



# **PIABC LEVEL 5 DIPLOMA IN PACKAGING TECHNOLOGY**

Qualification Number: 610/0740/7

## **Summary Specification**

Created: 15 February 2023

## **INTRODUCTION**

PIABC Level 5 Diploma in Packaging Technology (QN: 610/0740/7) is a nationally recognised packaging qualification. This third version of the PIABC Limited (PIABC) qualification was reviewed and updated in 2022 to ensure that it remained current and appropriate for the needs of those employed within the packaging industry and associated industries.

## **PURPOSE**

Its main purpose is to provide learners with a broad knowledge of the principles, materials, processes and other elements of packaging production and use. Those achieving the Diploma will be able to apply this knowledge to solving problems and making decisions associated with the technical and aesthetic performance, cost, safety and legality of packaging materials and packed products.

Success in this qualification prepares students for progression in the packaging industry to a position where they can assume responsibility for packaging in a company at any point in the supply chain.

## **GENERAL OUTCOMES**

The general objectives of the PIABC Level 5 Diploma in Packaging Technology (QN: 610/0740/7) are to:

1. Provide those employed, or who wish to be employed in the packaging and related industries with the skills, knowledge and understanding to underpin and enhance job experience.
2. Provide learners with a portable qualification to enable job movement throughout the industry.
3. Provide learners with a means of progression to higher level qualifications, e.g. MSc, MBA.
4. Provide employers throughout the packaging and related industries with a firm basis for judging suitability of candidates.
5. Raise the status of those employed in the packaging and related industries.

## **TARGET GROUP**

This Level 5 qualification is appropriate for those wanting to enhance their employment and progression opportunities in the packaging and related industries.

There are thus two broad target groups:

1. People currently employed in parts of the industry who want to broaden their knowledge and understanding and take on greater levels of responsibility. Due to the diverse nature of the packaging and related industries, it is difficult to define this target group in terms of precise job functions.
2. People who are not currently employed in the industry, who may be following courses in associate subject areas such as packaging design, food science/technology, materials science/engineering, and logistics, will find that this programme broadens the scope of their studies.

## **ENTRY REQUIREMENTS**

As a guide for entry onto programmes, candidates will normally be expected to have a minimum attainment of:

- 1 GCE A level and 5 GCSEs at grade A – C, including one science subject, plus the key skills of numeracy, communication and information technology;
- PIABC Level 3 Certificate in Packaging.

Alternatively, candidates should be able to clearly demonstrate, for example through experience in the packaging industry, which they are likely to succeed in the programme of study.

For candidates where English is not the candidate's first language, PIABC requests that a candidate provides evidence of their command of English before commencing the PIABC Level 5 Diploma in Packaging Technology (QN: 610/0740/7). PIABC's experience has shown that Learners who are fully proficient in English are best placed to successfully complete their programme.

## **PROGRESSION**

Success in this qualification prepares students for progression in the packaging industry to a position where they can assume responsibility for packaging in a company at any point in the supply chain.

## **STAFFING**

It is expected that staff involved with the delivery of the course will be appropriately qualified and/or experienced in packaging. The PIABC approval process requires prospective centres to provide details of the staff involved in delivery and assessment including their qualifications and relevant training/employment experience, plus staff development arrangements. Whilst these details are passed on to the external moderator appointed by PIABC, it is the Centre's responsibility to ensure tutors' qualifications are both bona fide and appropriate to the level of the qualification.

## **QUALITY ASSURANCE**

PIABC requires that each centre has a quality assurance and enhancement procedure in respect of the programme, and a means of monitoring its implementation.

There should be a team that is responsible for preparing an annual self-assessment of the programme and for monitoring the improvement measures resulting from this.

This self-assessment process should use evidence from different sources including:

- Candidate self-evaluation
- The views of external individuals and organisations, for example those companies sending learners
- Staff working on the award

In addition, it is also expected that there will be an internal moderation procedure to ensure standardisation of unit delivery. This will include the following elements:

- Classroom observation
- Peer review of award materials
- Moderation of any internally assessed elements

There should be a named and appropriately qualified individual (Centre co-ordinator) who has the necessary authority, with whom the awarding body can liaise directly on all matters of management, administration, and quality assurance.

## **EXTERNAL MODERATION**

PIABC will appoint external centre monitors to undertake external quality assurance activities with the centres in order to ensure the maintenance of standards of quality.

## **PROGRAMME ORGANISATION**

It is anticipated that the qualification will require a minimum of 107 guided learning hours for satisfactory completion.

The organisation of the award is at the discretion of the Centre and will consider the aims, aspirations, and experience of the candidates.

Centres are encouraged to choose the most suitable curriculum model for their candidates. Whilst the sequential delivery of units is a possibility and may provide the most straightforward way of determining completion of individual units, it may be that some degree of integration of units will

occur, or that other methods of delivery are more appropriate to meet the needs of candidates. It should be noted however that each unit will be individually assessed.

Centres must ensure that adequate arrangements are in place for supporting candidates. This could be either through separate tutorial sessions or through the use of time within structured study sessions. Centres using on-line or other forms of open learning must ensure that appropriate tutorial support is provided for candidates.

In relevant circumstances, centres are recommended to provide information and guidance to their candidates on the availability and type of employment the programme may lead to and on the progression routes available for further education and training in packaging.

