is no time limit given for the completion of this project, unlike the projects in the Applied Information

Technology IVQ. This is intentional. Candidates will need different amounts of time to complete their projects according to the ways in which they do their research, and the ways they choose to present their results. Once again, the project is assessed on the basis of a candidate having successfully completed the required outcomes, and not because of the amount of time he or she has spent preparing the project.

No specific reference has been made to assistance by the tutor in the syllabus guidance notes. The tutor may, of course, give assistance and should ensure that all projects are being prepared according to the guidelines. Candidates should be encouraged to seek the tutor's advice and support but the tutor must not do the work for the candidate.

The section of the guidance notes that deals with the project structure and guidelines ends with a list of the required knowledge and competences involved in preparing and completing the project. This knowledge and the competences should be developed during the teaching programme but tutors should ensure that every candidate understands what is meant by each of the listed requirements.

At the end of the list we refer to '**effective writing skills**'. We do not require an exceptionally high level of English, and the project must not be judged on the basis of the quality of a candidate's English. However, the written parts of the project must be written in a way that the meaning is clear to a reader who is reading the project for the first time. Remember that this is the advanced diploma level of this IVQ and some candidates may be considering working in a supervisory role, or going into higher education. For both, effective communication skills are essential. It is unfair to a candidate to accept written work that cannot be read or understood. This gives a candidate a misleading impression of what is required. For candidates with special educational needs, you should refer to the guidance we give in the **International Directory of Examinations and Assessments**.

In addition to the guidance notes we have given, the tutor will need to give candidates any additional instructions necessary for completion of the project. If the tutor decides that all candidates must do the same project, then the tutor will need to prepare, hand out, and discuss the content of the project and the tutor's requirements so that everyone understands what they have to do.

Whether everyone completes the same project or not for the Advanced Diploma in International Tourism, the tutor must prepare a marking scheme and must prepare guidelines for completing the project on time, as described in the section headed '**Assessing a Project or Portfolio**'.

As a reminder, the marking scheme is a set of outcomes that have to be seen. If the candidate has produced what is required to the stated standard, then credit is given to the candidate by placing a tick, as in the example (Fig 11) shown on the next page:

### Marking

- |   |     |
|---|-----|
| 1.1 Issue or problem, stated in general terms       | [✓] |
| 1.2 Issue or problem described in specific terms    | [✓] |
| 1.3 At least two different methods of research used | [✓] |
| 1.4 Each research method explained                  | [✓] |

(Fig 11)

This is just an example of part of a marking scheme based on the project structure given in the International Tourism syllabus. You do not have to copy this model, but including our requirements in the marking scheme is strongly recommended. This will help to ensure every project meets the criteria.

The project is marked on a pass or fail basis. Do not attempt to grade it. However, you can use the marking scheme you have prepared to place the projects in order of merit. This will help the visiting verifier to agree with you the result to be given to any borderline cases you may have.

After the projects for the Advanced Diploma award in International Tourism have been completed and assessed, you must do the following:

- ✓ Keep them somewhere secure so that the visiting verifier may look at them, and they can be made available if a candidate needs them for an interview. Make sure a completed mark sheet is with each project.
- ✓ Make a record of each candidate's result.
- ✓ Prepare for the visiting verifier's visit by ensuring that all the projects are clearly named and labelled, and that your proposed results are clearly documented. You will need to put the results for these projects on Form S. You may do this before the visiting verifier visit, but remember that the visiting verifier must agree your proposed results.

A visiting verifier is required for the International Tourism programme. The visiting verifier is particularly responsible for ensuring that the outcomes of practical work meet our standards and to ensure that you are marking projects in a way that is consistent with other centres. This is to ensure that standards are the same in all our centres.

The visiting verifier should see some of the projects, but does not have to see them all. The opportunity to look at the completed projects will probably come towards the end of your teaching programme. We would suggest, however, that you arrange the visiting verifier's visit so that other activities can take place on the same day – for example, seeing candidates undertaking practical work.

