

National Technical and Vocational Qualification Framework

NTVQF

National Competency Standard

For

Baking

NTVQ, Level 2 and 3



Bangladesh Technical Education Board

Agargoan, Sher-E-Bangla Nagar

Dhaka-1207

Table of Contents

INTRODUCTION.....	4
BANGLADESH NTVQF WITH JOB CLASSIFICATIONS	5
ANNEX 1: NTVQF LEVEL DESCRIPTORS.....	6
<u>NATIONAL COMPETENCY STANDARDS FOR NATIONAL CERTIFICATE IN BAKING(LEVELS 2 & 3).....</u>	7
COURSE STRUCTURE FOR NATIONAL CERTIFICATE IN BAKING (NTVQF LEVEL 2)	9
COURSE STRUCTURE FOR NATIONAL CERTIFICATE IN BAKING (NTVQF LEVEL 3)	10
<u>LIST OF ABBREVIATIONS</u>	11
GENERIC UNITS	12
GN1001A1 - USE BASIC MATHEMATICAL CONCEPTS.....	13
GN1002A1: APPLY OSH PRACTICES IN THE WORKPLACE	16
GN2003A1: USE ENGLISH IN THE WORKPLACE.....	19
GN2004A1: OPERATE IN A SELF-DIRECTED TEAM.....	22
GN2005A1: PRESENT AND APPLY WORKPLACE INFORMATION	25
SECTOR SPECIFIC UNITS.....	28
FODSS1006A1: FOLLOW QUALITY AND FOOD SAFETY PROGRAMS	29
FODSS1007A1: FOLLOW OSH POLICIES AND PROCEDURES IN THE FOOD INDUSTRY	34
FODSS1008A1: WORK IN THE FOOD INDUSTRY	37
OCCUPATION SPECIFIC UNITS	40
FODSS1009A1: INTERPRET MIXING SPECIFICATIONS FOR PRODUCTS (ONLY IN BAKERY).....	41
JOB ROLE SPECIFIC ELECTIVES - BREAD.....	44
FODBAK1010A1: PRODUCE BREAD DOUGH.....	45
FODBAK2011A1: SCALE AND MOULD DOUGH FOR INTERMEDIATE PROOF.....	48
FODBAK2012A1: CONDUCT FINAL MOULD AND FINAL PROOF	51
FODBAK1013A1: BAKE BREAD	54
FODBAK3030A1: PREPARE SPECIAL BREAD DOUGH FOR BAKING	57
FODBAK3031A1: BAKE SPECIAL BREAD.....	61
FODBAK3014A1: INSPECT QUALITY, DIAGNOSE & RESPOND TO PRODUCT AND PROCESS FAULTS (BREAD).....	65
JOB ROLE SPECIFIC ELECTIVES – PASTRY	69
FODBAK1015A1: PRODUCE PASTRY.....	70
FODBAK2016A1 - PREPARE PASTRY FILL	74
FODBAK2017A1 : FORM AND FILL PASTRY PRODUCTS	78
FODBAK1018A1: BAKE PASTRY PRODUCTS	83
FODBAK3032A1: PREPARE SPECIAL PASTRY DOUGH AND FILLS FOR BAKING	87
FODBAK3033A1: BAKE SPECIAL PASTRY PRODUCTS.....	92
FODBAK3019A1: INSPECT QUALITY, DIAGNOSE AND RESPOND TO PROCESS AND PRODUCT FAULTS (PASTRY).....	96
JOB ROLE SPECIFIC ELECTIVES - CAKE	100
FODCAK1020A1: PRODUCE CAKE BATTER	101
FODBAK2021A: PRODUCE CAKE FILL	105
FODBAK1022A1: BAKE CAKE.....	109

FODBAK2023A1 : DECORATE CAKES.....	113
FODCAK3034A1: PREPARE SPECIAL CAKE BATTER AND FILLS FOR BAKING	117
FODBAK3035A1: BAKE SPECIAL CAKES	122
FODBAK3036A1 – DECORATE SPECIAL CAKES	127
FODBAK3024A1: INSPECT QUALITY, DIAGNOSE AND RESPOND TO PROCESS AND PRODUCT FAULTS (CAKE).....	132
JOB ROLE SPECIFIC ELECTIVES - BISCUIT.....	137
FODBAK1025A1: PRODUCE BISCUIT DOUGH	138
FODBAK2026A1: FORM BISCUITS.....	142
FODBAK1027A1: BAKE BISCUITS	146
FODBAK2028A1: COOL, DECORATE AND STACK BISCUITS	150
FODBAK3037A1 – PREPARE SPECIAL BISCUIT DOUGH FOR BAKING.....	153
FODBAK3038A1: BAKE SPECIAL BISCUIT	157
FODBAK3039A1: COOL, DECORATE AND STACK SPECIAL BISCUITS	161
FODBAK3029A1: INSPECT QUALITY, DIAGNOSE AND RESPOND TO PROCESS AND PRODUCT FAULTS (BISCUIT)	164

Introduction

These Competency Standards were developed by the Standards and Curriculum Development Committee (SCDC) **for the occupation 'Baker'** that was established under the sub-sector Industry Skills Council (ISC) and with the assistance of the Technical and Vocational Education Reform project. This project is funded by the European Union, the International Labour Organization and the Government of Bangladesh.

The competency standards are the foundation on which new competency based curriculum will be developed that responds better to the needs of industry for skilled workers. The members of the SCDCs are primarily from industry but with representatives from the Bangladesh Technical Education Board (BTEB) and the Directorate of Technical Education (DTE), Bureau of Manpower Employment and Training (BMET), NGO, and Private Training providers. Persons who will successfully complete the new TVET programs based on these competency standards will receive a qualification in the new National Technical and Vocational Qualification Framework (NTVQF).

Endorsed by

Industry Skills Council

Date:

Bangladesh Technical Education Board

Date:

Bangladesh NTVQF with Job Classifications

NTVQF LEVELS	EDUCATION SECTORS			Job Classification
	Pre-Vocation Education	Vocational Education	Technical Education	
NTVQF 6			Diploma in engineering or equivalent	Middle Level Manager /Sub Assistant Engr. etc.
NTVQF 5		National Skill Certificate 5 (NSC 5)		Highly Skilled Worker / Supervisor
NTVQF 4		National Skill Certificate 4 (NSC 4)		Skilled Worker
NTVQF 3		National Skill Certificate 3 (NSC3)		Semi-Skilled Worker
NTVQF 2		National Skill Certificate 2 (NSC 2)		Medium-Skilled Worker
NTVQF 1		National Skill Certificate 1 (NSC 1)		Basic Skilled Worker
Pre-Voc 2	National Pre-Vocation Certificate NPVC 2			Pre-Vocation Trainee
Pre-Voc 1	National Pre-Vocation Certificate 1 NPVC 1			Pre-Vocation Trainee

Annex 1: NTVQF Level Descriptors

NTVQF Level	Knowledge	Skill	Responsibility	Job Class.
6	Comprehensive actual and theoretical knowledge within a specific study area with an awareness of the limits of that knowledge.	Specialised and restricted range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems	- Manage a team or teams in workplace activities where there is unpredictable change - Identify and design learning programs to develop performance of team members	Supervisor / Middle Level Manager /Sub Assistant Engr. etc.
5	Very broad knowledge of the underlying, concepts, principles, and processes in a specific study area	Very broad range of cognitive and practical skills required to generate solutions to specific problems in one or more study areas.	- Take overall responsibility for completion of tasks in work or study - Apply past experiences in solving similar problems	Highly Skilled Worker / Supervisor
4	Broad knowledge of the underlying, concepts, principles, and processes in a specific study area	Range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information	- Take responsibility, within reason, for completion of tasks in work or study - Apply past experiences in solving similar problems	Skilled Worker
3	Moderately broad knowledge in a specific study area.	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools	Work or study under supervision with some autonomy	Semi-Skilled Worker
2	Basic underpinning knowledge in a specific study area.	Basic skills required to carry out simple tasks	Work or study under indirect supervision in a structured context	Medium Skilled Worker
1	Elementary understanding of the underpinning knowledge in a specific study area.	Limited range of skills required to carry out simple tasks	Work or study under direct supervision in a structured context	Basic Skilled Worker
Pre-Voc 2	Limited general knowledge	Very limited range of skills and use of tools required to carry out simple tasks	Work or study under direct supervision in a well-defined, structured context.	Pre-Vocation Trainee
Pre-Voc 1	Extremely limited general knowledge	Minimal range of skills required to carry out simple tasks	Simple work or study exercises, under direct supervision in a clear, well defined structured context	Pre-Vocation Trainee

National Competency Standards for National Certificate in Baking(Levels 2 & 3)

S. No.	Unit Code and Title		UoC Level	Nominal Duration (Hours)
Generic – Compulsory (5 UoCs required)				200
1.	GN1001A1	Use basic mathematical concepts	1	40
2.	GN1002A1	Apply OSH practices in the workplace	1	30
3.	GN2003A1	Use English in the workplace	2	70
4.	GN2004A1	Operate in a self- directed team	2	30
5.	GN2005A1	Present and apply workplace information	2	30
Sector SPECIFIC – Compulsory (3 UoCs required)				130
6.	FODSS1006A1	Follow quality and food safety programs	1	60
7.	FODSS1007A1	Follow OSH policies and procedures in the food industry	1	40
8.	FODSS1008A1	Work in the food industry	1	30
Occupation Specific – Compulsory (1 UoC required)				30
09.	FODSS1009A1	Interpret mixing specification for products	1	30
Sub Total for Non Job Role Specific UoCs				360
Job role Specific Electives (Complete any TWO of the following FOUR Elective Streams)				600
Bread (7 UoCs required)				300
10a	FODBAK1010A1	Produce bread dough	1	60
11a	FODBAK2011A1	Scale and mould dough for intermediate proof	2	40
12a	FODBAK2012A1	Conduct final mould and final proof	2	30
13a	FODBAK1013A1	Bake bread	1	30
14a	FODBAK3030A1	Prepare special bread dough for baking	3	70
15a	FODBAK3031A1	Bake special Bread	3	40
16a	FODBAK3014A1	Inspect quality, diagnose and respond to process and product faults (Bread)	3	30
Pastry (7 UoCs required)				300
10b	FODBAK1015A1	Produce pastry	1	60
11b	FODBAK2016A1	Prepare pastry fills	2	40
12b	FODBAK2017A1	Form and fill pastry products	2	30
13b	FODBAK1018A1	Bake pastry products	1	30
14b	FODBAK3032A1	Prepare special pastry dough and fills for baking	3	70

15b	FODBAK3033A1	Bake special pastry products	3	40
16b	FODBAK3019A1	Inspect quality, diagnose and respond to process and product faults (Pastry)	3	30
Cake (8 UoCs required)				300
10c	FODBAK1020A1	Produce cake batter	1	40
11c	FODBAK2021A1	Produce cake fill	2	30
12c	FODBAK1022A1	Bake cakes	1	30
13c	FODBAK2023A1	Decorate cakes	2	60
14c	FODBAK3034A1	Prepare special cake batter and fills for baking	3	40
15c	FODBAK3035A1	Bake special Cakes	3	30
16c	FODBAK3036A1	Decorate special cakes	3	40
17c	FODBAK3024A1	Inspect quality, diagnose and respond to process and product faults (Cake)	3	30
Biscuit (8 UoCs required)				300
10d	FODBAK1025A1	Produce biscuit dough	1	60
11d	FODBAK2026A1	Form biscuits	2	40
12d	FODBAK1027A1	Bake biscuits	1	30
13d	FODBAK2028A1	Cool, decorate and stack biscuits	2	30
14d	FODBAK3037A1	Prepare special biscuit dough for baking	3	50
15d	FODBAK3038A1	Bake special Biscuits	3	30
16d	FODBAK3039A1	Cool, decorate and stack special Biscuits	3	30
17d	FODBAK3029A1	Inspect quality, diagnose and respond to process and product faults (Biscuit)	3	30
Grand Total Nominal Learning Hours				960

NOTE. Two Elective streams are required. Electives could be any two of the following: Bread, Pastry, Cake or Biscuit

Course Structure for National Certificate in Baking (NTVQF Level 2)
(Bread/Pastry/Cake/Biscuit)*

S. No.	Unit Code and Title		UoC Level	Nominal Duration (Hours)
Generic (5 UoCs required)				200
1.	GN1001A1	Use basic mathematical concepts	1	40
2.	GN1002A1	Apply OSH practices in the workplace	1	30
3.	GN2003A1	Use English in the workplace	2	70
4.	GN2004A1	Operate in a self-directed team	2	30
5.	GN2005A1	Present and apply workplace information	2	30
Sector Specific (3 UoCs required)				130
6.	FODSS1006A1	Follow quality and food safety programs	1	60
7.	FODSS1007A1	Follow OSH policies and procedures in the food industry	1	40
8.	FODSS1008A1	Work in the food industry	1	30
Occupation Specific (Compulsory) (1 UoC required)				30
9.	FODSS1009A1	Interpret mixing specification for products	1	30
Nominal Learning Hours (Sub Total)				360
Job role Specific Electives (Any TWO of the following FOUR required)				320
Bread (4 UoCs required)				160
10a	FODBAK1010A1	Produce bread dough	1	60
11a	FODBAK2011A1	Scale and mould dough for intermediate proof	2	40
12a	FODBAK2012A1	Conduct final mould and final proof	2	30
13a	FODBAK1013A1	Bake bread	1	30
Pastry (4 UoCs required)				160
10b	FODBAK1015A1	Produce pastry	1	60
11b	FODBAK2016A1	Prepare pastry fills	2	40
12b	FODBAK2017A1	Form and fill pastry products	2	30
13b	FODBAK1018A1	Bake pastry products	1	30
Cake (4 UoCs required)				160
10c	FODBAK1020A1	Produce cake batter	1	40
11c	FODBAK2021A1	Produce cake fill	2	30
12c	FODBAK1022A1	Bake cakes	1	30
13c	FODBAK2023A1	Decorate cakes	2	60
Biscuit (4 UoCs required)				160
10d	FODBAK1025A1	Produce biscuit dough	1	60
11d	FODBAK2026A1	Form biscuits	2	40
12d	FODBAK1027A1	Bake biscuits	1	30
13d	FODBAK2028A1	Cool, decorate and stack biscuits	2	30
Total Nominal Learning Hours				680

Any **two** of the **four** electives is required for the award of National Certificate in Baking (Bread/Pastry/Cake/Biscuit) (NTVQF Level 2).

Course Structure for National Certificate in Baking (NTVQF Level 3)

(Bread/Pastry/Cake/Biscuit)*

S. No.	Unit Code and Title		UoC Level	Nominal Duration (Hours)
Job role Specific Electives (Any <u>TWO</u> of the following <u>FOUR</u> required)				280
Bread (3 UoCs required)				140
1a	FODBAK3030A1	Prepare special bread dough for baking	3	70
2a	FODBAK3031A1	Bake special Bread	3	40
3a	FODBAK3014A1	Inspect quality, diagnose and respond to product process faults (Bread)	3	30
Pastry (3 UoCs required)				140
1b	FODBAK3032A1	Prepare special pastry dough and fills for baking	3	70
2b	FODBAK3033A1	Bake special pastry products	3	40
3b	FODCAK3019A1	Inspect quality, diagnose and respond to product process faults (Pastry)	3	30
Cake (4 UoCs required)				140
1c	FODCAK3034A1	Prepare special cake batter and fills for baking	3	40
2c	FODBAK3035A1	Bake special Cakes	3	30
3c	FODBAK3036A1	Decorate special cakes	3	40
4c	FODBAK3024A1	Inspect quality, diagnose & respond to product process faults (Cake)	3	30
Biscuit (4 UoCs required)				140
1d	FODBAK3037A1	Prepare special biscuit dough for baking	3	50
2d	FODBAK3038A1	Bake special Biscuits	3	30
3d	FODBAK3039A1	Cool, decorate and stack special Biscuits	3	30
4d	FODBAK3029A1	Inspect quality, diagnose & respond to product process faults (Biscuit)	3	30
Total Nominal Learning Hours				280

Any **two** of the four electives is required for the award of National Certificate in Baking (Bread/Pastry/Cake/Biscuit)* (NTVQF Level 3).

