



National Unit specification: general information

Unit title: Flour Confectionery Processes (SCQF level 6)

Unit code: FV01 12

Superclass: NE

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Summary

The purpose of this Unit is to enable the candidate to produce a range of flour confectionery products using ingredients and processes they have selected. Candidates will develop knowledge of a wide range of the processes and ingredients and compare them. They will learn how to adjust recipes and ingredients to obtain the best results.

This Unit is suitable for candidates who wish to develop their Skills and Knowledge in flour confectionery and for those who desire employment within the industry. It is also suitable for school leavers and adult returners or for those working in the industry with no formal qualifications. This is a mandatory Unit within the National Certificate in NC Bakery (SCQF level 5) but can also be used as a freestanding Unit.

Outcomes

- 1 Describe the main methods of flour confectionery processes and the functions of the ingredients of a range of products.
- 2 Compare the principal processes of flour confectionery manufacture.
- 3 Establish and apply the tolerances in the main methods of flour confectionery processes and ingredients, within recognised parameters.
- 4 Demonstrate health, safety and hygienic working practices.

Recommended entry

While entry is at the discretion of the centre, candidates would normally be expected to have attained the following, or equivalent: National Progression Award in Bakery G9T5 44.

General information (cont)

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Credit points and level

2 National Unit credits at SCQF level 6 (12 SCQF points at SCQF level 6*)

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

- ◆ Critical Thinking at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

National Unit specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

Outcome 1

Describe the main methods of flour confectionery processes and the functions of the ingredients of a range of products.

Performance Criteria

- (a) Describe the requirements of time and temperature controls required for flour confectionery processes.
- (b) Describe the main methods of flour confectionery processes.
- (c) Describe the functions of ingredients in flour confectionery manufacture.

Outcome 2

Compare the principal processes of flour confectionery manufacture.

Performance Criteria

- (a) Select the correct flour confectionery methods and ingredients for a variety of product types
- (b) Describe the advantages and disadvantages of the various methods and ingredients used.
- (c) Explain the tolerances required to control flour confectionery processes and ingredients in a range of products.

Outcome 3

Establish and apply the tolerances in the main methods of flour confectionery processes and ingredients, within recognised parameters.

Performance Criteria

- (a) Use the correct mixing methods, ingredient types and quantities according to instructions to make a range of flour confectionery products.
- (b) Establish and alter tolerances correctly in a range of flour confectionery products, within recognised parameters.

National Unit specification: statement of standards (cont)

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Outcome 4

Demonstrate health, safety and hygienic working practices.

Performance Criteria

- a) Wear appropriate protective clothing for the professional bakery.
- b) Operate commercial bakery equipment safely.
- c) Work safely and hygienically at all times.

Evidence Requirements for this Unit

Candidates are required to give written/oral/recorded and performance evidence that they have achieved all of the Performance Criteria detailed within the Outcomes of the Unit. Compliance with Health Safety and Hygiene legislation is required at all times during practical work.

Outcome1

Written/oral /recorded evidence is required which includes:

- ◆ A description of the principal methods of flour confectionery processes
- ◆ An explanation of the time and temperature controls required for flour confectionery processes
- ◆ A description of the functions of ingredients in flour confectionery manufacture

Flour confectionery to include: cake batters, scones/powder goods and pastry products.

Ingredients to include: sugars and liquid sugars, fats/oils/corn flour/rice flour/wheat flour, eggs and liquids, with the correct quantities identified for each product type.

Methods to include: sugar batter/flour batter/emulsion method, amalgamation methods and hot and boiled paste.

The evidence for Outcome 1 must be obtained under closed-book supervised conditions.

Outcome 2

Performance/product/written/oral/recorded evidence is required which includes:

- ◆ Selection of the correct recipes, ingredients, equipment and mixing methods to produce a minimum of 5 flour confectionery products.
- ◆ One of each product type from the following list must be produced:
 - Plain cakes
 - Fruit cakes
 - Sponges
 - Pastries including short, sweet, savoury choux and puff
 - Powder goods including scones and buns.

National Unit specification: statement of standards (cont)

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- ◆ A description of the advantages and disadvantages of the ingredients and production method used for each product.
- ◆ Reasons for using the method of production for each selected product.
- ◆ An explanation of tolerances required during ingredient tempering, temperature, mixing times and speeds for each selected product.

Outcome 3

Performance/product evidence is required which includes:

- ◆ Making the flour confectionery products selected in Outcome 2 according to recipe, ingredient quantity and methods instructed, to industry standard.
- ◆ Applying the established tolerances used in flour confectionery processes.
- ◆ Altering the required tolerances in a range of cakes, sponges, pastries and powder good products, within the recognised parameters, to produce items to industry standard.

The evidence for Outcomes 2, 3 and 4 should be obtained under supervised conditions on one occasion throughout the Unit for each product type. The opportunity for re-assessment will be given.