The visiting verifier needs to agree your results for the project. The visiting verifier is not responsible for marking the projects.

You should be prepared to show the visiting verifier any and every project, but as a guide you should always select:

- ✓ the best project or projects
- ✓ all the projects about which you are unsure whether they are pass or fail – the visiting verifier can help you agree a result for these
- ✓ any project you believe does not meet the criteria for 'pass'; this allows you to get a second opinion.

At the end of the visiting verifier's visit you should be able to complete Form S with the results for the project component of the International Tourism award. The visiting verifier can then countersign it before it is sent to us.

After the visiting verifier's visit you should keep the projects for a further six months. Occasionally we may also ask to see the projects. This will normally only be the case if there is a query about the result. If candidates need their projects for an interview, you should make a copy of the project to keep on file and ask them to return the project after the interview.

# Mechanical, Electrical and Electronic Engineering (2565 and 8030[2000] programmes)

These IVQs have project requirements at the following awards at Advanced Diploma level

Advanced Technician Diploma in Applied Mechanical Engineering – Manufacturing  
Advanced Technician Diploma in Applied Mechanical Engineering – Plant Technology  
Advanced Technician Diploma in Applied Mechanical and Electrical Engineering – Design and Manufacture  
Advanced Technician Diploma in Applied Mechanical and Electrical Engineering – Plant Technology  
Advanced Technician Diploma in Applied Mechanical and Electrical Engineering – Control Systems  
Advanced Technician Diploma in Applied Electrical Engineering  
Advanced Technician Diploma in Applied Electronic Engineering

and a candidate must complete the project successfully in order to be awarded any one of the Advanced Technician Diploma awards listed above

You can find information about the project for the Applied Technician Diplomas in Applied Mechanical Engineering syllabus. You can find information about the project for the Applied Technician Diplomas in the Applied Mechanical and Electrical Engineering syllabus. Finally, you can find information about the project for the Applied Technician Diplomas in the Applied Electrical Engineering 2000 edition of the syllabus.

The project required for all the awards listed above **is the same project**. Therefore, all the following information applies to the project regardless of which syllabus you refer to. The advantage of this is that you can prepare your candidates for a variety of qualifications according to your resources and their interests.

The project is of the structured type, where we have stated what we require in terms of outcomes. As a tutor you do not need to decide on the outcomes. What you must do is make sure that the project chosen will meet all the required outcomes. You will find all these outcomes in the syllabus. You may decide what the topic for the project is going to be and may require all students to do the same project. Alternatively, students may choose their own topic and agree it with you. Both are equally acceptable.

The project begins with a section stating the 'practical competences'. The practical competences are the skills which your candidates must develop and demonstrate during your teaching programme, and whilst they work on the project, in order to successfully complete the project. You will notice that some of these are personal skills, such as the example (Fig 12) given below.

## Scheduling and planning

220.7 Plan the initial programme for solving the problem.

220.8 Estimate the resource requirements for each of the tasks.

220.9 Estimate the time needed to complete each task.

220.10 Prepare a schedule of work.

(Fig 12)

These are also personal skills that will be necessary if your candidate is going to be successful in a work environment, or in further study at a university. Here, the project is the assessment method being used to practise and show these skills.

Some of the practical competences relate to the skills needed to ensure the content of the project is correct, as shown (Fig 13) below.

## Evaluation and communication

220.17 Prepare a project report to a specified layout.

**Layout:** eg. title page, summary, contents page, list of figures, tables, symbols as required, introduction, work carried out, evaluation of the results, conclusions as related to the aims of the project, practical recommendations, references and appendices.

(Fig 13)

Here the skill being assessed is the ability to prepare a project according to instructions. The text that follows the word '**layout**' is an example of what could be a specified layout. It is not the only acceptable layout, and the term '**eg**', or **for example** at the beginning of the list is our indication that this is only an example. You may use a different model.