List of Abbreviations

General

BMET – Bureau of Manpower Employment and Training
BSTI – Bangladesh Standard and Testing Institution
BTEB – Bangladesh Technical Education Board
DTE – Directorate of Technical Education
ILO – International Labour Organization
ISC – Industry Skills Council
NPVC – National Pre-Vocation Certificate
NTVQF – National Technical and Vocational Qualification Framework
SSDC – Standards and Curriculum Development Committee
TVET – Technical Vocational Education and Training
UoC – Unit of Competency

Occupation Specific Abbreviations

GAP – Good Agricultural Practices
GMP – Good Manufacturing Practices
HACCP – Hazard Analysis and Critical Control Points
MSDS – Material Safety Data Sheet
OSH – Occupational Safety and Health
PPE – Personal Protective Equipment
SOP – Standard Operating Procedures
SSOP – Sanitation Standard Operating Procedure

GENERIC UNITS

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	GN1001A1 - Use Basic Mathematical Concepts
Nominal Hours	40 hours
Unit Descriptor	This requires the knowledge, skill and attitude to apply mathematical methods such as addition, subtraction, multiplication, and division, among others, in the routine tasks of an organization.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable Training Components
1. Identify calculation requirements in the workplace	1.1 Calculation requirements are identified from <i>workplace information</i>
2. Select appropriate mathematical methods for the calculation	2.1. Appropriate <i>Mathematical methods</i> are selected to carry out the calculation. 2.2. <i>System and units of measurement</i> to be followed are determined.
3. Use basic mathematical concepts to calculate workplace calculation.	3.1. Calculations are completed using appropriate methods such as addition, subtraction, multiplication and division. 3.2. Systems and units of measurement for the task are applied to workplace calculation.
Range of Variables	
Variable	Range (May include but not limited to)
1. Equipment and tools	1.1 Calculator 1.2 Computer with office software
2. Mathematical methods	2.1. Addition 2.2. Subtraction 2.3. Division 2.4. Multiplication 2.5. Ratio on any types of real values (such as whole numbers, fractional numbers, percentages, numbers with exponents)
3. System and units of measurement	3.1. Measurement 3.2. Volume 3.3. Weight

	3.4. Mass 3.5. Density 3.6. Percentage 3.7. Length / Breadth / Thickness 3.8. Capacity 3.9. Time 3.10. Temperature 3.11. Budget, Pay/ Wages, Leave entitlements 3.12. Material usage 3.13. Speed 3.14. Costing
4. Workplace information	4.1 Project documents 4.2 Graphs 4.3 Charts 4.4 Tables 4.5 Spread sheets 4.6 Item price quotations 4.7 Equipment manuals
5. Budget	5.1 Budget of consumables 5.2 Calculation for software components 5.3 Hardware equipment 5.4 Maintenance budget of a set-up 5.5 Cost estimation
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Applied mathematical methods such as addition, subtraction, division and multiplication to workplace calculations.
2. Underpinning knowledge	2.1. Calculation requirements in the workplace 2.2. Select appropriate mathematical methods 2.3. Equipment and tools 2.4. Mathematical language, symbols and terminology 2.5. Application of units 2.6. Workplace information 2.7. Using arithmetic processes to find solutions to simple mathematical problems
3. Underpinning skill	3.1. Ability to identify calculation requirements from workplace information 3.2. Ability to select appropriate mathematical methods 3.3. Ability to use appropriate technology

	3.4. Ability to use mathematical language, symbols and terminology 3.5. Understanding of appropriate units of measurement (such as kg, meter) and application may include measurement, volume, weight, density, percentage etc. 3.6. Ability to include workplace information (project documents, graphs, charts, tables, spread sheets, item price quotations, equipment manuals) 3.7. Ability to use arithmetic processes to find solutions to simple mathematical problems 3.8. Ability to apply in the workplace.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources must be provided: 5.1 Tools, equipment and physical facilities appropriate to perform activities. 5.2 Materials, consumables to perform activities.
6 Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7 Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	GN1002A1: Apply OSH practices in the workplace
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to identify and apply OSH in the workplace. This also covers identifying, controlling and reporting OSH hazards, conducting of work in a safe manner, following emergency response procedure and maintaining and improving health and safety in the workplace.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable Training Components
1. Identify, control and report OSH hazards	1.1 Immediate work area is routinely checked for OSH hazards prior to commencing and during work. 1.2 Hazards and unacceptable performance are identified and corrective action is taken within the level of responsibility. 1.3 OSH hazards and incidents are reported to appropriate personnel according to workplace procedures. 1.4 Safety Signs and symbols are identified and followed
2. Conduct work safely	2.1. Apply OSH practices in the workplace. 2.2. Appropriate personal protective equipment (PPE) is selected and worn.
3. Follow emergency response procedures	3.1. Emergency situations are identified and reported according to workplace reporting requirements. 3.2. Emergency procedures are followed as appropriate to the nature of the emergency and according to workplace procedures. 3.3. Workplace procedures for dealing with accidents, fires and emergencies are followed whenever necessary within scope of responsibilities.
4. Maintain and improve health and safety in the work place	4.1 Risks are identified and appropriate control measures are implemented in the work area. 4.2 Recommendations arising from risk assessments are implemented within level of responsibility. 4.3 Opportunities for improving OSH performance are identified and raised with relevant personnel. 4.4 Safety records according to company policies are maintained.

Range of Variables	
Variable	Range (May include but not limited to)
1. Company policies	1.1. Job-related Standard Operating Procedures (SOPs) and OSH-specific procedures. Examples of OSH procedures include consultation and participation, emergency response, response to specific hazards, incident investigation, risk assessment, reporting arrangements and issue resolution procedures
2. Workplace procedures	2.1. OSH system and related documentation including policies and procedures 2.2. Standard Operating Procedures (SOPs) 2.3. information on hazards and the work process, hazard alerts, safety signs and symbols 2.4. Labels 2.5. Material Safety Data Sheets (MSDSs) and manufacturers' advice.
3. Hazards	3.1 OSH incidents include near misses, injuries, illnesses and property damage, noise, handling hazardous substances, other hazards 3.2 Working with and near moving equipment/load shifting equipment 4.3 Broken or damaged equipment or materials
4. Personal Protective equipment (PPE)	4.1 Goggles 4.2 Ear muffs 4.3 Ear plugs 4.4 Gloves 4.5 Clothing 4.6 Apron 4.7 Helmet 4.8 Boots
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Identified, controlled and reported OSH hazards 1.2 Followed work safety. 1.3 Followed emergency response procedures. 1.4 Maintained and improved health and safety in the workplace.
2. Underpinning knowledge	2.1. Personal protective equipment - Hand gloves, safety shoes, safety goggles, masks, apron, 2.2. Identification of tools and equipment 2.3. Hazardous events

	2.4. Tools, equipment, machinery and relevant accessories. 2.5. Communication 2.6. Job roles, responsibilities and compliance 2.7. Workplace laws
3. Underpinning skill	3.1. Ability to use the appropriate PPE. 3.2. Ability to identify tools and equipment. 3.3. Ability to quick response and to take safety precautions for different hazardous situations. 3.4. Ability to operate and use tools, equipment, machinery and accessories properly as per SOP (Company standards). 3.5. Ability to communicate with peers and supervisors. 3.6. Ability to apply in the workplace.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources must be provided: 5.1 Tools, equipment and physical facilities appropriate to perform activities. 5.2 Materials, consumables to perform activities.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	GN2003A1: Use English in the workplace
Nominal Hours	70 hours
Unit Descriptor	This unit specifies knowledge, skills and attitude the competency required to able to read, write and understand basic English in the workplace.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable Training Components
1. Read and understand workplace documents in English	1.1 Workplace documents are read and understood. 1.2 Visual information is interpreted.
2. Write simple routine workplace documents in English	2.1 Simple routine workplace documents are prepared using key words, phrases, simple sentences and visual aids where appropriate. 2.2 Key information is written in the appropriate places in standard forms.
3. Listen to conversation in English	3.1 Active listening in English language is demonstrated to the required workplace standard.
4. Perform conversation in English	4.1 Conversation is performed in English with peers, customers and management to the required workplace standard.
Range of Variables	
Variable	Range (May include but not limited to)
1. Workplace documents	1.1 Schedules and itineraries 1.2 Agenda 1.3 Simple reports such as progress and incident reports 1.4 Job sheets 1.5 Operational manuals 1.6 Brochures and promotional material 1.7 Visual and graphic materials 1.8 Standards 1.9 OSH information
2. Visual information	2.1 Signs 2.2 Maps 2.3 Diagrams 2.4 Forms

	2.5 Labels 2.6 Graphs 2.7 Charts
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical aspects of competency	1.1 Used basic English in the workplace 1.2 Read and understood workplace documents in English 1.3 Constructed simple routine workplace documents in English 1.4 Listened to conversation in English 1.5 Communicated with peers, customers and management using English to the required workplace standard
2. Underpinning knowledge	2.1. Read workplace documents in English 2.2. Write simple routine workplace documents in English 2.3. Listen to conversation in English 2.4. Perform conversation in English 2.5. Interaction skills (i.e., teamwork, interpersonal skills, etc.) 2.6. Job roles, responsibilities and compliances
3. Underpinning skill	3.1. Ability to read and understand workplace documents in English, using appropriate vocabulary and grammar, and standard spelling and punctuation. 3.2. Ability to write simple routine workplace documents in English, such as: Schedules and agendas, job sheets, operational manuals and brochures, and promotional material. 3.3. Ability in active listening in English language is demonstrated to the required workplace standard. 3.4. Ability to perform conversation in English with peers, customers and management, to the required workplace standard. 3.5. Work effectively with others: ○listening and questioning skills ○ability to follow simple directions
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns

	4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources must be provided: 5.1 Tools, equipment and physical facilities appropriate to perform activities. 5.2 Materials, consumables needed to perform activities.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	GN2004A1: Operate in a self-directed team
Nominal Hours	30 hours
Unit Descriptor	This unit specifies the knowledge, skills and attitude to communicate and work within a team in an interactive work environment as per the workplace standard.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable Training Components
1. Identify team goals and processes	1.1 <i>Team goals and processes</i> are identified. 1.2 Roles and responsibilities of team members are identified 1.3 Relationships within team and with other work areas are identified
2. Communicate and cooperate with team members	2.1. Effective interpersonal skills are used to interact with team members and to contribute to activities and objectives. 2.2. Formal and informal forms of communication are used effectively to support team achievement. 2.3. Diversity is respected and valued in team functioning. 2.4. Views and opinions of other team members are understood and reflected accurately. 2.5. <i>Workplace staff regulation</i> is used correctly to assist communication.
3. Work as a team member	3.1. Duties, responsibilities, authorities, objectives and task requirements are identified and clarified with team. 3.2. Tasks are performed in accordance with organizational and team requirements, specifications and workplace procedures. 3.3. Team members support other members as required to ensure team achieves goals and requirements. 3.4. Agreed reporting lines are followed using standard operating procedures
4. Solve problems as a team member	4.1 Current and potential problems faced by team are identified. 4.2 Procedures for avoiding and managing problems are identified. 4.3 Problems are solved effectively and in a manner that supports the team.

Range of Variables	
Variable	Range (May include but not limited to)
1. Team goals and processes	1.1 Identifying the problem 1.2 Consider solutions 1.3 Action 1.4 Follow-up.
2. Workplace staff regulation	2.1. Organization/company's code of conduct, complaint handling/grievance policies and procedures
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Communicated and worked within a team in an interactive work environment as per workplace standard. 1.2 Dealt with a range of communication/ information at one time. 1.3 Made constructive contributions in workplace issues 1.4 Presented information clearly and effectively in written form 1.5 Asked appropriate questions 1.6 Provided accurate information
2. Underpinning knowledge	2.1. Organization requirements for written and electronic communication methods 2.2. Effective verbal communication methods
3. Underpinning skill	3.1. Organize information 3.2. Understand and convey intended meaning 3.3. Participate in a variety of workplace discussions 3.4. Comply with Organization's requirements in the use of written and electronic communication methods
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace

5. Resource implication	The following resources MUST be provided: 5.1 Variety of Information 5.2 Communication tools 5.3 Simulated workplace
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	GN2005A1: Present and apply workplace information
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude to communicate and deliver up-to-date information in an interactive work environment as per workplace standard.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable Training Components
1. Identify information requirements	1.1 <i>Sources of Information</i> requirements in the workplace are identified
2. Process Data	2.1. Data is collected and correlated as per prescribed <i>method</i> . 2.2. Relevant data is used as references in accordance with the objectives of the program. 2.3. Information is applied according to workplace requirements.
3. Analyse, interpret and organize information	3.1. Collected information is analysed, interpret and organize as required for workplace.
4. Apply and present workplace information	4.1 Findings and recommendations are summarized and presented in a user-friendly manner. 4.2 Draft report/ <i>forms</i> are prepared based on standard format. 4.3 Graphs and other visual presentations are prepared to highlight <i>analysis</i> /interpretation of information. 4.4 Reports/forms are submitted and distributed to relevant departments/persons.
Range of Variables	
Variable	Range (May include but not limited to):
1. Sources of information	1.1 Daily job instructions 1.2 Specifications 1.3 Standard operating procedures 1.4 Charts 1.5 Lists 1.6 Documents 1.7 Computer data

	1.8 Drawings 1.9 Sketches 1.10 Tables 1.11 Technical manuals and/or charts 1.12 Surveys 1.13 Interviews 1.14 Front-end analysis 1.15 Functional analysis
2. Forms	2.1. Questionnaires 2.2. Profile 2.3. Accident/incident report form 2.4. Work order 2.5. Purchase order,
3. Methodologies	3.1. Qualitative 3.2. Quantitative
4. Statistical analysis	4.1 Average (mean, median, mode) 4.2 Percentage 4.3 Frequency distribution
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Communicated and delivered current information in an interactive work environment as per workplace standard.
2.Underpinning knowledge	2.1. Identify information 2.2. Identify data 2.3. Workplace standard
3.Underpinning skill	3.1. Collecting information 3.2. Collecting data 3.3. Demonstrating, interpreting and/or following data sheet or instruction 3.4. Performing task as per data sheet or instruction 3.5. Keeping records and reports
4.Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness

	4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
1. Resource implication	The following resources must be provided: 5.1 Tools, equipment and physical facilities appropriate to perform activities. 5.2 Materials, consumables needed to perform activities.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

SECTOR SPECIFIC UNITS

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	FODSS1006A1: Follow quality and food safety programs
Nominal Hours	60 hours
Unit Descriptor	This unit covers the knowledge, skills and attitudes required to follow food quality and safety programs in the workplace.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Practice personal hygiene and good grooming standards	2.1. Personal hygiene and good grooming is practiced in line with workplace health and safety requirements. 2.2. Health conditions and/or illness are reported as required by the food safety program. 2.3. Clothing and footwear is appropriate for the food handling task and meets the requirements of the food safety program. 2.4. Movement around the workplace complies with the food safety program.
3. Follow safe food handling and sanitation practices	3.1. Food handling requirements are identified. 3.2. Safe food handling practices are followed in line with workplace sanitation regulations and the food safety code. 3.3. The workplace is maintained in a clean and tidy order to meet workplace standards.
4. Monitor quality of work outcome	4.1 Quality requirements are identified. 4.2 Inputs are inspected to confirm capability to meet quality requirements. 4.3 Work is conducted and monitored to produce required outcomes.
5. Identify and act on quality deficits and/or food safety hazards	5.1 Work area, materials, equipment and product are routinely checked to ensure compliance with quality and/or food safety requirements. 5.2 Processes, practices or conditions that are not consistent with quality standards or food safety program are identified.

	5.3 Quality variations and/or food safety hazards are rectified or removed within the level of responsibility and in accordance with workplace procedures. 5.4 Quality variations and/or food safety outside the scope of individual responsibility are reported to appropriate personnel according to workplace reporting requirements.
Range of Variables	
Variable	Range (May include but not limited to)
1.PPE (Personal Protective Equipment)	1.1 Protective clothing 1.2 Gloves 1.3 Hair net 1.4 Other PPE as per OSH requirements
2. Food handled and stored	2.1. Raw materials 2.2. Ingredients 2.3. Consumables 2.4. Part-processed product 2.5. Finished product 2.6. Cleaning materials
3. Processes, practices or conditions	3.1. Methods of receiving and storing food 3.2. Food preparation 3.3. Cooking 3.4. Holding 3.5. Cooling 3.6. Chilling and reheating 3.7. Packaging 3.8. Disposal
4. Clothing and footwear	4.1 Purpose designed overalls or uniforms 4.2 Hair-nets 4.3 Beard snoods 4.4 Gloves 4.5 Overshoes
5. Food safety	5.1 Failure to check delivery temperatures of potentially hazardous chilled food; 5.2 Failure to place temperature-sensitive food in temperature-controlled storage conditions promptly 5.3 Failure to wash hands when required 5.4 Use of cloths for unsuitable purposes
Special Notes Food Safety Program is a written document that specifies how a business will control all food safety hazards that may be reasonably expected to occur in all food handling operations of the food business. The food safety program and related procedures must comply with legal requirements of the Food Safety Standards and must be communicated to all food handlers. Where no food safety program is in place, food	

safety requirements may be specified in general operating procedures.

Food safety information may be provided in a food safety program and/or in Standard Operating Procedures (SOPs), specifications, log sheets and written or verbal instruction.

Appropriate clothing and footwear depends on work requirements. It should be designed to ensure that the body and clothing itself does not contaminate food or surfaces likely to come into contact with food.