Outcome 4 – Performance evidence

Candidates are required to provide evidence by performance that they understand health and safety and hygiene legislation by:

- ◆ Wearing appropriate protective clothing for the professional bakery whilst carrying out the tasks in Outcomes 2 and 3
- ◆ Complying with all relevant health and food safety legislation whilst carrying out the tasks in Outcomes 2 and 3
- ◆ Using appropriate equipment safely and hygienically whilst carrying out the tasks in Outcomes 2 and 3

National Unit specification: support notes

Unit title: Flour Confectionery Processes (SCQF level 6)

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 80 hours.

Guidance on the content and context for this Unit

This Unit is a mandatory Unit within the National Certificate in NC Bakery (SCQF level 5), but can also be taken as a free-standing Unit.

This Unit is aligned to the following *Improve Food and Drink* Sector Skills Council National Occupational Standard (NOS) Units:

- ◆ 292 Produce laminated pastry
- ◆ 306 Prepare and mix craft flour confectionery
- ◆ 309 Deposit and fry hot plate products
- ◆ 312 Oven bake craft flour confectionery

In this Unit candidates are required to apply the methods of flour confectionery processes together with the knowledge of the factors that affect the processes and how they are produced in a range of products and processes.

They will learn how to compare the principal methods of flour confectionery and ingredients and their tolerances in cake batters, scones/powder goods and pastry products. They will then select the correct methods and ingredients together with their quantities for product type. They will describe the advantages and disadvantages of the various methods and ingredients used.

Candidates will learn the tolerances required to control flour confectionery processes and ingredients. They will then select the correct flour confectionery processes and ingredients for a range of cakes, pastries, scones and powder goods. This will allow them to describe the requirements of time and temperature controls required during ingredient tempering, mixing times, speeds and temperatures together with an appropriate selection of equipment and implements for the given tasks.

In Outcome 3 candidates will apply their selection of mixing methods, ingredient types and quantities when making the following:

- ◆ cake and sponge; plain and fruit; various mixing methods; sugar/ flour batter, amalgamation, emulsified
- ◆ pastry; short, sweet, savoury, choux and puff; cold, hot and boiled paste methods
- ◆ powder goods; scones and buns

They will make all of these according to instructions, to cover the range of products currently used in the industry. During this process they will be able to alter and identify the required tolerances in a range of cakes, pastries and powder good products all within the recognised parameters.

National Unit specification: support notes (cont)

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Safety and hygiene regulations and safe working practices and procedures should be observed at all times.

Candidates would benefit from having Knowledge and/or Skills in baking or cooking.

This Unit could be integrated with

- ◆ *Craft Baking* (SCQF level 5)
- ◆ *Aeration* (SCQF level 5)
- ◆ *Measuring and Mixing* (SCQF level 5)
- ◆ *Post Baking processes* (SCQF level 5)

This Unit should prepare candidates for progression to SCQF level 6 *Professional Cookery and Bakery* Units and/or other Bakery Units such as *Prepare and Bake Dough Products* at SCQF level 5.

Guidance on learning and teaching approaches for this Unit

For Outcome 2 and 3 candidates would benefit from:

- ◆ Working as a class to explore the minimum/maximum tolerances within the context of the various flour confectionery processes.
- ◆ Working in small groups to produce a variety of products from particular processes.
- ◆ Working individually to improve a recipe within the context of a particular flour confectionery process.

Guidance on approaches to assessment for this Unit

The following approaches to assessment are suggested:

Outcome 1: Restricted response questions should be used to describe the principles of flour confectionery processes and the tolerances within the processes.

Outcome 2: Practical exercises should be used to show the tasks required to display an understanding of flour confectionery processes and recipe tolerances.

Outcome 3: Practical activity. The candidate could also have a comprehensive record of all the activities successfully carried out to produce bakery products using all of the stated ingredients and processes. The logbook is the recording of all the information gathered in Outcome 2 together with any required alteration to the material quantities or the processes to successfully make the products.

The evidence for Outcomes 2 and 3 should be obtained under supervised conditions on one occasion throughout the Unit for each product type.

Time should be allowed for any necessary re-assessment.

National Unit specification: support notes (cont)

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Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

Opportunities for developing Core Skills

In this Unit candidates will produce a range of flour confectionery products using ingredients and processes they have selected. Candidates will develop knowledge of a wide range of the processes and ingredients and compare them. They will learn how to adjust recipes and ingredients to obtain the best results. Candidates will:

- ◆ Explain the properties of a variety of ingredients and select the most appropriate justifying their selection.
- ◆ Explain the advantages and disadvantages of a variety of baking processes and justify their selection.
- ◆ Bake a variety of flour confectionery products in groups.
- ◆ Calculate tolerances in recipes and adjust these as necessary explaining their reasons for doing so.

As they are doing this Unit, candidates will be developing aspects of the Core Skills in *Problem Solving, Communication, Numeracy and Working with Others*.

Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website www.sqa.org.uk/assessmentarrangements

History of changes to Unit

Version	Description of change	Date
02	Core Skills Component Critical Thinking at SCQF level 5 embedded.	29/09/2011
03	Outcome 1, Evidence Requirements clarified: ingredients separated from methods.	09/01/2012

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