The next section of the project begins with a statement of the competence references. These are the objectives in the syllabus that the project is designed to assess. Obviously candidates need to be involved in a teaching programme that covers all of these objectives in order that they can complete the project.

The section headed 'Preparation' is a list of things that must take place.

There are a number of important guidance notes (Fig 14) about the way in which the project should be completed:

## Preparation

### 2.1 Location of task

The training centre or other venue where supervision and appropriate working conditions will be provided.

### 2.2 Requirements

Paper, pens, pencils and ruler **or** a computer system running appropriate software (eg work processing, computer aided draughting software) and a printer connected to the system, with paper loaded and set up ready to print.

Manuals for software.

Copy of section 3 and section 6.

### 2.3 Instructor notes

Candidates are required to select and solve individually an engineering problem which can realistically be achieved (see section 6 for suitable suggestions) within 60 hours. The project must be agreed between candidate and instructor and must take into account the amount and level of work required and the resources available. The nature of the work must demonstrate the candidate's ability at advanced diploma level ...

(Fig 14)

**Training centre or other venue** – 'other venue' could mean place of employment, or a place selected for work experience; it does not mean at home.

**supervision and appropriate working conditions** – 'supervision' is needed for two reasons, so that the tutor can help and so that the tutor can be assured that the candidate is completing a project that is his own, independent work. 'Appropriate working conditions' means a suitable venue for studying and practising skills relevant to the project.

**... can be realistically achieved within 60 hours.** 'within 60 hours' is our statement of the target time a candidate should be given to prepare for and complete the project properly. There is no extra credit for completing the project in less time, and no penalty for taking longer but candidates should not be allowed an excessive amount of additional time.

**Candidates may use word processors to produce their report.... provided they have sufficient word processing skills to do so efficiently.** The ability to word process the report is not a specified part of the project and we do not specify particular word processing software. '**efficiently**' means candidates should not be allowed extra time for the project simply to complete word processing. It also means that the word processing should be of a standard that does not detract from the overall quality of the project.

The project has a set of candidates' instructions. You should do two things with these:

- ✓ Make a copy of the candidates' instructions and give one to each candidate
- ✓ Discuss the candidates' instructions with each candidate individually, or with the class as a group, and make sure that everyone understands what is required.

You may give help and guidance during the project, and may help candidates' to correctly understand what is meant by each of the instructions.

It is essential that candidates complete their projects by following all the instructions.

The next section we give is the marking scheme for the project. This is found in section 4 of these projects under the heading 'Marking'. You may also copy this section and give it to candidates because it shows them the criteria by which their projects are going to be assessed. Alternatively you could copy this sheet and put it on a notice board so that all candidates can see it. You will need one copy of the mark sheet for each candidate to put with the completed project.

Each marking scheme is a list of statements that describe what the candidate must have completed in order to complete the project. The statements can always be answered with

Either

**Yes, the candidate has done this in the project.**

Or

**No, the candidate has not completed this to the standard stated.**

The marking scheme is, therefore, a set of outcomes that have to be seen. If the candidate has produced what is required to the stated standard, then credit is given to the candidate by placing a tick, as in the example (Fig 15) below:

Marking	
4.1 Project completed in approximately 60 hours.	[✓]
4.2 Realistic engineering project selected and agreed with tutor.	[✓]
4.3 Log book or diary maintained throughout the project.	[✓]
4.4 The main elements of the problem identified and the objectives defined.	[✓]

(Fig 15)

In this project some of the outcomes are compulsory. The candidate must achieve these. These outcomes are marked with square brackets, thus – [ ]

Two of the outcomes are optional – the requirement to complete in approximately 60 hours, and the requirement to make recommendations. It is not essential to complete the project within 60 hours and/or to make recommendations in order for the project to be awarded a 'pass'.