A food safety hazard is a biological, chemical or physical agent in, or condition of, food that has the potential to cause an adverse health effect. Examples are bacteria, chemical additives, plastic and glass.

Responsibility for monitoring food safety, identifying breaches in food safety procedures and taking corrective action relates to own tasks and responsibilities and occurs in the context of the food safety program in the workplace.

Responsibility for monitoring quality relates to immediate work responsibilities and may require visual inspections and checks.

Monitoring typically involves visual inspection or checks at control points. Control points refer to those key points in a work process which must be monitored and controlled. This includes food safety (critical) control points.

Responding to out-of-specification or unacceptable outcomes at this level typically involves exercising judgment within clearly defined boundaries and reporting/referring to others.

Minimum personal hygiene requirements are specified by the workplace food safety program and at a minimum must at least meet legal requirements as set out in the Food Safety Standard.

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

1. Critical aspects of competency	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment and work place is cleaned for production and hygiene requirements. 1.4 Quality variations and/or food safety hazards are rectified or removed within the level of responsibility and in accordance with workplace procedures
--	---

2. Underpinning knowledge	2.1. Personal protective equipment - hand gloves, safety shoes, safety goggles, masks, apron. 2.2. Practice personal hygiene 2.3. Rules and regulations to produce quality and safety in food 2.4. Control measures for food safety 2.5. Food safety hazards 2.6. Cleaning, sanitation and waste storage and disposal practices 2.7. Food safety procedures 2.8. Monitor quality of work outcome 2.9. Hazardous events 2.10. Interaction skills (teamwork, networking, interpersonal skills, etc.) 2.11. Job roles, responsibilities and compliance
3. Underpinning skill	3.1. Ability to use the appropriate PPE. 3.2. Ability to practise personal hygiene and good grooming in line with workplace health and safety requirements. 3.3. Ability to identify food rules and regulations, food grade preservatives and food additives to meet food production safety requirements according to BSTI. 3.4. Ability to control the measures for minimizing food contamination for food safety (for example keeping out micro-organisms, maintenance of anaerobic conditions, use of low temperatures, drying, use of chemical preservatives etc.) 3.5. Understand food safety hazards: biological, chemical or physical agents in, or conditions of, food that have the potential to cause an adverse health effect. Examples are bacteria, chemical additives, plastic, and glass. 3.6. Ability to perform waste collection, recycling, handling and disposal. This may include handling/disposal requirements for different types of waste including hazardous waste where relevant. 3.7. Ability to perform food safety procedures such as: checking delivery temperatures of potentially hazardous chilled food, placing temperature-sensitive food in temperature-controlled storage conditions promptly, washing hands when required, use of cloths for unsuitable purposes. 3.8. Ability to perform food safety and quality responsibilities and requirements relating to the work area.

	3.9. Ability to respond quickly and to take safety precautions for different hazardous situations. 3.10. Ability to apply in the workplace.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources should be provided 5.1 Tools, equipment and facilities appropriate to the process or activity. 5.2 Materials relevant to the proposed activity.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	FODSS1007A1: Follow OSH policies and procedures in the food industry
Nominal Hours	40 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to apply occupational safety and health (OSH) policies and procedures in a commercial food production work area.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Conduct work safely	2.1. Workplace procedures for controlling risks are followed when carrying out work tasks. 2.2. Workplace information are interpreted and followed
3. Identify, control and report OSH hazards	3.1. Immediate work area is routinely checked for safety hazards prior to starting and during work. 3.2. Hazards and unacceptable performance are identified. 3.3. Hazards and unacceptable performance are rectified or removed within the level of responsibility and in accordance with workplace procedures and OSH standards. 3.4. OSH hazards and incidents in the work area are reported to appropriate personnel according to workplace procedures.
4. Follow emergency procedures to respond to a hazardous event	4.1 <i>Emergency situations</i> are promptly identified. 4.2 Emergency situations are reported to appropriate personnel according to workplace reporting requirements. 4.3 Workplace procedures for dealing with accidents, fires and emergencies are followed whenever 4.4 Necessary within scope of responsibilities.

Range of Variables	
Variable	Range (May Includes but not limited to)
1. workplace procedures	1.1 Job-related SOPs (standard operating procedures) and OSH-specific procedures. Examples of OSH procedures include consultation and participation, emergency response, response to specific hazards, incident investigation, risk assessment, reporting arrangements and issue resolution procedures.
2. Workplace information	2.1. OSH systems and related documentation including policies and procedures 2.2. Information on hazards and the work process 2.3. hazard alerts 2.4. Safety signs and symbols, labels 2.5. Material Safety Data Sheets (MSDSs) and manufacturers' advice.
3. OSH incidents include	3.1. Near misses, injuries, illnesses and property damage, noise, handling hazardous substances, working with steam and hot services/product, airborne particulates, slip, trip and fall hazards, manual handling, working with 240V power supply, poor ventilation, working in exposed weather conditions, working with combustible materials, working with and near moving equipment/load shifting equipment, broken or damaged equipment or materials.
4. PPE (Personal Protective Equipment)	Protective clothing 5.1 Gloves 5.2 Hair net and other PPE as per OSH requirements.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Followed rule and regulation. 1.2 Checked workplaces hazards 1.3 Identified unacceptable performance and report appropriate personnel.
2. Underpinning knowledge	2.1 Selected appropriate PPE. 2.2 Cleaning agents and equipment. 2.3 Personal hygiene and sanitations. 2.4 Food safety and hazards.
3. Underpinning skill	3.1 Ability to use the appropriate PPE. 3.2 Ability to practise personal hygiene and good grooming in line with workplace health and safety requirements.

	3.3 Ability to identify food rules and regulations, food grade preservatives and food additives to meet food production safety requirements according to BSTI. 3.4 Ability to identify responsible personnel.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources should be provided 5.1 Tools, equipment and facilities appropriate to the process or activity. 5.2 Materials relevant to the proposed activity.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODSS1008A1: Work in the food Industry
Nominal Hours	30 hours
Unit Descriptor	This unit specifies the knowledge, skills and attitude required to identify roles and responsibilities and work in the food industry.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Identify job roles and responsibilities in the food industry	1.1 Job roles and responsibilities in the food industry are identified. 1.2 Relationships within the food industry employees are identified.
2. Identify and observe OSH in the food industry.	2.1. OSH in the food industry is identified and observed. 2.2. Safe work practices are followed when using equipment in the work environment.
3. Plan work activities	3.1. Common goals, objectives and tasks are identified and clarified with appropriate persons. 3.2. Individual tasks are determined and agreed on according to workplace environment.
4. Work with others	4.1 Effective interpersonal skills are applied to interact with others and to contribute to activities and objectives. 4.2 Assigned tasks are performed in accordance with job requirements, specifications and workplace environment. 4.3 Work requirements are confirmed with colleagues.
Range of Variables	
Variable	Range (May Includes but not limited to)
1. OSH	1.1 Personal protective equipment (PPE) 1.2 Apron 1.3 Hair net 1.4 Hand gloves
2. Effective interpersonal skills	2.1 Basic listening and speaking skills 2.2 Use of terminology and jargon

	2.3 Communicating and receiving feedback 2.4 Interpretation of instructions, and basic principles of effective communication.
3. Requirements	3.1 Requirements as directed in verbal modes or written in specification or procedures.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of competency	1.1 Followed work place rule and regulation. 1.2 Make a work plan 1.3 Group forming and work with others.
2. Underpinning knowledge	2.1 Positive attitudes for work others. 2.2 Identify own task 2.3 Food sector in Bangladesh 2.4 Job opportunity 2.5 Salary structure for food worker 2.6 Written and oral language communication 2.7 OSH
3. Underpinning skill	3.1 Able to identify task 3.2 Able to communicated with co workers 3.3 Able to communicate with supervisor 3.4 Able to writing report
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	The following resources should be provided 5.1 Tools, equipment and facilities appropriate to the process or activity. 5.2 Materials relevant to the proposed activity.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book

7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

OCCUPATION SPECIFIC UNITS

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODSS1009A1: Interpret mixing specifications for products (only in Bakery)
Nominal Hours	30 hours
Unit Descriptor	This unit specifies the competency of Knowledge, skills and attitude required to interpret mixing specifications for products in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for mixing	2.1. Ingredients are ready for mixing as per production requirements. 2.2. Mixing equipment is checked and adjusted as per production requirements
3. Operate and monitor the mixing process	3.1. Ingredients are delivered to the mixer in the required quantities according to the recipe specifications. 3.2. The mixing is started and operated according to workplace requirements. 3.3. Process is monitored as per workplace requirements.
4. Shut down the mixing process	4.1 The process is shut down according to workplace procedures.
5. Clean and maintain equipment and production area.	5.1 Equipment and production area are cleaned to meet hygiene requirements. 5.2 Maintenance requirements are identified and reported according to workplace requirements. 5.3 Waste is disposed of according to workplace procedures.

Range of Variables	
Variable	Range (May include but not limited to)
1. PPE	1.1 Gloves 1.2
1. Equipment	1.1 Mixers, sieves, 1.2 Weighing equipment and 1.3 Measurement tools
2. Ingredients	2.1. As per recipe.
3. Mixing equipment	3.1. Set mixing equipment to meet recipe requirements.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of Competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe. 1.3 Follow the proper mixing process 1.4 Waste is disposed of according to workplace procedures
2. Underpinning knowledge	2.1. Consistency 2.2. Quality of mixing 2.3. Handling of Ingredients
3. Underpinning skill	3.1. Handling tools ,equipment & ingredients
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity

6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

JOB ROLE SPECIFIC ELECTIVES - Bread

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	FODBAK1010A1: Produce bread dough
Nominal Hours	60 hours
Unit Descriptor	This unit specifies the competency of knowledge , skills and attitude required to apply bread dough making principles and select equipment and procedures for producing a range of dough types including white, brown, wholemeal and grain dough in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare to mix bread dough	2.1. Necessary ingredients are selected, measured and weighed according to recipe to make bread dough. 2.2. Equipment is confirmed ready for use. 2.3. Dough mixing equipment is set and made ready to mix the dough.
3. Produce bread dough	3.1 Ingredients are poured into the mixer. 3.2 Mixing process is operated and monitored. This may include monitoring the dough for consistency, feel and texture, and the other variables. 3.3 Unacceptable dough is identified and rectified. 3.4 Corrective action is taken as required to ensure dough meets requirements. 3.5 Unacceptable dough is reported.
4. Clean and maintain equipment and production area.	4.1 Equipment and production area are cleaned to meet hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedures.

Range of Variables	
Variable	Range (may include but not limited to)
1. PPE	1.1 Apron, gloves, hair net
2. Equipment	2.1 Mixers, bowls, sieves, weighing equipment, measurement tools, knife, brush, scraper, scissors, refrigerator, and working tables.
3. Ingredients	3.1 Flour (white, brown, and wholemeal), sugar, yeast, salt, bread improver, eggs, shortening, milk powder, oil, wheat grains, water.
4. Other variables	4.1 Water temperature to meet final finished dough temperature requirements. 4.2 Dough development/bulk fermentation time.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspects of Competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe 1.3 Follow the proper mixing process 1.4 Explain types of dough 1.5 Unacceptable dough is identified and rectified 1.6 Waste is disposed of according to workplace procedures
2. Underpinning knowledge	2.1. Basic principles of bread making and types of dough 2.2. Ingredient characteristics and purpose in dough (including an understanding of flour quality and the components of wheat flour). 2.3. Settings, operating requirements and safety features of equipment used. 2.4. OHS hazards and controls. 2.5. Waste handling and cleaning procedures.
3. Underpinning skill	3.1. Confirm that equipment is clean and ready for operation. 3.2. Weigh, scale or meter ingredients as required. 3.3. Transfer ingredients to the mixer in the required sequence. 3.4. Set mixing equipment to meet recipe requirements. 3.5. Adjust water temperature to meet final finished dough temperature requirements.

	3.6. Clean equipment and utensils to meet hygiene standards. 3.7. Maintain workplace records as required.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2011A1: Scale and mould dough for intermediate proof
Nominal Hours	40 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to select the equipment and ingredients, divide and shape dough at intermediate proof stage for commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Scale and mould for intermediate proof	2.1. Dough is scaled for different types of bread. 2.2. Dough is moulded to provide initial shape. 2.3. Fruits, nuts etc. are added if required by recipe. 2.4. Errors in scaled and moulded dough are identified and removed or rectified, considering all factors including the other variables.
3. Clean and maintain equipment and production area	3.1. Equipment and production area are cleaned to meet production and hygiene requirements. 3.2. Maintenance requirements are identified and reported according to workplace requirements. 3.3. Waste is disposed of according to workplace procedure.
Range of Variables	
Variable	Range (may include but not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment, measuring tools, proofing/fermentation cabinet.
2. Personal Protective Equipment (PPE)	2.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.

3. Ingredients	3.1 Flour (white, brown, and wholemeal), sugar, yeast, salt, bread improver, eggs, milk powder, shortening, fruit, honey, onions, nuts, etc.
4. Other variables	4.1 The effect of dough shape/size on the final product. 4.2 Purpose and time required to allow dough to develop. 4.3 Required characteristics of proofed dough such as size, height and appearance.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical Aspects of competency	1.1 Equipment must be clean before and after production 1.2 Scaled for different types of bread 1.3 Errors in scaled and moulded dough are 1.4 Identified and removed or rectified, considering all factors including the other variables 1.5 Waste is disposed of according to workplace procedure
2. Underpinning Knowledge	2.1. Basic principles of dough making and proofing. 2.2. Ingredient and environment characteristics and impact on dough making and proofing (including an understanding of flour quality, the components of wheat flour and weather/temperature). 2.3. Settings, operating requirements and safety features of equipment used. 2.4. OHS hazards and controls. 2.5. Waste handling and cleaning procedures.
3. Underpinning Skills	3.1. Confirm that proofing equipment and utensils are clean and ready for operation. 3.2. Weigh, scale or meter ingredients as required. 3.3. Transfer ingredients in the required sequence, mix, divide and shape as required. 3.4. Set up the proofing equipment to meet recipe requirements. 3.5. Monitor the temperature and time to meet finished dough requirements. 3.6. Clean equipment, utensils and work area to meet workplace/hygiene standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities

	4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2012A1: Conduct final mould and final proof
Nominal Hours	30 hours
Unit Descriptor	This unit specifies the competency of knowledge skills and attitude required to select the equipment, ingredients and procedures used to mould dough to final shape, place dough in tins or on baking surfaces and conduct final proof in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Conduct final mould	2.1. Dough is moulded to provide final shape. 2.2. Dough is placed in tins or on baking trays as required. 2.3. Dough may be manually or mechanically moulded or shaped using rounding and moulding equipment.
3. Conduct final proof	3.1. Conducive conditions including the temperature and time are maintained. 3.2. Errors in final proofed dough is identified, removed or rectified 3.3. Final proof may be wet or dried. 3.4. Applying finishing can include methods such as dusting, cutting, spraying and applying toppings.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements.

	4.3 Waste is disposed of according to workplace procedure.
Range of Variables	
Variable	Range (may include but not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment, measuring tools, moulding and rounding equipment, baking trays, proofing/ fermentation cabinet.
2. Ingredients	2.1. Flour (white, brown, and wholemeal), sugar, yeast, salt, bread improver, eggs, shortening,
3. PPE	3.1. Apron, gloves, hair net
4. Time	4.1 Depends on weather and temperature conditions
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical Aspects of competency	1.1 Equipment must be clean before and after production 1.2 Dough may be manually or mechanically moulded or shaped using rounding and moulding equipment. 1.3 Errors in final proofed dough is identified, removed or rectified 1.4 Applying finishing can include methods such as dusting, cutting, spraying and applying toppings 1.5 Waste is disposed of according to workplace procedure
2. Underpinning Knowledge	2.1. Basic principles of dough making and proofing 2.2. Ingredient and environment characteristics and impact on dough making and proofing (including an understanding of flour quality, and the components of wheat flour). 2.3. Settings, operating requirements and safety features of equipment used. 2.4. OHS hazards and controls. 2.5. Waste handling and cleaning procedures.
3. Underpinning Skills	3.1. Confirm that equipment and utensils are clean and ready for operation 3.2. Apply moulding and shaping techniques. 3.3. Set up the proofing equipment to meet recipe requirements.