## **GUIDANCE ON LEARNING AND TEACHING STRATEGY, METHODS AND ASSESSMENT**

Packaging technology is a practical subject, based on theoretical principles. As far as possible, it is important that the course is taught by relating the underlying theory to practical examples and applications. Two factors which will help in this regard are:

1. The use of lecturers with direct experience in the packaging and related industries. Specifically, for “Packaging Materials and Components”, lecturers with experience in the relevant packaging manufacturing (converter) sector are likely to offer the most appropriate level of practical knowledge. This must, of course, be balanced against a sound understanding of the theoretical principles, as anecdotal experience alone is unlikely to meet the requirements of the course.
2. Factory visits should be undertaken, to packaging manufacturers and users where learners can see packaging processes and make the link between theoretical principles and practical applications. Familiarity with different packaging settings will be assumed in elements of the qualification’s assessment. DVD illustrations of processes should also be used as part of the teaching regime. A further and invaluable source of information is the Internet and there are many web sites which demonstrate important aspects of packaging manufacture and use. Lecturers should be encouraged to use this material, always making sure due acknowledgment is given to the source.

Whilst all units are designed to be “stand alone” some items for example sustainability, quality and legislation appear as common themes across more than one unit. This should be recognised by tutors and links made in those cases where candidates are working across more than a single unit.

Those learners employed in the packaging and related industries, will come to the course with varying levels of existing knowledge and/or practical experience of some parts of the syllabus. Lecturers should utilise this, through group work and other structured interactive activities, thus encouraging the sharing of knowledge which has the potential to lead to a high level of understanding.

The relation of theory and practice is a theme that will be reflected in the assessments for each unit and for the programme as a whole. Therefore, in structured learning and individual work, candidates should be aware of the requirement to develop a practical dimension to their understanding.

## **REASONABLE ADJUSTMENTS**

Please refer to “*Access to Assessment – Arrangements for Candidates Needing Reasonable Adjustments, Special Consideration and/or Extenuating Circumstances in the Assessment Process*” document for more information. A copy is available from the PIABC team at [piabc@iom3.org](mailto:piabc@iom3.org).

In carrying out assessments, PIABC’s policy is to give all candidates equal opportunity to demonstrate attainment and to provide candidates with disabilities, learning difficulties and other problems the same access to assessment as other candidates.

Assessment arrangements may be varied however, where the standards permit, for candidates with particular requirements. These requirements may take the form of special condition/extenuating circumstances for candidates whose needs are covered by the Equality Act 2010 or extenuating circumstances for those whose needs result from temporary disability or indisposition such as short-term illness.

In general, variation in assessment arrangements may be needed for physical disability, visual impairment, hearing impairment, specific learning difficulty, medical conditions, and use of English as a second language.

The nature of any special arrangements depends largely upon the qualification being followed and the assessment strategy employed. For scheduled fixed date examinations, then arrangements must be agreed directly with PIABC. For assessments at Level 3 and above, centres must write to PIABC to request concessions at least two months before the assessment. Concessions will be limited by specification and assessment requirements and supporting evidence will be required.

## **QUALIFICATION LEVEL**

PIABC Level 5 Diploma in Packaging Technology (QN: 610/0740/7) is a Level 5 qualification.

### **Level 5 Descriptor**

#### **Knowledge descriptor (the holder...)**

- Can analyse, interpret and evaluate relevant information, concepts and ideas.
- Is aware of the nature and scope of the area of study or work.
- Understands different perspectives, approaches or schools of thought and the reasoning behind them

#### **Skills descriptor (the holder can...)**

- Determine, adapt and use appropriate methods, cognitive and practical skills to address broadly defined, complex problems.
- Use relevant research or development to inform actions.  
Evaluate actions, methods and results.

*Source: Ofqual Handbook: General Conditions of Recognition (Updated 12/05/2022)*

## **QUALIFICATION STRUCTURE**

In designing the diploma, the unit design that each unit has an informative title, a level, a credit value, learning outcomes and assessment criteria have been applied. The assessment process is based on those learning outcomes and assessment criteria. The learning and teaching strategy must be designed so that candidates have the opportunity to meet the learning outcomes in an effective manner by demonstrating that they can achieve the assessment criteria.

The PIABC Level 5 Diploma in Packaging Technology (QN: 610/0740/7) is divided into three units:

- Unit 1 - Understand the role and functions of packaging
- Unit 2 - Understanding packaging materials and components
- Unit 3 - Understand the management of packaging, production, and business processes

## UNIT CONTENT

- Unit 1 - Understand the role and functions of packaging

The learning outcomes for this unit are:

- Understand the role, functions, and impact of packaging in the world today.
- Understand the structure and interactions of elements in the packaging supply chain from raw materials to end use and disposal.
- Understand how active and intelligent packaging technologies can enhance traditional packaging methodologies.
- Understand how packaging complies with regulatory practices.
- Understand the factors that impact on environmental sustainability of packaging.
- Understand how packaging communicates and satisfies customer needs.

- Unit 2 - Understanding packaging materials and components

The learning outcomes for this unit are:

- Understand the properties and manufacture of glass packaging.
- Understand the properties and manufacture of metal packaging.
- Understand the properties and manufacture of fibre-based packaging.
- Understand the properties and manufacture of plastic packaging.
- Understand adhesives & adhesive properties.
- Understand the manufacture and use of labels.
- Understand the application and use of closure systems.
- Understand printing and decoration processes used in packaging.
- Understand how materials are combined to achieve required properties.

- Unit 3 - Understand the management of packaging, production, and business processes

The learning outcomes for this unit are:

- Understand the packaging design and development process.
- Understand packaging machinery and packing line operations.
- Understand quality and business management in packaging.

## ASSESSMENT

This qualification is assessed by four 2-hour examinations and one 5,000-word written project.

## QUALIFICATION CERTIFICATION

The full qualification is available at *Pass*, *Merit* or *Distinction* to candidates who successfully complete all the assessments.

## FURTHER INFORMATION

Please contact PIABC Limited directly at:

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