Remember that the extent to which optional items have been successfully completed in a project may influence a university's decision when the project is being looked at as part of an entry interview. In this particular case, it is important to consider why a candidate has not been able to complete the project within the 60 hours.

The optional outcomes are marked with rounded brackets, thus – ( )

The projects are marked on a pass or fail basis. Do not attempt to grade them. However, you can use the marking scheme we have given to place the projects in order of merit. Candidates who have successfully completed both of the optional items may rank higher than those who have failed to achieve one or more of the optional items.

The next section states our criteria for marking and gives instructions about what to do if a candidate does not successfully complete a project.

After the projects have been completed and assessed, you must do the following:

- ✓ Keep them somewhere secure so that the visiting verifier can look at them, and they can be made available if a candidate needs them for an interview. Make sure the completed mark sheet is with each project.
- ✓ Make a record of each candidate's result. You should use the record keeping sheet we have provided in the Mechanical Engineering and Mechanical and Electrical Engineering syllabuses, and in the 2000 edition of the Electrical and Electronic Engineering syllabus.
- ✓ Prepare for the visiting verifier's visit by ensuring that all the projects are clearly named and labelled, and that your proposed results are clearly documented. You will need to put the results for these projects on Form S. You may do this before the visiting verifier visit, but remember that the visiting verifier must agree your proposed results.

A visiting verifier is required for the Mechanical, Mechanical and Electrical, and Electrical and Electronic Engineering programmes if you are going to enter candidates for the practical work assessments and/or the projects. The visiting verifier is particularly responsible for ensuring that the outcomes of practical work meet our standards and to ensure that you are assessing projects in a way that is consistent with other centres. This is to ensure that standards are the same in all our centres. The same visiting verifier can visit regardless of the programme you are offering because, as we have explained, the projects for all these awards follow the same outline.

The visiting verifier should see some of the projects, but does not have to see them all. The opportunity to look at the completed projects will probably come towards the end of your teaching

programme. We would suggest, however, that you arrange the visiting verifier's visit so that other activities can take place on the same day – for example, seeing candidates undertaking practical work.

The visiting verifier needs to agree your results for the project but is not responsible for marking the projects. You should be prepared to show the visiting verifier any and every project, but as a guide you should always select:

- ✓ the best project or projects
- ✓ all the projects about which you are unsure whether they are pass or fail – the visiting verifier can help you agree a result for these
- ✓ any project you believe does not meet the criteria for 'pass'; this allows you to get a second opinion.

At the end of the visiting verifier's visit you should be able to complete Form S with the results for the project components. The visiting verifier can then countersign it before it is sent to us.

After the visiting verifier's visit you should keep the projects for a further six months. Occasionally we may also ask to see the projects. This will normally only be the case if there is a query about the result. If candidates need their projects for an interview, you should make a copy of the project to keep on file and ask them to return the project after the interview.

# Motor Vehicle Engineering (3905)

This IVQ has project requirements for the Advanced Technician Diploma in Motor Vehicle Engineering and for the Advanced Technician Diploma in Motor Vehicle Management only.

A project is not required for any of the other advanced diploma or Advanced Technician diploma awards that are described in the syllabus.

You can find information about the project in the 3905 syllabus.

The description of the project in the syllabus begins with an outline of the criteria for the project.

The subject of the project, 'Motor Vehicle Engineering', is intentionally open but we have stated that the content of the project must cover an international perspective. By this we mean that it is quite acceptable for candidates to base their project on what they are familiar with in their local area, region or country. However, at advanced diploma level we do expect candidates to do research that extends beyond their own country. For example, candidates may want to look at the way in which the motor vehicle industry is increasingly led by giant multi-national organisations, and the advantages or disadvantages this development brings. Candidates may want to compare practices in their own area with similar or contrasting areas in other countries. The project cannot be considered for a 'pass' if there is no attention given to the international perspective.