	3.4. Monitor the temperature and time to meet final proofed dough requirements 3.5. Apply finishing techniques. 3.6. Clean equipment, utensils and work area to meet hygiene standards. 3.7. Maintain work place records as required. 3.8. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity.
6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK1013A1: Bake Bread
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to able to apply the principles, select equipment and procedures to bake bread in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking	2.1. Oven is preheated according to product specification. 2.2. Ovens loaded manually, trays placed or using slips and belts according to workplace equipment. 2.3. Ovens are operated for baking according to product specifications.
3. Bake bread	3.1. Bread is baked according to food safety and quality requirements. 3.2. Under baked or over baked products are identified and rectified. 3.3. Monitor baking process. This includes steam injection, crust, colour, sheen, uniformity of shape and size.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range
1. Equipment:	1.1 Electric or gas oven.
2. Ingredients:	2.1. Bread dough, water and salt.
3. Other variables:	3.1 Time, temperature and humidity on baking 3.2 Dough characteristics such as shape/size and skin formation affect the final product 3.3 The effect of yeast activity on the final product
4. Quality characteristics of final product including:	4.1 Volume 4.2 Grain 4.3 Texture 4.4 Crumb colour 4.5 Crust formation and colour
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical Aspects of competency	1.1 Equipment must be clean before and after production 1.2 Preheat the oven as per product required temperature 1.3 Waste is disposed of according to workplace Procedure
2. Underpinning Knowledge	2.1 Oven temperature & preheat the oven
3. Underpinning Skills	3.1 Handling the electric & gas oven.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity.

6. Methods of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3030A1: Prepare special bread dough for baking
Nominal Hours	70 hours
Unit Descriptor	This unit covers the basic knowledge, skills and attitude required to produce various bread dough using the sponge and roller dough system in commercial food production environment.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment for sponge bread dough	2.1. Necessary Ingredients are selected, measured and weighed according to recipe to make sponge bread dough. 2.2. Equipment is confirmed ready for use. 2.3. Dough mixing equipment is set and operated to mixing the dough.
3. Produce sponge bread dough and test the dough	3.1. Ingredients are poured into the mixer. 3.2. Mixing process is operated and monitored. This may include monitoring dough consistency feel and texture. 3.3. Dough is tasted to test sugar level, salt level, fat level. 3.4. Corrective action is taken as required to ensure dough meets requirements. 3.5. Unacceptable dough is reported.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedures.

Range of Variables	
Variable	Range
1. Equipment may include but is not limited to:	1.1 Bakery Lab 1.2 Mixers 1.3 Sieves 1.4 Weighing 1.5 Measurement Tools 1.6 Mixing Bowl 1.7 Fermentation / Proofing Cabinet 1.8 Refrigerator 1.9 Bread Mould 1.10 Baking Tray 1.11 Moulding and Rounding Equipment 1.12 Small Bowl 1.13 Egg, Oil, Flour, Brush 1.14 Knife, Scrapers, Scissor 1.15 Electric Rack System Large Oven 1.16 Gas Oven with 5 Burners 1.17 Cooling Rack 1.18 Hot Steel Table 1.19 Wooden Table - 1 for 4 students
2. PPE (Personal Protective Equipment)	may include but is not limited to 2.1. Protective clothing 2.2. apron 2.3. gloves 2.4. Hair net and other PPE as per OSH requirements.
3. Ingredients	may include but is not limited to 3.1. Wheat flour, sugar, yeast, salt, bread improver, eggs, shortening, milk powder, water, wheat grains etc.
4. Special types of bread	may include: 4.1 Brioche, Sandwich, Rumbaba and Fruit Savarin.

5. Standards and Regulations	5.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
6. Equipment setup	6.1 Set mixing equipment to meet recipe requirements.
7. Other variables	7.1 Adjust water temperature to meet final finished dough temperature requirements. 7.2 Dough development/bulk fermentation time.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after production 1.2 Preheat the oven as per product required temperature 1.3 Waste is disposed of according to workplace Procedure
2. Underpinning knowledge	2.1. Ingredients required for making bread dough. 2.2. Basic principles of bread making 2.3. Ingredient characteristics and purpose in dough. 2.4. Understanding of quality of flour and component 2.5. Settings operating requirements and safety features of equipment used. 2.6. OHS hazards and controls. 2.7. Waste handling and cleaning procedures.
3. Underpinning skill	3.1. Confirm that equipment is clean and ready for operation. 3.2. Weigh, scale or meter ingredients as required. 3.3. Transfer ingredients to the mixer in the required sequence. 3.4. Set mixing equipment to meet recipe requirements. 3.5. Adjust water temperature to meet final finished dough temperature requirements. 3.6. Clean equipment and utensils to meet hygiene standards. 3.7. Maintain workplace records as required.

4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	FODBAK3031A1: Bake special bread
Nominal Hours	40 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to able to apply the principles, select equipment and procedures to bake special bread (Brioche, sandwich, rumba, etc.) in commercial food production
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking	2.1. Oven is preheated according to product specification. 2.2. Ovens loaded manually, trays placed or using slips and belts according to workplace equipment. 2.3. Ovens are operated for baking according to product specifications.
3. Bake bread and testing bread	3.1. Bread is baked according to food safety and quality requirements. 3.2. Under baked or over baked products are identified and rectified. 3.3. Monitor baking process. This includes steam injection, crust, colour, sheen, uniformity of shape and size. 3.4. After baking test the bread: volume, general appearance, oven spring, crust character.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.
Range of Variables	

Variable	Range
1. Equipment	1.1 Electric or gas oven.
2. Ingredients	2.1. Bread dough, water and salt.
3. Special breads	3.1 Brioche, sandwich, rumbaba, etc.
4. Quality characteristics of final product including:	4.1 Volume 4.2 Grain 4.3 texture 4.4 Crumb colour 4.5 Crust formation and colour
5. Other variables	5.1 Effect of time, temperature and humidity on baking 5.2 Dough characteristics such as shape/size and skin formation affect the final product 5.3 The effect of yeast activity on the final product
6. Standards and Regulations	6.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Oven is preheated according to product specification 1.3 Ovens operating system. 1.4 Effects of under baked and over baked products are identified and rectified. 1.5 Monitor baking process. 1.6 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Changes that occur to the product during baking. 2.2. How dough characteristics such as shape/size and skin formation affect the final product. 2.3. The effect of variables such as time, temperature and humidity on baking. 2.4. The effect of yeast activity on the final product.

	2.5. Quality characteristics of final product including: • Volume • Grain • Texture • Crumb colour • Crust formation and colour. 2.6. Settings, operating requirements and safety features of equipment used. 2.7. Causes of variation and corrective action required. 2.8. Control points and related monitoring requirements. 2.9. OHS hazards and controls. 2.10. Waste handling and cleaning requirements.
3. Underpinning skill	3.1 Access workplace information to identify recipe/baking requirements. 3.2 Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.3 Load dough pieces. 3.4 Monitor baking process. This includes monitoring: • Steam injection (as required) • Crust colour • Uniformity of shape • Size (oven spring) 3.5 Take corrective action as required to maintain quality of product. 3.6 Maintain workplace records as required. 3.7 Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity

6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3014A1: Inspect quality, diagnose & respond to product and process faults (Bread)
Nominal Hours	30 hours
Unit Descriptor	This unit covers knowledge, skills and attitude required to the principles and procedures used to inspect quality to produce bread in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Inspect quality of raw materials and bread products	2.1. Quality of ingredients and/or raw materials is inspected before processing. 2.2. Storage of ingredients, raw materials and/or bread products is inspected for compliance with product specifications according to work standards and food safety requirements. 2.3. Process factors and reactions occurring during processing are monitored according to product specifications.
3. Diagnose and rectify product processes and faults in biscuit production	3.1. Under baked and over baked products are diagnosed and analysed to determine cause. 3.2. Corrective action is recorded and faults rectified according to procedures and food safety standards.
4. Inspect equipment and production area to ensure they meet hygiene requirements.	4.1 Equipment and production area are inspected to ensure they are clean and they meet hygiene requirements 4.2 Waste is disposed of according to workplace procedures.

Range of Variables	
Variable	Range (May include but not limited to)
1. Equipment	1.1 Thermometer, hydrometer, digital scale, Ph measuring equipment, moisture testing equipment,
2. PPE (Personal Protective Equipment)	2.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
3. Ingredients and raw materials:	3.1 Raw materials include those used to manufacture bread products. 3.2 Ingredients relate to those ingredients used in product, materials may include packaging consumables. 3.3 Bread styles and types include but are not limited to sours, flat breads, ryes, and continental breads.
Special Notes ➤ Causes of unacceptable quality may relate to raw materials, processing and/or storage. ➤ Process includes temperature, time, humidity, development/proving time. ➤ Remove/isolate and report ingredients/materials of unacceptable quality. ➤ Determine likely causes of unacceptable final product relating to raw ingredients and storage conditions. ➤ Preparation requirements for use. This may include conditioning fruit. ➤ Bread styles, types and textures. This includes an awareness of the labelling requirements for types of bread consistent with the Food Standards Code. ➤ Principles of processing techniques used to achieve finished products. This includes: 1) Wet and dry proof methods 2) Types of mixtures used 3) Hand moulding 4) Oven types, including, method of steam generation 5) Methods of delivering product to the oven ➤ Effect of typical reactions during mixing, development and baking. This may include: 1) Yeast activity 2) Gluten development 3) Browning and caramelisation 4) Gelatinisation as it occurs in different dough types ➤ Factors that can affect shelf-life, including: 1) Ingredients used 2) Bread types 3) Storage conditions 4) Packaging 5) Environmental factors	

Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Quality of ingredients and storing procedures. 1.3 Monitor process factors and reactions. 1.4 Effects of under baking and over baking. 1.5 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1 Quality of ingredients and storing procedures 2.2 Monitor process factors and reactions. 2.3 Effects of under baking and over baking.
3. Underpinning skill	3.1 Selecting and storage of ingredients. 3.2 Find out under baked & over baked products. 3.3 Identified & rectified products fault according to Procedures and food safety standards.
4 Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5 Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity
6 Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7 Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

JOB ROLE SPECIFIC ELECTIVES – Pastry

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK1015A1: Produce Pastry
Nominal Hours	60 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to be able to operate equipment, apply principles and procedures to produce pastry and Shortbread, produced in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment	2.1. Ingredients are confirmed and arrange according to product requirements. 2.2. Ingredients are measured according to recipe. 2.3. Equipment is checked to confirm readiness for use.
3. Produce pastry	3.1. Mixing equipment is set up and operated to meet recipe requirements. 3.2. Ingredients are poured into the mixer for mixing.
4. Block and laminate pastry as required	4.1 Pastry is blocked to meet recipe requirements. 4.2 Pastry is laminated and folded to meet product requirements. 4.3 Pastry is checked to ensure it meets food safety and quality standards.
5. Clean and maintain equipment and production area	5.1 Equipment and production area are cleaned to meet production and hygiene requirements 5.2 Maintenance requirements are identified and reported according to workplace requirements. 5.3 Waste is disposed of according to workplace procedure

Range of Variables	
Variable	Range (May include but not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment and measuring tools, trays, cake moulds, saucepan, fry pan, utensils etc.
2. Set mixing equipment to meet production requirements.	2.1. Selecting and fitting appropriate attachments 2.2. Setting mixer times and speeds
3. PPE (Personal Protective Equipment)	3.1 Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Ingredients:	4.1 Ingredients may include but are not limited to: 4.2 Flour, sugar, salt, water, eggs, shortening, other ingredients as per recipe.
5. Pastries	5.1 Puff, Danish, Choux, short crust, piecrust, etc.
6. Other variations	6.1 Shortening may be added to the mixer or worked into the batter/dough manually 6.2 Folding of pastry is typically in half or book folds 6.3 Lamination does not apply to short paste and pie bottom paste 6.4 Monitor the appearance and consistency of mix and ensure that all ingredients including shortening are added. Roll out pastry dough and add shortening if not already in the mix
7. Standards and Regulations	7.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Measure ingredients & select tools and equipment.

	1.3 Pastry is blocked & laminated according to recipe. 1.4 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Basic principles of pastry making. 2.2. Ingredient characteristics and purpose in pastry. (This includes an understanding of shortening types, flour types, components and their effect on pastry quality) 2.3. Significance of factors such as shortening type and temperature on final product. 2.4. Methods used to confirm accuracy of measuring equipment used. 2.5. Process requirements. This may include: • Mixing times and speeds. • Appearance and consistency to be met. • Batching or scaling off pastry for blocking. • Pastry rolling and folding for pastry type. • Resting time. 2.6. Required characteristics of different types of pastry, uses and related processing methods. 2.7. Settings, operating requirements and safety features of equipment used. 2.8. Purpose and time required to allow pastry to rest. 2.9. Product storage requirements. This can include an understanding of refrigeration, freezing and shelf life. 2.10. OHS hazards and controls. 2.11. Waste handling and cleaning and procedures.
3. Underpinning skill	3.1. Access workplace information to identify recipe requirements. 3.2. Weigh, scale or meter ingredients as required. 3.3. Confirm equipment status and condition. 3.4. Set mixing equipment to meet production requirements. This can include: 3.5. Selecting and fitting appropriate attachments. 3.6. Setting mixer times and speeds. 3.7. Transfer ingredients to the mixer in the required sequence.

	3.8. Monitor the appearance and consistency of mix and ensure that all ingredients (including shortening) are added. 3.9. Block pastry as required, to suit dough break capacity. 3.10. Roll out pastry dough and add shortening if not already in the mix. 3.11. Laminate and fold pastry to meet product requirements. 3.12. Take corrective action as required so that pastry meets quality standards. 3.13. Clean equipment and utensils to meet hygiene standards. 3.14. Maintain workplace records as required. 3.15. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2016A1 - Prepare pastry fill
Nominal Hours	40 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to Apply the skills and knowledge to prepare a range of fillings for use in pastry products in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare equipment and ingredients	2.1 Ingredients are confirmed and made available for product requirements. 2.2 Equipment is checked to confirm readiness for use. 2.3 Ingredients are measured according to recipe requirements. 2.4 Ingredients are prepared for use in fillings. This may include thawing or conditioning pre-prepared ingredients.
3. Produce Pastry Fill	3.1. Pastry fill is produced according to recipe requirements. 3.2. Raw and cooked fillings must be checked before use. Unacceptable ingredients or fillings are identified and rectified.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment and measuring tools, tray, cake mould, saucepan, fry pan, utensils etc.
2. PPE (Personal Protective Equipment)	2.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
3. Ingredients	3.1. Egg, corn flour, shortening, milk, pastry cream, butter cream, fresh cream, fruit, jam, fruit colour, etc.
4. Savoury filling ingredients	4.1 Minced or diced raw meat (including chicken), vegetables, eggs, starches and other ingredients as required for use in products such as pies, sausage rolls, pasties, quiches and other products
5. Sweet fillings	5.1 Fruit, syrup, jam, custard, cream and starches
6. Preparation of ingredients for use in fillings may include	6.1 Mincing, peeling, slicing, dicing and cooking, conditioning pre-prepared ingredients and/or preparing raw ingredients for use, and preparing solutions for addition such as dissolving starch for use in a mixture.
7. Combine and process fillings. This may include monitoring:	7.1 Quality, quantity and sequencing of ingredient addition 7.2 Blending/mixing process 7.3 Cooking times and temperatures 7.4 Filling characteristics (colour, texture, smell, viscosity)
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Measure ingredients & select tools and equipment 1.3 Pastry is blocked & laminated according to recipe. 1.4 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Basic principles of filling preparation. 2.2. Differences in filling types for different product types.

	2.3. Ingredient characteristics and purpose in filling. This includes an awareness of types of thickeners used for filling types. 2.4. Methods used to prepare fillings in the workplace. 2.5. Quality characteristics and uses of fillings. 2.6. Process requirements such as: 2.7. Time and temperature requirements relating to thawing, reheating, cooling (of cooked food) and cooking as required. 2.8. Storing/holding requirements. 2.9. Cooking times and temperatures. 2.10. Reconstituting dry ingredients. 2.11. Settings, operating requirements and safety features of equipment used. 2.12. Causes of variation and corrective action required. 2.13. OHS hazards and controls. 2.14. Storage requirements for prepared fillings. This can include an understanding of refrigeration, freezing and shelf life. 2.15. s
3. Underpinning skill	3.1. Access workplace information to identify production requirements. 3.2. Confirm condition, type, quality and quantity of ingredients. 3.3. Weigh, scale or meter ingredients as required. 3.4. Prepare ingredients as required. This may include thawing or conditioning pre-prepared ingredients and/or preparing raw ingredients for use, and preparing solutions for addition such as dissolving starch for use in a mixture. 3.5. Combine and process fillings. This may include monitoring: 3.6. Quality, quantity and sequencing of ingredient addition. 3.7. Blending/mixing process. 3.8. Cooking times and temperatures. 3.9. Filling characteristics (colour, texture, smell, viscosity) 3.10. Take corrective action so that fillings meet quality standards. 3.11. Clean equipment and utensils to meet hygiene standards.

	3.12. Maintain workplace records as required. 3.13. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities 5.2 Materials relevant to the proposed activity
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2017A1 : Form and fill pastry products
Nominal Hours	30 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to apply the skills and knowledge required to form pastry and deposit fillings into a pastry shell or onto a pastry sheet in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Form pastry product	2.1. Pastry and fillings are confirmed and made available for the preparation of the pastry product. 2.2. Forming and filling utensils are available and equipment is checked to confirm readiness of use. 2.3. Pastry is rolled and shaped to meet product requirements.
3. Fill pastry products	3.1. Fillings are prepared and used according to recipe. 3.2. Pastry tops are decorated and finishes are applied as required. 3.3. Milk and egg washes may be applied prior to baking. Glazes and sugar may be applied after baking. 3.4. Unacceptable products are identified and rectified.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements.

	4.3 Waste is disposed of according to workplace procedure
Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment and measuring tools, tray, palette knife, nozzle, fruit knife, tins and trays and depositing equipment etc.
2. Ingredients	2.1. Sugar, eggs, shortening, milk, pastry cream, butter cream, fresh cream, fruit extract, jam, cooked meat etc.
3. Fillings	3.1. May be sweet or savoury, hot or cold
4. PPE (Personal Protective Equipment)	4.1 Protective clothing, gloves, hair net and other PPE as per OSH requirements.
Special Notes Forming, filling, depositing and trimming of pastry products may be done manually or mechanically Dispense fillings within acceptable volume, weight and placement. Trim pastry according to the requirements of the final product. Monitor the forming and filling process to ensure quality standards. This can involve monitoring: • Pastry thickness • Product weight • Appearance (size and shape)	
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Forming and filling utensils are checked to confirm readiness of use. 1.3 Milk and egg washes may be applied prior to baking. Glazes and sugar may be applied after baking. 1.4 Unacceptable products are identified and rectified. 1.5 Waste is disposed of according to workplace procedure.

2. Underpinning knowledge	2.1. Basic principles of pastry forming and filling. 2.2. Acceptable standards for equipment/utensils used. This includes an understanding of cleaning requirements, and signs of wear or unacceptable damage. 2.3. Quality requirements of filled pastry products. This can include appearance, weight, and seal as required by product. 2.4. Types of pastry suitable for use as tops and bottoms and in different products. 2.5. Procedures for inclusion of rework. This can include an understanding of appropriate uses of rework; maximum number of batches that can contain rework before scrap is discarded; and importance of ensuring rework pastry is contaminated by filling materials, other pastry types or other forms of contamination. 2.6. Procedure for preparing and applying washes and glazes as required for product. 2.7. The effect of variables such as filling temperature on finished product, and product temperature on glazing application. 2.8. Equipment used. 2.9. Inspections/control points used to confirm that product meets quality requirements, and related monitoring requirements. 2.10. Causes of variation and corrective action required. 2.11. OSH hazards and controls. 2.12. Waste handling and cleaning requirements and procedures
3. Underpinning skill	3.1. Access workplace information to identify production requirements. 3.2. Confirm that pastry types and fillings match product requirements. 3.3. Confirm that equipment is clean and in operating order. This includes confirming that trays and tins are available as required. 3.4. Prepare pastry and fillings for use. This may include: • Rolling pastry • Loading fillings into hopper and setting automatic dispensing equipment. • Bringing fillings to required temperature. 3.5. Form product shape.

	3.6. Dispense fillings within acceptable volume, weight and placement parameters. 3.7. Apply tops, coding and/or toppings according to product requirements. 3.8. Trim pastry keeping bottom and top pastry separate. 3.9. Include reworked pastry according to workplace procedures. 3.10. Monitor the forming and filling process to ensure that quality standards are met. This can involve monitoring: • Product weight • Enclosure of pastry product by forming, rolling or covering with a pastry top to form seal. • Application of washes (before baking) or glaze and toppings (after baking) • Appearance (size and shape) 3.11. Take corrective action so that product quality standards are met. 3.12. Clean equipment and utensils to meet hygiene standards. 3.13. Maintain workplace records as required. 3.14. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book

7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK1018A1: Bake Pastry Products
Nominal Hours	30 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to select equipment and apply the principles and procedures used to bake pastry in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking	2.1. Product is prepared, finished and arranged to meet quality and product requirements 2.2. Ovens are operated to meet required output. This includes setting time and temperature controls, and can include positioning product on trays, slips or belts with correct spacing. 2.3. Washes and/or glazes are applied before baking as required.
3. Bake Pastry Products	3.1. Pastry products are baked according to food safety and quality requirements. 3.2. Under baked or over baked products are identified and rectified. 3.3. Baked products are remove from oven and cooled to meet required temperature.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range
1. Equipment	1.1 Equipment may include topping equipment, oven loading equipment, ovens and cooling racks
2. Ingredients	2.1. Pastry and other ingredients as per recipe
3. PPE (Personal Protective Equipment) may include but is not limited to	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Monitor baking process includes monitoring:	4.1 Colour 4.2 Appearance/shape 4.3 Seals that they show no signs of boil out 4.4 Take corrective action as required to maintain quality of product.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Select oven temperature & preheat . 1.3 Milk and egg washes may be applied prior to baking. Glazes and sugar may be applied after baking. 1.4 Unacceptable products are identified and rectified. 1.5 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Changes that occur to the product during baking. 2.2. How pastry product characteristics affect the final product. 2.3. Time required for conditioning products. 2.4. The effect of variables such as temperature of fillings, time, temperature and humidity during the baking process. 2.5. Quality characteristics of the final product. 2.6. Presentation and/or storage requirements for baked product. This can include an understanding of refrigeration, freezing and shelf-life. 2.7. Settings, operating requirements and safety

	features of equipment used. 2.8. Causes of variation and corrective action required. 2.9. Control points and related monitoring requirements. 2.10. OSH hazards and controls. 2.11. Waste handling and cleaning requirements.
3. Underpinning skill	3.1. Access workplace information to identify baking requirements. 3.2. Prepare product for baking. This may include thawing frozen product and allowing the required development/conditioning of product prior to baking. It can also include applying finishing or glazes. 3.3. Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.4. Load product. This can include positioning product on trays, slips, or belts with correct spacing. 3.5. Select required oven settings. This may include setting time, temperature and steam controls. 3.6. Monitor baking process. This includes monitoring: - a.colour - b.appearances/shape c. seals that they show no signs of boil out. 3.7. Remove baked products from oven and cool to meet required temperature. 3.8. Present, package and/or store as required. 3.9. Apply washes and/or glazes before or after baking as required. 3.10. Take corrective action as required to maintain quality of product. 3.11. Maintain workplace records as required. 3.12. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in

	workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3032A1: Prepare Special pastry dough and fills for baking
Nominal Hours	70 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to be able to operate equipment, apply principles and procedures to produce pastry and Shortbread, produced in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment	2.1. Ingredients are confirmed and arrange according to product requirements. 2.2. Ingredients are measured according to recipe. 2.3. Equipment is checked to confirm readiness for use.
3. Produce special pastry	3.1. Mixing equipment is set up and operated to meet recipe requirements. 3.2. Ingredients are poured into the mixer for mixing. 3.3. Produce a range of specialised products using, sweet, puff and choux pastry and also prepare various fillings and garnishes.
4. Block and laminate pastry as required and fill pastry products	4.1 Pastry is blocked to meet recipe requirements. 4.2 Pastry is laminated and folded to meet product requirements. 4.3 Pastry is checked to ensure it meets food safety and quality standards. 4.4 Fillings are prepared and used according to recipe. 4.5 Milk and eggs washes may be applied prior to baking. 1.4 Unacceptable products are identified and rectified.

5. Clean and maintain equipment and production area	5.1 Equipment and production area are cleaned to meet production and hygiene requirements 5.2 Maintenance requirements are identified and reported according to workplace requirements. 5.3 Waste is disposed of according to workplace procedure
Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment and measuring tools, trays, saucepan, fry pan, utensils etc.
2. Ingredients	2.1. Flour, sugar, salt, water, eggs, shortening, other ingredients as per recipe.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Pastries include	4.1 Puff, Danish, Choux, short crust, pie crust, etc.
5. Set mixing equipment to meet production requirements.	5.1 Selecting and fitting appropriate attachments 5.2 Setting mixer times and speeds
6. Monitor the forming and filling process to ensure quality standards, including	6.1 Pastry thickness 6.2 Product weight 6.3 Appearance (size and shape)
7. Special Pastry products that may include (puff pastry base, sweet pastry base and choux pastry based)	7.1 Gateaux St. Honore 7.2 Gateaux Pithivier 7.3 Linzer Torte 7.4 Custard filling
8. Other variations	8.1 Shortening may be added to the mixer or worked into the batter/dough manually 8.2 Folding of pastry is typically in half or book folds 8.3 Lamination does not apply to short paste and pie bottom paste 8.4 Monitor the appearance and consistency of mix and ensure that all ingredients including shortening are added 8.5 Roll out pastry dough and add shortening if not already in the mix

9. Standards and Regulations	9.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Select equipment and measure ingredients. 1.3 Pastry is blocked & laminated. 1.4 Pastry is checked to ensure it meets food safety and quality standards. 1.5 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Basic principles of pastry making. 2.2. Ingredient characteristics and purpose in pastry. 2.3. This includes an understanding of shortening types, flour types, components and their effect on pastry quality. 2.4. Significance of factors such as shortening type and temperature on final product. 2.5. Methods used to confirm accuracy of measuring equipment used. 2.6. Process requirements. This may include: 2.7. Mixing times and speeds. 2.8. Appearance and consistency to be met. 2.9. Batching or scaling off pastry for blocking. 2.10. Pastry rolling and folding for pastry type. 2.11. Resting time. 2.12. Required characteristics of different types of pastry, uses and related processing methods. 2.13. Settings, operating requirements and safety features of equipment used. 2.14. Purpose and time required to allow pastry to rest. 2.15. Product storage requirements. This can include an understanding of refrigeration, freezing and shelf life. 2.16. OHS hazards and controls. 2.17. Waste handling and cleaning and procedures.

3. Underpinning skill	3.1. Access workplace information to identify recipe requirements. 3.2. Weigh, scale or meter ingredients as required. 3.3. Confirm equipment status and condition. 3.4. Set mixing equipment to meet production requirements. This can include: 3.5. Selecting and fitting appropriate attachments. 3.6. Setting mixer times and speeds. 3.7. Transfer ingredients to the mixer in the required sequence. 3.8. Monitor the appearance and consistency of mix and ensure that all ingredients (including shortening) are added. 3.9. Block pastry as required, to suit dough break capacity. 3.10. Roll out pastry dough and add shortening if not already in the mix. 3.11. Laminate and fold pastry to meet product requirements. 3.12. Take corrective action as required so that pastry meets quality standards. 3.13. Clean equipment and utensils to meet hygiene standards. 3.14. Maintain workplace records as required. 3.15. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio

	6.5	Log book
7. Context of assessment	7.1	Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.		

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3033A1: Bake Special Pastry Products
Nominal Hours	40 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to select equipment and apply the principles and procedures used to bake special pastry (puff pastry, choux pastry, sweet pastry) to a predetermined standard in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking	2.1. Product is prepared, finished and arranged to meet quality and product requirements 2.2. Ovens are operated to meet required output. This includes setting time and temperature controls, and can include positioning product on trays, slips or belts with correct spacing. 2.3. Washes and/or glazes are applied before baking as required.
3. Bake Special Pastry Products	3.1. Pastry products are baked according to food safety and quality requirements. 3.2. Under baked or over baked products are identified and rectified. 3.3. Baked products are remove from oven and cooled to meet required temperature.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Topping equipment, oven loading equipment, ovens and cooling racks
2. Ingredients	2.1. Pastry and other ingredients as per recipe
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Monitor baking process includes monitoring:	4.1 Colour 4.2 Appearance/shape 4.3 Seals that they show no signs of boil out 4.4 Taking corrective action as required maintaining quality of product.
5. Standards and Regulations	5.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Select oven temperature & preheat. 1.3 Milk and egg washes may be applied prior to baking. 1.4 Glazes and sugar may be applied after baking. 1.5 Unacceptable products are identified and rectified. 1.6 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Changes that occur to the product during baking. 2.2. How pastry product characteristics affect the final product. 2.3. Time required for conditioning products. 2.4. The effect of variables such as temperature of

	fillings, time, temperature and humidity during the baking process. 2.5. Quality characteristics of the final product. 2.6. Presentation and/or storage requirements for baked product. This can include an understanding of refrigeration, freezing and shelf life. 2.7. Settings, operating requirements and safety features of equipment used. 2.8. Causes of variation and corrective action required. 2.9. Control points and related monitoring requirements. 2.10. OHS hazards and controls. 2.11. Waste handling and cleaning requirements.
3. Underpinning skill	3.1. Access workplace information to identify baking requirements. 3.2. Prepare product for baking. This may include thawing frozen product and allowing the required development/conditioning of product prior to baking. It can also include applying finishing or glazes. 3.3. Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.4. Load product. This can include positioning product on trays, slips, or belts with correct spacing. 3.5. Select required oven settings. This may include setting time, temperature and steam controls. 3.6. Monitor baking process. This includes monitoring: • colour • appearances/shape • seals that they show no signs of boil out. 3.7. Remove baked products from oven and cool to meet required
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace

	4.8	Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1	Tools, equipment and facilities appropriate to the process or activities .
	5.2	Materials relevant to the proposed activity.
6. Method of assessment	6.1	Demonstration with oral questioning
	6.2	Direct observation
	6.3	Written test
	6.4	Portfolio
	6.5	Log book
7. Context of assessment	7.1	Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3019A1: Inspect quality, diagnose and respond to process and product faults (Pastry)
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to inspect quality to produce pastry in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Inspect quality of raw materials and pastry products	2.1. Quality of ingredients and/or raw materials is inspected before processing. 2.2. Storage of ingredients, raw materials and/or pastry products is inspected for compliance with product specifications according to work standards and food safety requirements. 2.3. Process factors and reactions occurring during processing are monitored according to product specifications.
3. Diagnose and rectify product processes and faults in pastry production	3.1. Under baked and over baked products are diagnosed and analysed to determine cause. 3.2. Corrective action is recorded and faults rectified according to workplace procedures and food safety standards.
4. Inspect equipment and production area to ensure they meet hygiene requirements.	4.1 Equipment and production area are inspected to ensure they are clean and they meet hygiene requirements 4.2 Waste is disposed of according to workplace procedures.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Thermometer, hydrometer, digital scale, Ph measuring equipment, moisture testing equipment
2. Ingredients	2.1. Raw materials include those used to manufacture pastry products. 2.2. Ingredients relate to those ingredients used in product, materials may include packaging consumables. 2.3. Pastry styles and types include but are not limited to pastry cake, puff pastry, Danish pastry, éclair pastry etc.
3. PPE (Personal Protective Equipment) may include but is not limited to:	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
Special Notes ➤ Causes of unacceptable quality may relate to raw materials, processing and/or storage. ➤ Remove/isolate and report ingredients/materials of unacceptable quality. ➤ Determine likely causes of unacceptable final product relating to raw ingredients. ➤ Determine likely causes of unacceptable final product relating to the process and/or storage conditions. ➤ Preparation requirements for use. This may include conditioning fruit. ➤ Pastry styles, types and textures. This includes an awareness of the labelling requirements for types of pastry consistent with the Food Standards Code. ➤ Principles of processing techniques used to achieve finished products. This includes: 1) Types of mixtures used 2) Hand moulding 3) Oven types, including, method of steam generation 4) Methods of delivering product to the oven ➤ Effect of typical reactions during mixing, development and baking. This may include : 1) Baking powder activity 2) Types of flour 3) Mixing procedures ➤ Storage and handling conditions for raw ingredients and finished product ➤ Factors that can affect shelf-life, including: 1) Ingredients used	

2) Pastry types 3) Storage conditions 4) Packaging 5) Environmental factors	
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Quality of ingredients and storing procedures. 1.3 Monitor process factors and reactions. 1.4 Effects of under baking and over baking. 1.5 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1 Quality of ingredients and storing procedures 2.2 Monitor process factors and reactions. 2.3 Effects of under baking and over baking.
3. Underpinning skill	3.1 Selecting and storage of ingredients. 3.2 Find out under baked & over baked products. 3.3 Identified & rectified products fault according to Procedures and food safety standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test

	6.4 Portfolio
	6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

JOB ROLE SPECIFIC ELECTIVES - Cake

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODCAK1020A1: Produce Cake Batter
Nominal Hours	40 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to operate equipment, and apply principles and procedures to produce a variety of cake batter in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment	2.1. Necessary ingredients are selected, measured and weighed according to recipe to make cake batter 2.2. Equipment is confirmed ready for use. 2.3. Batter mixing equipment is set and operated to mix the batter.
3. Produce cake batter	3.1. Ingredients are poured into the mixer. 3.2. Mixing process is monitored. This may include monitoring batter consistency, feel and texture. 3.3. Unacceptable cake batter is identified and rectified. 3.4. Corrective action taken as required to ensure cake batter requirements. 3.5. Unacceptable cake batter is reported.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mixers, sieves, weighing equipment and measuring tools, tray, cake mould, saucepan, fry pan, and other utensils etc.
2. Ingredients	2.1. Cake flour, sugar, eggs, shortening, flavour, fruit and other ingredients as per recipe
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Set mixing equipment to meet production requirements	4.1 Selecting and fitting appropriate attachments 4.2 Setting mixer times and speeds In the case of sponge production, this includes ensuring equipment and other utensils are free of all fat residues.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe. 1.3 Follow the proper mixing process. 1.4 Explain types of batter. 1.5 Unacceptable batter is identified and rectified. 1.6 Waste is disposed of according to workplace procedures.
2. Underpinning knowledge	2.1. Basic principles of cake and sponge making. 2.2. Ingredient characteristics and purpose in the final product. This includes a knowledge of flour types, sugar, grades, shortening and emulsifiers, and fresh and/or pulp egg. It may also include a basic understanding of pre-mix composition. 2.3. Methods used to confirm accuracy of measuring equipment used. 2.4. Ingredients storage requirements. 2.5. Methods used to prepare cake batter. 2.6. Physical and chemical methods used to aerate batter. 2.7. Significance of factors such as temperature of batter on final product.