The project must also reflect the award for which the candidate is preparing. So a candidate who is preparing a project for the Advanced Technician Diploma in Motor Vehicle Engineering will need to include different information to that included by a candidate preparing for the Advanced Technician Diploma in Motor Vehicle Management.

We have suggested that the project is between 4000 and 6000 words in length. You must keep within these guidelines. A project of 2000 words in length is not acceptable. However, there is no advantage in producing 6000 words in the belief that 6000 words will make the project more satisfactory. The criteria for awarding the project a 'pass' are based on successful achievement of the required outcomes, and not on the length of the project within the 4000 – 6000 word range given. Of course, the content of the project should be substantially the candidate's own work. Material obtained from text books, from available software and from the internet may be acceptable but it should be used to illustrate a point being made by the candidate. Large pieces of copied text are not acceptable. Candidates must also be aware of and respect copyright restrictions.

You will see that it is acceptable to illustrate the project with visual aids such as a video presentation or using a computer and presentation software.

The next section of the project guidance notes explains the structure that we require for the project. As a tutor you must make sure that every project is prepared using the structure we have suggested. You may include additional features but you should consider that our suggestions are the minimum expected:

- ✓ Make a copy of the guidance notes.  
Give a copy to each candidate.
- ✓ Discuss the guidance notes with each candidate individually, or with the class as a group, and make sure that everyone understands what is required.

The tutor may decide what the topic for the project is going to be and may require all students to do the same project. If the tutor decides on the topic, the tutor must make sure that the topic chosen is suitable for Motor Vehicle Engineering **or** Motor Vehicle Management. Alternatively, students may choose their own topic and agree it with the tutor. Both are equally acceptable.

You will see that there is no time limit given for the completion of this project, unlike the projects in the Applied Information Technology IVQ. This is intentional. Candidates will need different amounts of time to complete their projects according to the ways in which they do their research, and the ways they choose to present their results. Once again, the project is assessed on the basis of a candidate having successfully completed the required outcomes, and not because of the amount of time he or she has spent preparing the project.

No specific reference has been made to assistance by the tutor in the syllabus guidance notes. The tutor may, of course, give assistance and should ensure that all projects are being prepared according to the guidelines. Candidates should be encouraged to seek the tutor's advice and support but the tutor must not do the work for the candidate.

The section of the guidance notes that deals with the project structure and guidelines ends with a list of the required knowledge and competences involved in preparing and completing the project. This knowledge and the competences should be developed during the teaching programme but tutors should ensure that every candidate understands what is meant by each of the listed requirements.

At the end of the list we refer to '**effective writing skills**'. We do not require an exceptionally high level of English, and the project must not be judged on the basis of the quality of a candidate's English. However, the written parts of the project must be written in a way that the meaning is clear to a reader who is reading the project for the first time. Remember that this is the advanced diploma level of this IVQ and some candidates may be considering working in a supervisory or management role, or going into higher education. For both, effective communication skills are essential. It is unfair to a candidate to accept written work that cannot be read or understood. This gives a candidate a misleading impression of what is required. For candidates with special educational needs, you should refer to the guidance we give in the **International Directory of Examinations and Assessments**.

In addition to the guidance notes we have given, the tutor will need to give candidates any additional instructions necessary for completion of the project. If the tutor decides that all candidates must do the same project, then the tutor will need to prepare, hand out, and discuss the content of the project and

the tutor's requirements so that everyone understands what they have to do.

Whether everyone completes the same project or not for the Advanced Diplomas in Motor Vehicle Engineering and Motor Vehicle Management, the tutor must prepare a marking scheme and must prepare guidelines for completing the project on time.

If projects are being prepared for both options, the tutor should prepare two marking schemes but the two marking schemes must be comparable in terms of what is expected of the candidates. Much of the content may be the same, but each marking scheme should include some outcomes that are specifically relevant to Engineering or to Management.