	2.8. Factors affecting sponge making. 2.9. Required characteristics of batter. 2.10. Process requirements. This may include: ○ Mixing times and speeds. ○ Batter specifications. 2.11. Settings, operating requirements and safety features of equipment used. 2.12. Methods used to deposit batter including use of release agents as required. 2.13. Causes of variation and corrective action required. 2.14. Control points and related monitoring requirements. 2.15. OSH hazards and controls. 2.16. Waste handling and cleaning and procedures.
3. Underpinning skill	3.1. Access workplace information to identify recipe requirements. 3.2. Confirm condition, type, quality and quantity of ingredients. This includes selecting shortening type to meet recipe and ambient temperature requirements. 3.3. Weigh, scale or meter ingredients as required. 3.4. Calculate yield based on given batch weight and/or main ingredient weight, according to workplace practices. 3.5. Confirm equipment status and condition. 3.6. Transfer ingredients to the mixer in the required sequence. 3.7. Set mixing equipment to meet production requirements. 3.8. This can include: ○ Selecting and fitting appropriate attachments. ○ Setting mixer times and speeds. 3.9. Operate and monitor the mixing process. This can include monitoring: ○ Mixing time and speed. ○ Ingredient and finished batter temperature. ○ Batter consistency, appearance and texture. 3.10. Identify batter that does not meet quality requirements and take necessary corrective action 3.11. Prepare tins/trays, liners and papers as required. 3.12. Deposit, extrude or spread batter to meet product and volume/weight requirements.

	3.13. Clean equipment and utensils to meet hygiene standards. 3.14. Maintain workplace records as required. 3.15. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Critical aspect of competency	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2021A: Produce Cake Fill
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to prepare a range of fillings for use in cake products produced in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare equipment and ingredients	2.1. Ingredients are confirmed and made available for product requirements. 2.2. Equipment is checked to confirm readiness for use. 2.3. Ingredients are measured according to recipe requirements. 2.4. Ingredients are prepared for use in fillings . This may include thawing or conditioning pre-prepared ingredients .
3. Produce Cake Fill	3.1. Cake fill is produced according to recipe requirements. 3.2. Raw and cooked fillings must be checked before use. Unacceptable ingredients or fillings are identified and rectified.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mixers, sieves, weighing, tray, cake mould, saucepan, fry pan, wooden spatula, whisk, palette knife, etc.
2. Ingredients	2.1. Egg, corn flour, shortening, oil, milk, pastry cream, butter cream, fresh cream, fruit, jam, fruit colour, chocolate and other ingredients as required by recipe.
3. Sweet fillings include	3.1. Fruit, syrup, jam, custard, cream and starches
4. PPE (Personal Protective Equipment)	4.1 Protective clothing, gloves, hair net and other PPE as per OSH requirements
5. Preparation of ingredients for use in fillings	5.1 mincing, peeling, slicing, dicing and cooking, conditioning pre-prepared ingredients and/or preparing raw ingredients for use, and preparing solutions for addition such as dissolving starch for use in a mixture.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe. 1.3 Follow the proper mixing process. 1.4 Explain types of cake filling. 1.5 Unacceptable fillings are identified and rectified. 1.6 Waste is disposed of according to workplace procedures.
2. Underpinning knowledge	2.1. Basic principles of filling preparation. 2.2. Differences in filling types for different product types. 2.3. Ingredient characteristics and purpose in filling. This includes an awareness of types of thickeners used for filling types. 2.4. Methods used to prepare fillings in the workplace. 2.5. Quality characteristics and uses of fillings. 2.6. Process requirements such as: • Time and temperature requirements relating to thawing, reheating, cooling (of cooked food) and cooking as required. • Storing/holding requirements. • Cooking times and temperatures. • Reconstituting dry ingredients.

	2.7. Settings, operating requirements and safety features of equipment used. 2.8. Causes of variation and corrective action required. 2.9. OHS hazards and controls. 2.10. Storage requirements for prepared fillings. This can include an understanding of refrigeration, freezing and shelf life. 2.11. Contamination (including cross-contamination) risks associated with ingredients/processes used. • Waste handling and cleaning and procedures
3. Underpinning skill	3.1. Access workplace information to identify production requirements. 3.2. Confirm condition, type, quality and quantity of ingredients. 3.3. Weigh, scale or meter ingredients as required. 3.4. Prepare ingredients as required. This may include thawing or conditioning pre-prepared ingredients and/or preparing raw ingredients for use, and preparing solutions for addition such as dissolving starch for use in a mixture. 3.5. Combine and process fillings. This may include monitoring: ○ Quality, quantity and sequencing of ingredient addition. ○ Blending/mixing process. ○ Cooking times and temperatures. ○ Filling characteristics (colour, texture, smell, viscosity) ○ Take corrective action so that fillings meet quality standards. 3.6. Clean equipment and utensils to meet hygiene standards. 3.7. Maintain workplace records as required. 3.8. Maintain work area to meet housekeeping standards
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace

5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Critical aspect of competency	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK1022A1: Bake Cake
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to select equipment and bake cakes in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking cakes	2.1. Prepared cake batter is poured into tins, finished and arranged to meet quality and product requirements. 2.2. Ovens are operated to meet required output. This includes setting time and temperature controls, and can include positioning product on trays, slips or belts with correct spacing. 2.3. Washes and/or glazes are applied before baking as required.
3. Bake cakes	3.1. Cakes are baked according to food safety and quality requirements. 3.2. Baking is monitored. Under baked and over baked product is identified and rectified. 3.3. Baked products are removed from oven and cooled to meet required temperature. 3.4. Washes and/or glazes are applied after baking as required.

4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.
Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Topping equipment, oven loading equipment, ovens and cooling racks
2. Ingredients	2.1. Water, sugar, oil and other glazing ingredients as per recipe.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Monitor baking process includes monitoring:	4.1 Colour 4.2 Appearance/shape 4.3 Time
5. Workplace information	5.1 Can include verbal or written operating procedures, specifications, productions schedules and recipe instructions.
6. Standards and Regulations	6.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
7. Other conditions	7.1 Take corrective action as required to maintain quality of product. 7.2 Maintain workplace records as required.
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Select oven temperature & preheat. 1.3 Washes may be applied prior to baking. 1.4 Glazes and sugar may be applied after baking. 1.5 Under baked & over baked products are identified and rectified.

	1.6 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Basic principles of cake and sponge. 2.2. Effect of ingredients on baking process and final product. 2.3. Cooling methods. 2.4. Required characteristics of final product. 2.5. Process requirements. This may include: • Baking times and temperatures • Oven settings • Settings, operating requirements and safety features of equipment used. 2.6. Produce presentation and storage requirements. This can include an understanding of refrigeration and shelf life. 2.7. Product cooling and handling methods to preserve product quality. 2.8. Control points and related monitoring requirements. 2.9. Causes of variation and corrective action required. 2.10. Control points and related monitoring requirements. 2.11. OHS hazards and controls. 2.12. Waste handling and cleaning requirements. May include knowledge of: • Finishing baked products. • Decorating cakes.
3. Underpinning skill	3.1. Access workplace information to identify baking requirements. 3.2. Confirm product is correctly deposited and ready for baking. 3.3. Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.4. Load product. This can include positioning product on trays, slips or belts with correct spacing. 3.5. Monitor baking process. This includes monitoring: ○ colour ○ appearance/shape ○ time 3.6. Remove baked products from oven and cool, turn out and present finished product. This can include placing on cooling racks. 3.7. Take corrective action as required to maintain quality of product.

	3.8. Maintain workplace records as required. 3.9. Maintain work area to meet housekeeping standards. 3.10. May include ability to: • Finish products • Decorate cakes.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Critical aspect of competency	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2023A1 : Decorate Cakes
Nominal Hours	60 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to select equipment and decorate cakes with decorating materials such as fondants and ganache in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare utensils, equipment and ingredients	2.1. Ingredients are confirmed and arranged to meet product requirements. 2.2. Utensils and equipment are checked to confirm readiness for use. 2.3. Ingredients are measured for recipe requirements 2.4. Decorations are purchased or made ready to decorate cakes.
3. Decorate Cakes	3.1. Decorating materials are applied according to design specifications. 3.2. Unacceptable ingredients are identified and rectified.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Piping bags and nozzles, mixing bowls and application utensils such as spatulas and palette knives.
2. Decorating materials	2.1. Cake ornaments and decorations, fresh, mock or butter cream, fudge and other icing sugar, fondant, chocolate, glazes, fruit, custard, mousses and similar fillings and coverings. These may be freshly prepared or purchased for use.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Typical decorating techniques include	4.1 Flooding, icing or masking cakes, finishing cake sides, piping to produce decorative finishes and write simple messages, and placement or arrangement of ornaments and decorations. It may also include applying the final layer of materials to finish a product.
5. Decorating	5.1 is done within design specifications.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after 1.2 Production. 1.3 Select tools & decorating equipment. 1.4 Decorating materials are purchased or made ready to decorate cakes. 1.5 Unacceptable ingredients & decorating materials are identified and rectified. 1.6 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1. Methods used to prepare a range of decorating materials. This includes preparation of ganache and fondants. 2.2. Characteristics of prepared decorating materials. 2.3. Methods used to confirm accuracy of measuring equipment used. 2.4. Methods used to prepare powdered and liquid colours/flavours.

	2.5. Board types, sizes and appropriate medium to secure cake to cake base. 2.6. Acceptable standards for equipment/utensils used includes an understanding of cleaning requirements, and signs of wear or unacceptable damage. Where measuring signs of wear or unacceptable damage. Where measuring equipment is used, it may also include procedures such as taring of scales. 2.7. Decorating techniques such as flooding, icing or masking, piping of simple messages and decorative finishes, and placement of ornaments and decorations. 2.8. The effect of variables such as the temperature of decorating materials and application time on the finished product. 2.9. Product quality. Presentation and storage requirements. This includes an understanding of refrigeration, freezing and shelf life. 2.10. Inspections/control points used to confirm that product meets quality requirements and related monitoring requirements. 2.11. Causes of variation and corrective action required. 2.12. OHS hazards and controls. 2.13. Waste handling and cleaning requirements and procedures. 2.14. May include knowledge of: ○Chocolate preparation and tempering.
3. Underpinning skill	3.1. Select and/or follow appropriate decorating instructions. 3.2. Confirm that the required type and quantity of cake ornaments, decorations and decorating materials and/or ingredients are available. 3.3. Confirm that required equipment is clean and ready for use. 3.4. Mix or prepare decorating materials as required. 3.5. Select and mount cakes on appropriate cake bases. 3.6. Demonstrate a range of decorating techniques to suit the product. At a minimum, decorating techniques will include: ○Flooding, icing or masking cakes. ○Writing simple messages. ○Using more than one decorating material to achieve the required finish.

	3.7. Applying decorating materials to cover cakes in a timely manner to achieve an even, clean finish as required by product and customer requirements. 3.8. Identify and take corrective action to ensure the finished product meets quality standards. 3.9. Clean equipment and utensils to meet hygiene standards. 3.10. Maintain workplace records as required. 3.11. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Critical aspect of competency	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODCAK3034A1: Prepare Special Cake Batter and fills for baking
Nominal Hours	40 hours
Unit Descriptor	This unit specifies the competency of knowledge, skills and attitude required to operate equipment, apply principles, and procedures to prepare a variety of special cake, a range of filling and decorate cake in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment	2.1. Necessary ingredients are selected, measured and weighed according to recipe to make cake batter 2.2. Equipment is confirmed ready for use. 2.3. Batter mixing equipment is set and operated to mix the batter.
3. Produce cake batter and cake fill	3.1. Ingredients are poured into the mixer. 3.2. Mixing process is monitored. This may include monitoring batter consistency, feel and texture. 3.3. Unacceptable cake batter is identified and rectified. 3.4. Corrective action taken as required to ensure cake batter requirements. 3.5. Cake fill is produced according to recipe requirements 3.6. Raw and cooked fillings must be checked before use 3.7. Unacceptable ingredients or fillings are identified and rectified.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and

	reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure
Range of Variables	
Variable	Range (may include but is not limited to)
1. Equipment	1.1 Bakery Lab 1.2 Mixers 1.3 Sieves 1.4 Weighing Equipment 1.5 Measurement Tools 1.6 Mixing Bowl 1.7 Sauce Pan 1.8 Refrigerator 1.9 Cake Mould 1.10 Baking Tray 1.11 Wooden Spatula 1.12 Small Bowl 1.13 Palette Knife 1.14 Knife, Scrapers, Scissor 1.15 Electric (Rack System Large) Oven 1.16 Gas Oven with 5 Burners 1.17 Cooling Rack 1.18 Hot Steel Table 1.19 Wooden Table - 1 for 4 students 1.20 Nozzle (For decorating) 1.21 Piping Bag
2. Ingredients	2.1. White flour, sugar, corn flour, salt, cake improver, eggs, shortening, milk powder, water, butter, icing sugar, coco powder, fresh cream, chocolate, vermicelli, different types of nut, fresh & dry fruit, baking power, food colour, fudge, fondant, glaze fruit, custard, mousses and similar fillings.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing 3.2. gloves 3.3. hair net and other PPE as per OSH requirements.
4. Special cake	4.1 Chiffon cake, swiss roll (conventional), high ratio cake, fibre and grain cakes.

5. Set mixing equipment to meet production requirements	5.1 Selecting and fitting appropriate attachments 5.2 Setting mixer times and speeds In the case of sponge production, this includes ensuring equipment and other utensils are free of all fat residues.
6. Standards and Regulations	6.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe. 1.3 Follow the proper mixing process. 1.4 Explain types of batter. 1.5 Unacceptable batter is identified and rectified. 1.6 Waste is disposed of according to workplace procedures.
2. Underpinning knowledge	2.1. Basic principles of cake and sponge making. 2.2. Ingredient characteristics and purpose in the final product. This includes a knowledge of flour types, sugar, grades, shortening and emulsifiers, and fresh and/or pulp egg. It may also include a basic understanding of pre-mix composition. 2.3. Methods used to confirm accuracy of measuring equipment used. 2.4. Ingredients storage requirements. 2.5. Methods used to prepare cake batter. 2.6. Physical and chemical methods used to aerate batter. 2.7. Significance of factors such as temperature of batter on final product. 2.8. Factors affecting sponge making. 2.9. Required characteristics of batter. 2.10. Process requirements. This may include: ○ Mixing times and speeds. ○ Batter specifications.

	○ Settings, operating requirements and safety features of equipment used. ○ Methods used to deposit batter including use of release agents as required. ○ Causes of variation and corrective action required. 2.11. Control points and related monitoring requirements. 2.12. OHS hazards and controls. Waste handling and cleaning and procedures.
3. Underpinning skill	3.1. Access workplace information to identify recipe requirements. 3.2. Confirm condition, type, quality and quantity of ingredients. This includes selecting shortening type to meet recipe and ambient temperature requirements. 3.3. Weigh, scale or meter ingredients as required. 3.4. Calculate yield based on given batch weight and/or main ingredient weight, according to workplace practices. 3.5. Confirm equipment status and condition. 3.6. Transfer ingredients to the mixer in the required sequence. 3.7. Set mixing equipment to meet production requirements. This can include: • selecting and fitting appropriate attachments. • setting mixer times and speeds. 3.8. Operate and monitor the mixing process. This can include monitoring: 3.9. Mixing time and speed. 3.10. Temperature of ingredients and finished batter. 3.11. Batter consistency, appearance and texture. 3.12. Identify batter that does not meet quality requirements and take necessary corrective action. 3.13. Prepare tins/trays, liners and papers as required. 3.14. Deposit, extrude or spread batter to meet product and volume/weight requirements. 3.15. Clean equipment and utensils to meet hygiene standards. 3.16. Maintain workplace records as required. 3.17. Maintain work area to meet housekeeping standards.

4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Critical aspect of competency	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3035A1: Bake Special Cakes
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to select equipment and bake special cakes in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking cakes	2.1. Prepared cake batter is poured into tins, finished and arranged to meet quality and product requirements. 2.2. Ovens are operated to meet required output. This includes setting time and temperature controls, and can include positioning product on trays, slips or belts with correct spacing. 2.3. Washes and/or glazes are applied before baking as required.
3. Bake special cakes	3.1. 3.1 Cakes are baked according to food safety and quality requirements. 3.2. Baking is monitored. Under baked and over baked product is identified and rectified. 3.3. Baked products are removed from oven and cooled to meet required temperature. 3.4. Washes and/or glazes are applied after baking as required.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements.

	4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.
Range of Variables	
Variable	Range 9 may include but are not limited to)
1. Equipment	1.1 Topping equipment, oven loading equipment, ovens and cooling racks
2. Ingredients	2.1. Water, sugar, oil and other glazing ingredients as per recipe.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Monitor baking process includes monitoring:	4.1 Colour 4.2 Appearance/shape 4.3 Time
5. Workplace information	5.1 Can include verbal or written operating procedures, specifications, productions schedules and recipe instructions.
6. Standards and Regulations	6.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
7. Other conditions	7.1 Take corrective action as required to maintain quality of product. 7.2 Maintain workplace records as required.
8. Special cake may include	8.1 Chiffon cake, swiss roll (conventional), high ratio cake, fibre and grain cakes.
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Select oven temperature & preheat.

	1.3 Washes may be applied prior to baking. 1.4 Glazes and sugar may be applied after baking. 1.5 Under baked & over baked products are identified and rectified. 1.6 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1. Basic principles of cake and sponge. 2.2. Effect of ingredients on baking process and final product. 2.3. Cooling methods. 2.4. Required characteristics of final product. 2.5. Process requirements. This may include: 2.6. Baking times and temperatures 2.7. Oven settings 2.8. Settings, operating requirements and safety features of equipment used. 2.9. Produce presentation and storage requirements. This can include an understanding of refrigeration and shelf life. 2.10. Product cooling and handling methods to preserve product quality. 2.11. Control points and related monitoring requirements. 2.12. Causes of variation and corrective action required. 2.13. Control points and related monitoring requirements. 2.14. OHS hazards and controls. 2.15. Waste handling and cleaning requirements. 2.16. May include knowledge of: 2.17. Finishing baked products. 2.18. Decorating cakes.
3. Underpinning skill	3.1. Access workplace information to identify baking requirements. 3.2. Confirm product is correctly deposited and ready for baking. 3.3. Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.4. Load product. This can include positioning product on trays, slips or belts with correct spacing.

	3.5. Monitor baking process. This includes monitoring: ○ colour ○ appearance/shape ○ time ● Remove baked products from oven and cool, turn out and present finished product. This can include placing on cooling racks. ● Take corrective action as required to maintain quality of product. ● Maintain workplace records as required. ● Maintain work area to meet housekeeping standards. ● May include ability to: ○ Finish products ○ Decorate cakes.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Critical aspect of competency	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3036A1 – Decorate Special Cakes
Nominal Hours	40 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to select equipment and decorate special cakes with decorating materials such as fondants and ganache in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare utensils, equipment and ingredients	2.1 Ingredients are confirmed and arrange for product requirements. 2.2 Utensils and equipment are checked to confirm readiness for use. 2.3 Ingredients are measured for recipe requirements 2.4 Decorations are purchased or make ready to decorate cakes.
3. Decorate Special Cakes	3.1 Prepare chocolate icing and piping mediums for decorate the cake. 3.2 Decorating materials are applied according to design specifications. 3.3 Unacceptable ingredients are identified and rectified.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may included but are not limited to)
1. Equipment	1.1 Piping bags and nozzles, mixing bowls and application utensils such as spatulas and palette knives.
2. Decorating materials	2.1. Cake ornaments and decorations, fresh, mocha or butter cream, fudge and other icing sugar, fondant, chocolate, glazes, fruit, custard, mousses and similar fillings and coverings. These may be freshly prepared or purchased for use.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Special cake may include	4.1 Chiffon cake, swiss roll (conventional), high ratio cake, fibre and grain cakes.
5. Typical decorating techniques include	5.1 Flooding, icing or masking cakes, finishing cake sides, piping to produce decorative finishes and write simple messages, and placement or arrangement of ornaments and decorations. It may also include applying the final layer of materials to finish a product.
6. Decorating	6.1 is done within design specifications.
7. Standards and Regulations	7.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production.

	1.2 Select tools & decorating equipment. 1.3 Decorating materials are purchased or made ready to decorate cakes. 1.4 Unacceptable ingredients & decorating materials are identified and rectified. 1.5 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1. Methods used to prepare a range of decorating materials. This includes preparation of ganache and fondants. 2.2. Characteristics of prepared decorating materials. 2.3. Methods used to confirm accuracy of measuring equipment used. 2.4. Methods used to prepare powdered and liquid colours/flavours. 2.5. Board types, sizes and appropriate medium to secure cake to cake base. 2.6. Acceptable standards for equipment/utensils used include an understanding of cleaning requirements, and signs of wear or unacceptable damage. Where measuring signs of wear or unacceptable damage. Where measuring equipment is used, it may also include procedures such as taring of scales. 2.7. Decorating techniques such as flooding, icing or masking, piping of simple messages and decorative finishes, and placement of ornaments and decorations. 2.8. The effect of variables such as the temperature of decorating materials and application time on the finished product. 2.9. Product quality. Presentation and storage requirements. This includes an understanding of refrigeration, freezing and shelf life. 2.10. Inspections/control points used to confirm that product meets quality requirements and related monitoring requirements. 2.11. Causes of variation and corrective action required. 2.12. OHS hazards and controls. 2.13. Waste handling and cleaning requirements and procedures. 2.14. May include knowledge of: 2.15. Chocolate preparation and tempering.

3. Underpinning skill	3.1.in a timely manner to achieve an even, Select and/or follow appropriate decorating instructions. 3.2. Confirm that the required type and quantity of cake ornaments, decorations and decorating materials and/or ingredients are available. 3.3. Confirm that required equipment is clean and ready for use. 3.4. Mix or prepare decorating materials as required. 3.5. Select and mount cakes on appropriate cake bases. 3.6. Demonstrate a range of decorating techniques to suit the product. At a minimum, decorating techniques will include: 3.7. Flooding, icing or masking cakes. 3.8. Writing simple messages. 3.9. Using more than one decorating material to achieve the required finish. 3.10. Applying decorating materials to cover cakes clean Finish as required by product and customer requirements. 3.11. Identify and take corrective action to ensure the finished product meets quality standards. 3.12. Clean equipment and utensils to meet hygiene standards. 3.13. Maintain workplace records as required. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity
6. Method of assessment	6.1 Demonstration with oral questioning 6.1 Direct observation 6.2 Written test 6.3 Portfolio

	6.4	Log book
7. Context of assessment	7.1	Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.		

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3024A1: Inspect quality, diagnose and respond to process and product faults (Cake)
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to inspect quality to produce cakes in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Inspect quality of raw materials and cake products	2.1. Quality of ingredients and/or raw materials is inspected before processing. 2.2. Storage of ingredients , raw materials and/or cake products is inspected for compliance with product specifications according to work standards and food safety requirements. 2.3. Process factors and reactions occurring during processing are monitored according to product specifications.
3. Diagnose and rectify product processes and faults in cake production	3.1. Under baked and over baked products are diagnosed and analysed to determine cause. 3.2. Corrective action is recorded and faults rectified according to workplace procedures and food safety standards.
4. Inspect equipment and production area to ensure they meet hygiene requirements.	4.1 Equipment and production area are inspected to ensure they are clean and they meet hygiene requirements 4.2 Waste is disposed of according to workplace procedures.
Range of Variables	

Variable	Range (may include but are not limited to)
1. Equipment	1.2 Thermometer, hydrometer, digital scale, Ph measuring equipment, moisture testing equipment.
2. Ingredients/ Raw materials	2.1. Raw materials include those used to manufacture cake products. 2.2. Causes of unacceptable quality may relate to raw materials, processing and/or storage. 2.3. Ingredients relate to those ingredients used in product, materials may include packaging consumables. 2.4. Cake styles and types include but are not limited to plain cake, fruit cakes, marble cakes, Christmas cake and other cakes.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
Special Notes ➤ Remove/isolate and report ingredients/materials of unacceptable quality. ➤ Determine likely causes of unacceptable final product relating to raw ingredients. ➤ Determine likely causes of unacceptable final product relating to the process and/or storage conditions. ➤ Preparation requirements for use. This may include conditioning fruit. ➤ Cake styles, types and textures. This includes an awareness of the labelling requirements for types of pastry consistent with the Food Standards Code. ➤ Principles of processing techniques used to achieve finished products. This includes: 1) Types of mixtures used 2) Hand moulding 3) Oven types, including method of steam generation 4) Methods of delivering product to the oven ➤ Effect of typical reactions during mixing, development and baking. This may include: 1) Baking powder activity 2) Types of flour 3) Mixing procedures ➤ Storage and handling conditions for raw ingredients and finished product ➤ Factors that can affect shelf-life, including: 1) Ingredients used 2) Cake types 3) Storage conditions 4) Packaging 5) Environmental factors	

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Quality of ingredients and storing procedures. 1.3 Monitor process factors and reactions. 1.4 Effects of under baking and over baking. 1.5 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Basic composition, characteristics and function of each main ingredient used. This includes: 2.2. Form/grade of ingredient supplied 2.3. Behaviour/changes occurring during processing 2.4. Role and purpose 2.5. Preparation requirements for use. This may include conditioning fruit and bringing ingredients to the required temperature 2.6. Styles, types and textures of finished products 2.7. Impact of ingredient cost and yields on profit margin 2.8. For cakes this includes: • Batter preparation methods including flour batter, sugar batter, all in and pre-mix methods • Methods of aeration including mechanical and chemical methods • Sponge preparation methods • Baking methods. This may include boiling, steaming and baking • Browning and caramelisation • Methods of assembly and finishing • Effect of typical reactions during mixing and baking. This varies depending on product range. 2.9. For cakes it may include: • Emulsification • Aeration – this includes the role of eggs in aeration • Browning and caramelisation • Formula balance and ingredient addition sequence • Impact of ingredient cost and yields on profit margin

	2.10. Recipe and preparation requirements relevant to product type. This can include starting and finishing temperatures of ingredients and dough; the amount of work input/mixing time; and factors such as time, temperature and humidity during each proving stage, and during baking, depanning and cooling 2.11. Storage and handling conditions for raw ingredients and finished product 2.12. Procedures for reworking or disposing of unacceptable product 2.13. Factors that can affect shelf-life, including: • Product type • Ingredients used • Preparation methods • Storage conditions • Packaging • Environmental factors
3. Underpinning skill	3.1. Access workplace information relating to troubleshooting 3.2. Select, fit and use personal protective clothing and/or equipment 3.3. Use relevant observation and/or test methods to confirm raw ingredient characteristics 3.4. Remove/isolate and report ingredients/materials of unacceptable quality 3.5. Determine likely causes of unacceptable final product relating to raw ingredients 3.6. Determine likely causes of unacceptable final product relating to the process and/or storage conditions 3.7. Develop procedures to prevent or minimise the likelihood of recurrence of the problem
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.

6. Method of assessment	6.5 Demonstration with oral questioning 6.1 Direct observation 6.2 Written test 6.3 Portfolio 6.4 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

JOB ROLE SPECIFIC ELECTIVES - Biscuit

National Technical and Vocational Qualification Framework for Bangladesh
Unit of Competency

Unit Code and Title	FODBAK1025A1: Produce Biscuit Dough
Nominal Hours	60 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to operate equipment and produce biscuit dough in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment	2.1. Ingredients are confirmed and arrange for product requirements. 2.2. Ingredients are measured for recipe requirements. 2.3. Equipment is checked to confirm readiness for use. 2.4. Mixing equipment is set and operated to meet recipe requirements.
3. Produce Biscuit Dough	3.1. Ingredients are poured into the mixer for mixing. 3.2. Dough is either freshly prepared or by using premixes. 3.3. Prepared dough is deposited into baking tray, either manually or mechanically.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.
Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mixers, sieves, weighing, tray, saucepan, fry pan, wooden spatula, palate knife, etc.

2. Ingredients	2.1. Cake flour, sugar, eggs, shortening, margarines, flavours, fruit, chocolate chips and other ingredients as per recipe
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Set mixing equipment to meet production requirements can include:	4.1 Selecting and fitting appropriate attachments 4.2 Setting mixer times and speeds 4.3 In the case of some kinds of biscuits, this includes ensuring bowls and utensils are free of all fat residues.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe 1.3 Follow the proper mixing process 1.4 Explain types of dough 1.5 Unacceptable dough is identified and rectified 1.6 Waste is disposed of according to workplace procedures.
2. Underpinning knowledge	2.1. Basic principles of biscuit making. 2.2. Ingredient characteristics and purpose in the final product. This includes a knowledge of flour types, sugar, grades, shortening and emulsifiers, and fresh and/or pulp egg. It may also include a basic understanding of pre-mix composition. 2.3. Methods used to confirm accuracy of measuring equipment used. 2.4. Ingredients storage requirements. 2.5. Methods used to prepare cake batter. 2.6. Physical and chemical methods used to aerate batter. 2.7. Significance of factors such as temperature of batter on final product. 2.8. Factors affecting sponge making. 2.9. Required characteristics of batter. 2.10. Process requirements. This may include: • Mixing times and speeds. • Batter specifications.

	2.11. Settings, operating requirements and safety features of equipment used. 2.12. Methods used to deposit batter including use of release agents as required. 2.13. Causes of variation and corrective action required. 2.14. Control points and related monitoring requirements. 2.15. OHS hazards and controls. 2.16. Waste handling and cleaning and procedures.
3. Underpinning skill	3.1. Access workplace information to identify recipe requirements. 3.2. Confirm condition, type, quality and quantity of ingredients. This includes selecting shortening type to meet recipe and ambient temperature requirements. 3.3. Weigh, scale or meter ingredients as required. 3.4. Calculate yield based on given batch weight and/or main ingredient weight, according to workplace practices. 3.5. Confirm equipment status and condition. 3.6. Transfer ingredients to the mixer in the required sequence. 3.7. Set mixing equipment to meet production requirements. This can include: • Selecting and fitting appropriate attachments. • Setting mixer times and speeds. 3.8. Operate and monitor the mixing process. This can include monitoring: • Mixing time and speed. • Ingredient and finished batter temperature. • Batter consistency, appearance and texture. 3.9. Identify batter that does not meet quality requirements and take necessary corrective action. 3.10. Prepare tins/trays, liners and papers as required. 3.11. Deposit, extrude or spread batter to meet product and volume/weight requirements. 3.12. Clean equipment and utensils to meet hygiene standards. 3.13. Maintain workplace records as required. 3.14. Maintain work area to meet housekeeping standards.

4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2026A1: Form Biscuits
Nominal Hours	40 hours
Unit Descriptor	This unit covers the knowledge , skills and attitude required to manually or mechanically operate a biscuit forming / shaping process in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for forming biscuits	2.1. Prepared biscuit dough is confirmed and arranged according to recipe and operating requirements. 2.2. Equipment is checked to confirm readiness for use. 2.3. Processing/operating factors are entered as required to meet safety and production requirements. 2.4. Pre-start checks are carried out as required by workplace requirements.
3. Form biscuits and shut down forming process	2.1. Biscuits are formed manually or mechanical forming process is started and operated according to workplace procedures. 2.2. The forming process is monitored to confirm that formed product is produced to specification. 2.3. The appropriate shutdown procedure is identified. 2.4. The process is shut down according to workplace procedures.
4. Clean and maintain equipment and production	4.1 Equipment and production area are cleaned to meet production and hygiene requirements.

area	4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.
Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Depositing, rolling, forming and cutting equipment, manual and mechanical weighing and measuring equipment, and conveying systems.
2. Ingredients	2.1. Various types of biscuit dough
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Operation of equipment and processes	4.1 may require the use of process control panels and systems.
5. Shutdown procedures	5.1 may include cleaning. In some cases cleaning may be carried out by a dedicated cleaning crew.
6. Service	6.1 may need to be confirmed. These depend on the nature of the process. Typical examples include power, steam, water, vacuum, and compressed and instrumentation air.
Evidence Guide	
The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Biscuits are formed manually or mechanical. 1.3 Monitor forming process. 1.4 Unacceptable products are identified and rectified. 1.5 Waste is disposed of according to workplace
2. Underpinning knowledge	2.1. Effect of dough quality on process outcomes. 2.2. Quality characteristics of formed products. 2.3. Process specifications, procedures and operating parameters. This includes procedures for incorporating re-work dough and procedures for mending webs as required. 2.4. OHS hazards and controls.