As a reminder, the marking scheme is a set of outcomes that have to be seen. If the candidate has produced what is required to the stated standard, then credit is given to the candidate by placing a tick, as in the example (Fig 16) below:

<b>Marking</b>		
1.1	Issue or problem, stated in general terms	[✓]
1.2	Issue or problem described in specific terms	[✓]
1.3	At least 2 different methods of research used	[✓]
1.4	Each research method explained	[✓]

(Fig 16)

This is just an example of part of a marking scheme based on the project structure given in the Motor Vehicle Engineering Syllabus, and this part of the model could be common to projects covering both options. You do not have to copy this model, but including our requirements in the marking scheme is strongly recommended. This will help to ensure every project meets the criteria.

The project is marked on a pass or fail basis. Do not attempt to grade it. However, you can use the marking scheme you have prepared to place the projects in order of merit. This will help the visiting verifier to agree with you the result to be given to any borderline cases you may have.

After the projects for the Advanced Diploma award in Motor Vehicle Engineering or Motor Vehicle Management have been completed and assessed, you must do the following:

- ✓ Keep them somewhere secure so that the visiting verifier can look at them, and they can be made available if a candidate needs them for an interview. Make sure a completed mark sheet is with each project.
- ✓ Make a record of each candidate's result.
- ✓ Prepare for the visiting verifier's visit by ensuring that all the projects are clearly named and labelled, and that your proposed results are clearly documented. If you have candidates for both options you should keep the projects

separately. You will need to put the results for these projects on Form S. You may do this before the visiting verifier visit, but remember that the visiting verifier must agree your proposed results. Make sure you use the correct component number on Form S for the chosen project topic. You will find these in the syllabus.

A visiting verifier is required for the Motor Vehicle Engineering programme if you have candidates completing the practical work and the projects. The visiting verifier is particularly responsible for ensuring that the outcomes of practical work meet our standards and to confirm that you are marking projects in a way that is consistent with other centres. This is to ensure that standards are the same in all our centres.

The visiting verifier should see some of the projects, but does not have to see them all. The opportunity to look at the completed projects will probably come towards the end of your teaching programme. We would suggest, however, that you arrange the visiting verifier's visit so that other activities can take place on the same day – for example, seeing candidates undertaking practical work.

The visiting verifier needs to agree your results for the project. The visiting verifier is not responsible for marking the projects. You should be prepared to show the visiting verifier any and every project, but as a guide you should always select:

- ✓ the best project or projects
- ✓ all the projects about which you are unsure whether they are pass or fail – the visiting verifier can help you agree a result for these
- ✓ any project you believe does not meet the criteria for 'pass'; this allows you to get a second opinion.

At the end of the visiting verifier's visit you should be able to complete Form S with the results for the project components of the Motor Vehicle Engineering award. The visiting verifier can then countersign it before it is sent to us.

After the visiting verifier's visit you should keep the projects for a further six months. Occasionally we may also ask to see the projects. This will normally only be the case if there is a query about the result. If candidates need their projects for an interview, you should make a copy of the project to keep on file and ask them to return the project after the interview.

**You must not send projects and mark sheets to City & Guilds. You should only send Form S with the agreed results, countersigned by the visiting verifier.**

# Telecommunications and Electronics Engineering 2720

This IVQ has an **optional** portfolio requirement at the Advanced Diploma level. It is not essential for a candidate to complete a portfolio successfully in order to be awarded the Advanced Diploma in Telecommunications and Electronic Engineering.

An optional portfolio of evidence has been selected for this particular IVQ because a portfolio gives the candidate the opportunity to provide a range of evidence to show achievement in the practical skills that are required at this level. The portfolio of evidence may be particularly useful if candidates hope to progress to university, or are seeking recognition from professional associations such as the various Engineering Councils. Candidates who do successfully complete a portfolio for this IVQ will have their success certified by City & Guilds.

To be successful, the portfolio must:

- ✓ include enough evidence to show competence
- ✓ include evidence of an appropriate level – as this portfolio is evidence for the Advanced Diploma award, we mean evidence that shows that a person has skills and knowledge consistent with being able to work in a job that includes supervising others and giving them guidance. As a reminder, look at the City & Guilds structure of awards, which you will find in many of our publications, and note the description for level 4 or Advanced Technician Diploma.

You can find information about the portfolio for the Advanced Diploma in Telecommunications and Electronic Engineering syllabus.

The description of the portfolio requirements begins with a brief description of the overall requirements for the portfolio.

**The purpose of the portfolio is to provide a record of work activities, evidence and assessment supporting a candidate's claim to having competence....** This means that the portfolio is intended to provide additional evidence to that provided by examination passes. The portfolio should contain evidence that the candidate can perform activities represented by the knowledge requirements in the syllabus.

**The portfolio should be well laid out** – ‘well laid out’ means the portfolio should be clearly labelled and divided into sections so that a person looking for evidence to support competence in a particular topic, for example installing a telephone exchange, can use the label to find the evidence straight away, without needing to look through the whole portfolio.

**It is important that all pieces of evidence and forms are appropriately marked, referenced and filed within the portfolio.** A number of references may be given, but references should always include the specific objective references of the knowledge requirements in the syllabus. You could do this in the form of a table, as in the example (Fig 17) that follows, and place the table with the evidence, which may take the form of a series of photographs showing the preparation of a completed product such as the installation of a telephone exchange.

Portfolio evidence	Objectives demonstrated
Series of photographs showing preparation for, and installation of a small telephone exchange, with a written description of activities	Knowledge requirements  31.1, 31.2

(Fig 10)

The portfolio of evidence for the Advanced Diploma in Telecommunications and Electronic Engineering must be divided into two clear sections. You can find the requirements for each section in the syllabus. Make sure you read this, and make sure every candidate has a copy of these.

- ✓ Make a copy of the instructions for preparing the portfolio and give one to each candidate
- ✓ Discuss the instructions with each candidate individually, or with the class as a group, and make sure that everyone understands what is required.

Tutors should give help and guidance to ensure that each candidate is completing a portfolio correctly. We also recommend that:

- ✓ Portfolios are kept in a safe and secure place to prevent loss.
- ✓ Candidates think about what they will include in their portfolio at the beginning of the teaching programme.
- ✓ Candidates collect evidence for the portfolio throughout the teaching programme. Do not under-estimate the time needed to do this properly.
- ✓ Candidates select the best evidence, with the tutor's help, where there is more than one piece of evidence to support achievement of the objectives.
- ✓ You make a checklist to make sure every portfolio covers all the required objectives. This is most important because you will need this to assess the portfolios.

Section 1 of the portfolio is for the evidence that a candidate collects during the teaching programme.

Section 2 of the portfolio is used to contain additional evidence that can be used to support a candidate's claim to be competent in the required areas. We have given a list of suitable evidence that could be put into section 2. Some of this evidence can come from other sources and does not have to be part of the teaching programme you are running.

For example, if a candidate already has certificates from elsewhere you could include these provided they recognise achievement at the appropriate level. In this case, school-leaving certificates for passing mathematics examinations would not be suitable evidence for section 2 because the candidate for the Advanced Diploma award must have skills and knowledge far beyond those measured in school. A certificate awarded by an organisation recognised by the American Society of Certified Engineering Technicians, for example through the NICET certification programme may be appropriate because it recognises standards that are normally reached after leaving school and after completing a full time training programme.

Note that some professional associations, for example the UK Engineering Council, specify activities that must be completed for recognition, such as a project. You must contact the individual associations to find out their specific requirements. You can use these activities as part of section 2 of the portfolio.

For both sections of the portfolio there is no minimum or maximum number of items to be included but every portfolio

must contain evidence to support all of the required performance outcomes (or objectives) listed in the advanced diploma syllabus.

Unlike a project, where you may use a marking scheme to give credit for achievement, a portfolio is not marked in the traditional sense.

To assess a portfolio it is necessary to look at all the evidence in the portfolio and make sure that it is:

- ✓ Complete. The portfolio for the Advanced Diploma in Telecommunications and Electronic Engineering must include evidence to support the achievement of all of the syllabus objectives. If evidence is missing the portfolio is not complete and cannot be given a 'pass'.
- ✓ Authentic. The evidence in the portfolio must clearly be the candidate's own work. It is your responsibility to check this and to make sure a visiting verifier can also see that the work is the candidate's own work.
- ✓ Relevant and reliable. This means that the evidence in the portfolio must relate to the objectives in the advanced diploma syllabus. It also means that it must clearly show what the candidate can do at the present time. It must show what you would expect the candidate to be able to do, un-aided in employment. You may include evidence of work that was completed a long time ago, but if you do you must ask the question 'Is this still relevant?' The candidate may now be capable of better work, or may not have recently demonstrated competence in the activities represented by the evidence.

If all the above criteria have been met the portfolio should be considered complete and ready for review by the visiting verifier.

The next section of Appendix A describes our procedures for submitting the portfolio and assessment of the portfolio by the visiting verifier.

After the portfolios for the Advanced Diploma in Telecommunications and Electronic Engineering have been completed and assessed for completeness and achievement of the required standards, you must do the following:

- ✓ Keep them somewhere secure so that the visiting verifier can look at them, and they can be made available if a candidate needs them for an interview. Make sure your completed evaluation (pass or fail) is with each portfolio, together with any notes you have made to justify your decision.
- ✓ Make a record of each candidate's result.
- ✓ Prepare for the visiting verifier's visit by ensuring that all the portfolios are clearly named and labelled, and that your proposed results are clearly documented. You will need to put the results for the portfolios on Form S. You may do this before the visiting verifier visit, but remember that the visiting verifier must agree your proposed results.

A visiting verifier is required for the portfolio part of the Advanced Diploma in Telecommunications and Electronic Engineering programme. The visiting verifier is particularly responsible for ensuring that the outcomes of practical work meet our standards and to ensure that you are assessing portfolios in a way that is

consistent with other centres. This is to ensure that standards are the same in all our centres.

The visiting verifier should see some of the portfolios, but does not have to see them all. The opportunity to look at the completed portfolios will probably come towards the end of your teaching programme. We would suggest, however, that you arrange the visiting verifier's visit so that other activities can take place on the same day – for example, seeing candidates undertaking practical work that is part of the evidence in the portfolios.

The visiting verifier needs to agree your results for the portfolio. The visiting verifier is not responsible for assessing the portfolios. You should be prepared to show the visiting verifier any and every portfolio, but as a guide you should always select:

- ✓ the best portfolio or portfolios
- ✓ all the portfolios about which you are unsure whether they are pass or fail – the visiting verifier can help you agree a result for these
- ✓ any portfolio you believe does not meet the criteria for 'pass'; this allows you to get a second opinion.

At the end of the visiting verifier's visit you should be able to complete Form S with the results for the portfolio components of the Advanced Diploma in Telecommunications and Electronic Engineering. The visiting verifier can then countersign Form S before it is sent to us. You must not send portfolios to us with Form S.

After the visiting verifier's visit you should keep the portfolios for a further six months. Occasionally we may also ask to see the portfolios. This will be the case if there is a query about the result. If candidates need their portfolios for an interview, you should agree arrangements for their return after the interview, until the period of six months has passed.

In the syllabus for the Advanced Diploma in Telecommunications and Electronic Engineering, you will see a checklist of tasks for which the centre is responsible.

**You must not send mark sheets to City & Guilds. You should only send Form S with the agreed results, countersigned by the visiting verifier.**

**The visiting verifier does not have to see all the portfolios. A representative sample is sufficient.**

**The portfolio must be kept for six months at the centre.**



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