	2.5. Lock out and tag out procedures. 2.6. Environmental issues and controls. 2.7. Shut down sequences and cleaning requirements associated with changeovers and types of shutdowns. 2.8. Waste handling requirements and procedures. 2.9. Recording requirements and procedures. 2.10. May include: • Cleaning and sanitation procedures. • Sampling and testing procedures. • Routine maintenance requirements and procedures.
3. Underpinning skill	3.1. Select, fit and use personal protective clothing and/or equipment 3.2. Confirm supply of necessary materials and services. This includes transfer and loading of dough into hoppers. 3.3. Confirm conditions of materials. This can includes confirming: • dough type matches product specification. • dough temperature, consistency/texture, moisture level, weight and colour • room temperature • dough standing time • dough supply 3.4. Confirm equipment status and condition. This can include ensuring equipment components are assembled in required configuration for biscuit type. 3.5. Set up and start up the process. This can include: • setting control panel for process type. • setting equipment speeds. • adjusting roller and web settings(as required) • adjusting depositing/extrusion settings(as required) 3.6. Monitor the forming process and equipment operation to identify out-of-specification results or non-compliance. This can involve monitoring: • biscuit size, shape and thickness • biscuit weight • biscuit temperature • incorporation of re-work dough

	3.7. Shut down equipment in response to an emergency situation. 3.8. Shut down equipment in response to routine shut down requirements. 3.9. Prepare equipment for cleaning. 3.10. Maintain workplace records. 3.11. Maintain work area to meet housekeeping standards.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification.

Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK1027A1: Bake biscuits
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to select equipment and to bake biscuits in commercial food production environments.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare biscuits for baking	2.1. Necessary ingredients are available to meet production requirement. 2.2. Prepared dough/ batter is tinned or deposited in baking tray for baking. 2.3. Ovens are operated to meet required output. This includes setting time and temperature controls, and can include positioning product on trays, slips or belts with correct spacing.
3. Bake biscuits	3.1. Biscuits are baked observing standard procedure that meets food safety and quality requirements. 3.2. Under baked and over baked product is identified and rectified. 3.3. Biscuits are checked for size as per production requirements.
4. Clean and maintain equipment and production area	1.4 Equipment and production area are cleaned to meet production and hygiene requirements. 1.5 Maintenance requirements are identified and reported according to workplace requirements. 1.6 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Topping equipment, oven loading equipment, ovens and cooling racks.
2. PPE (Personal Protective Equipment)	2.1. Protective clothing, gloves, hair net and other PPE as required by OSH requirements.
3. Workplace information	3.1. can include verbal or written operating procedures, specifications, productions schedules and recipe instructions.
4. Monitor baking process. This includes monitoring:	4.1 Colour 4.2 Appearance/shape 4.3 Time
5. Other variables	5.1 Take corrective action as required to maintain quality of product. 5.2 Maintain workplace records as required.
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Select oven temperature & preheat. 1.3 Washes may be applied prior to baking. 1.4 Glazes and sugar may be applied after baking. 1.5 Under baked & over baked products are identified and rectified. 1.6 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1. Basic principles of biscuit baking 2.2. Ingredient characteristics and purpose in dough. This includes an understanding of flour quality and the components of wheat flour. 2.3. Settings, operating requirements and safety features of equipment used. 2.4. OHS hazards and controls. 2.5. Waste handling and cleaning procedures. 2.6. What ingredients are required for making biscuit dough. 2.7. Basic principles of biscuit production 2.8. Effect of ingredients on baking process and final product.

	2.9. Cooling methods. 2.10. Required characteristics of final product. 2.11. Process requirements. This may include: 2.12. Baking times and temperatures 2.13. Oven settings 2.14. Settings, operating requirements and safety features of equipment used. 2.15. Produce presentation and storage requirements. This can include an understanding of refrigeration and shelf life. 2.16. Product cooling and handling methods to preserve product quality. 2.17. Control points and related monitoring requirements. 2.18. Causes of variation and corrective action required. 2.19. Control points and related monitoring requirements. 2.20. OHS hazards and controls. 2.21. Waste handling and cleaning requirements. 2.22. May include knowledge of: 2.23. Finishing baked products. 2.24. Decorating biscuit.
3. Underpinning skill	3.1. Confirm that equipment is clean and ready for operation. 3.2. Weigh, scale or meter ingredients as required. 3.3. Transfer ingredients to the mixer in the required sequence. 3.4. Set mixing equipment to meet recipe requirements. 3.5. Adjust water temperature to meet final finished dough temperature requirements. 3.6. Clean equipment and utensils to meet hygiene standards. 3.7. Maintain workplace records as required.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace

	4.8	Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1	Tools, equipment and facilities appropriate to the process or activities .
	5.2	Materials relevant to the proposed activity.
6. Method of assessment	6.1	Demonstration with oral questioning
	6.2	Direct observation
	6.3	Written test
	6.4	Portfolio
	6.5	Log book
7. Context of assessment	7.1	Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK2028A1: Cool, decorate and stack biscuits
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to cool, decorate and stack biscuits in commercial food production.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Cool biscuits	2.1. Baked biscuits are available to meet production requirements. 2.2. Baked biscuits are removed from oven and cooled to required temperature.
3. Decorate and stack biscuits	3.1. Decorations are added to cooled biscuits as per design specifications. 3.2. Biscuits are stacked either mechanically or manually according to production specifications.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mechanical stacking equipment, conveyor belts and cooling racks.
2. Ingredients for decoration	2.1. Chocolate, icings, decorations as per recipe. Decorations may be purchased or prepared.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
4. Workplace information	4.1 can include verbal or written operating procedures, specifications, productions schedules and recipe instructions
Special Notes ➤ Remove baked products from oven and cool, turn out and present finished product. This can include placing on cooling racks. ➤ Take corrective action as required to maintain quality of product. ➤ Maintain workplace records as required ➤ May include knowledge of: 1) Finishing baked products 2) Decorating biscuits	
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Baked biscuits are removed from oven and cooled to required temperature. 1.3 Select tools & decorating equipment. 1.4 Decorations are added to cooled biscuits as per design specifications. 1.5 Unacceptable ingredients & decorating materials are identified and rectified. 1.6 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1 Types of decorating materials. 2.2 Characteristics of prepared decorating materials. 2.3 Cooling temperature of biscuit.

3. Underpinning skill	3.1 Handling & cooling biscuits. 3.2 Decorating biscuits as per requirements.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3037A1 – Prepare special biscuit dough for baking
Nominal Hours	50 hours
Unit Descriptor	After completing this unit covers knowledge, skills and attitude required to produce a new variety of piped, sheeted and dropped biscuit dough in a commercial food production environment.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare ingredients and equipment for special biscuit dough.	2.1. Necessary Ingredients are selected, measured and weighed according to recipe to make special biscuit dough. 2.2. Equipment is confirmed ready for use. 2.3. Dough mixing equipment is set and operated to mixing the dough.
3. Produce special biscuit dough and test the dough	3.1. Ingredients are poured into the mixer. 3.2. Mixing process is operated and monitored. This may include monitoring dough consistency feel and texture. 3.3. Taste the dough: sugar level, moisture level, fat level 3.4. Corrective action is taken as required to ensure dough meets requirements. 3.5. Unacceptable dough is reported.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Bakery Lab 1.2 Mixers 1.3 Sieves 1.4 Weighing 1.5 Measurement Tools 1.6 Mixing Bowl 1.7 Fermentation / Proofing Cabinet 1.8 Refrigerator 1.9 Piping bag 1.10 Baking Tray 1.11 Star nozzle 1.12 Small Bowl 1.13 Egg, Oil, Flour, Brush 1.14 Knife, Scrapers, Scissor 1.15 Electric Rack System Large Oven 1.16 Gas Oven with 5 Burners 1.17 Cooling Rack 1.18 Hot Steel Table 1.19 Wooden /steel Table - 1 for 4 students
2. Ingredients	2.1. Medium protein flour, sugar, jam, coco powder, chocolate chips, eggs, margarine, milk powder, water, icing sugar, nuts etc.
3. Special types of biscuit	3.1. Viennese biscuits, checkerboard biscuit, icebox cookies, coconut fingers, cornflake cookies. 3.2. Set mixing equipment to meet recipe requirements.
4. PPE (Personal Protective Equipment)	4.1 Protective clothing, apron, gloves, hair net and other PPE as per OSH requirements.
5. Other variables	5.1 The margarine or fat needs to be soft to get maximum aeration.
6. Standards and Regulations	6.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.

Evidence Guide

The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.

1. Critical aspect of competency	1.1 Equipment must be clean before and after production. 1.2 Measure the ingredients as per recipe 1.3 Follow the proper mixing process 1.4 Explain types of dough 1.5 Unacceptable dough is identified and rectified 1.6 Waste is disposed of according to workplace procedures.
2. Underpinning knowledge	2.1. Basic principles of biscuit production 2.2. Effect of ingredients on baking process and final product. 2.3. Cooling methods. 2.4. Required characteristics of final product. 2.5. Process requirements. This may include: • baking times and temperatures • oven settings • settings, operating requirements and safety features of equipment used. 2.6. Produce presentation and storage requirements. This can include an understanding of refrigeration and shelf life. 2.7. Product cooling and handling methods to preserve product quality. 2.8. Control points and related monitoring requirements. 2.9. Causes of variation and corrective action required. 2.10. Control points and related monitoring requirements. 2.11. OHS hazards and controls. 2.12. Waste handling and cleaning requirements. 2.13. May include knowledge of: • Finishing baked products. • Decorating biscuits.
3. Underpinning skill	3.1. Access workplace information to identify baking requirements. 3.2. Confirm product is correctly deposited and ready for baking. 3.3. Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.4. Load product. This can include positioning product on

	trays, slips or belts with correct spacing. 3.5. Monitor baking process. This includes monitoring: • colour • appearance/shape • time 3.6. Remove baked products from oven and cool, turn out and present finished product. This can include placing on cooling racks. 3.7. Take corrective action as required to maintain quality of product. 3.8. Maintain workplace records as required. 3.9. Maintain work area to meet housekeeping standards. 3.10. May include ability to: • Finish products • Decorate biscuits.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3038A1: Bake Special Biscuit
Nominal Hours	30 hours
Unit Descriptor	After completing this unit covers the knowledge , skills and attitude required to able to bake a new variety of piped, sheeted and drooped biscuit in commercial food production environment.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Prepare for baking	2.1. Oven is preheated according to product specification. 2.2. Ovens loaded manually, trays placed or using slips and belts according to workplace equipment . 2.3. Ovens are operated for baking according to product specifications.
3. Bake biscuit and testing biscuit	3.1. Biscuit is baked according to food safety and quality requirements. 3.2. Under baked or over baked products are identified and rectified. 3.3. Monitor baking process. This includes heat, crust colour, sheen, uniformity of shape and size. 3.4. After baking test the biscuit: volume, general appearance, oven spring, crust colour.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.
Range of Variables	

Variable	Range (may included but are not limited to)
1. Equipment	1.1 Topping equipment, oven loading equipment, ovens and cooling racks.
2. Ingredients	2.1. Medium Protein Flour, sugar, milk powder, butter, eggs, margarine etc.
3. Special types of biscuit	3.1. Viennese biscuits, checker board, biscuit, icebox cookies, coconut fingers, cornflake cookies.
4. PPE (Personal Protective Equipment)	: 4.1 Protective clothing, gloves, hair net and other PPE as per OSH requirements.
5. Typical process parameters include	5.1 Temperature, time, humidity, development/proving time
6. Causes of unacceptable quality may relate to	6.1 Raw materials, processing and/or storage
7. Quality characteristics of final product including:	7.1 Volume 7.2 Texture 7.3 Crust colour
8. Other variables	8.1 The effects of time, temperature and humidity on baking 8.2 Dough characteristics such as shape/size and skin formation affect the final product
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	2.1 Equipment must be clean before and after Production. 2.2 Select oven temperature & preheat. 2.3 Washes may be applied prior to baking. Glazes and sugar may be applied after baking. 2.4 Under baked & over baked products are identified and rectified. 2.5 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1. Basic principles of biscuit production 2.2. Effect of ingredients on baking process and final product. 2.3. Cooling methods. 2.4. Required characteristics of final product.

	2.5. Process requirements. This may include: • baking times and temperatures • oven settings • settings, operating requirements and safety features of equipment used. 2.6. Produce presentation and storage requirements. This can include an understanding of refrigeration and shelf life. 2.7. Product cooling and handling methods to preserve product quality. 2.8. Control points and related monitoring requirements. 2.9. Causes of variation and corrective action required. 2.10. Control points and related monitoring requirements. 2.11. OHS hazards and controls. 2.12. Waste handling and cleaning requirements. 2.13. May include knowledge of: • Finishing baked products. • Decorating biscuit.
3. Underpinning skill	3.1. Access workplace information to identify baking requirements. 3.2. Confirm product is correctly deposited and ready for baking. 3.3. Select appropriate oven settings and start up the oven. This includes setting time and temperature controls. 3.4. Load product. This can include positioning product on trays, slips or belts with correct spacing. 3.5. Monitor baking process. This includes monitoring: • colour • appearance/shape • time 3.6. Remove baked products from oven and cool, turn out and present finished product. This can include placing on cooling racks. 3.7. Take corrective action as required to maintain quality of product. 3.8. Maintain workplace records as required. 3.9. Maintain work area to meet housekeeping standards. 3.10. May include ability to:

	• Finish products • Decorate biscuits
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3039A1: Cool, decorate and stack special biscuits
Nominal Hours	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to cool, decorate and stack special types of biscuits like Viennese biscuits, icebox cookies and coconut fingers in commercial food production environment.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Cool biscuits	2.1. Baked biscuits are available to meet production requirements. 2.2. Baked biscuits are removed from oven and cooled to required temperature.
3. Decorate and stack biscuits	3.1. Decorations are added to cooled biscuits as per design specifications. 3.2. Biscuits are stacked either mechanically or manually according to production specifications.
4. Clean and maintain equipment and production area	4.1 Equipment and production area are cleaned to meet production and hygiene requirements. 4.2 Maintenance requirements are identified and reported according to workplace requirements. 4.3 Waste is disposed of according to workplace procedure.

Range of Variables	
Variable	Range (may include but are not limited to)
1. Equipment	1.1 Mechanical stacking equipment, conveyor belts and cooling racks.
2. Ingredients for decoration	2.1. Chocolate, icings, jams, decorations as per recipe. Decorations may be purchased or prepared.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing , gloves, hair net and other PPE as per OSH requirements.
4. Workplace information	4.1 can include verbal or written operating procedures, specifications, productions schedules and recipe instructions
5. Knowledge and skills	5.1 Finishing baked products 5.2 Decorating biscuits
6. Standards and Regulations	6.1 Work is carried out according to company policies and procedures, regulatory and licensing requirements, and industrial awards and agreements. Food Standards Code including labelling, weights and measures legislation; and legislation covering food safety, environmental management, occupational health and safety.
7. Other variables	7.1 Remove baked products from oven and cool, turn out and present finished product. This can include placing on cooling racks. 7.2 Take corrective action as required to maintain quality of product. 7.3 Maintain workplace records as required
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	
1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Baked biscuits are removed from oven and cooled to required temperature. 1.3 Select tools & decorating equipment. 1.4 Decorations are added to cooled biscuits as per design specifications.

	1.5 Unacceptable ingredients & decorating materials are identified and rectified. 1.6 Waste is disposed of according to workplace.
2. Underpinning knowledge	2.1. Occupational health and safety (OHS) hazards and controls. 2.2. Should have adequate knowledge of biscuit production. 2.3. Knowledge of cooling, decorating and stacking special biscuits.
3. Underpinning skill	3.1. How to cool, decorate and stack biscuits. 3.2. Remove baked products from oven and cool 3.3. Turn out and present finished product. This can include placing on cooling racks.
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities . 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book
7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place

Accreditation Requirements

Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.

National Technical and Vocational Qualification Framework for Bangladesh

Unit of Competency

Unit Code and Title	FODBAK3029A1: Inspect quality, diagnose and respond to process and product faults (Biscuit)
Nominal Hour	30 hours
Unit Descriptor	This unit covers the knowledge, skills and attitude required to inspect quality to produce biscuits in a commercial food production environment.
Elements of Competency	Performance Criteria <i>Italicized</i> terms are elaborated in the Range of Variable
1. Observe OSH practices	1.1 Housekeeping standards are maintained in the workplace following OSH requirements. 1.2 Personal hygiene is maintained and PPE worn as per OSH requirements. 1.3 Equipment is cleaned for production and hygiene requirements.
2. Inspect quality of raw materials and biscuit products	2.1. Quality of ingredients and/or raw materials is inspected before processing. 2.2. Storage of ingredients, raw materials and/or biscuit products is inspected for compliance with product specifications according to work standards and food safety requirements. 2.3. Process factors and reactions occurring during processing are monitored according to product specifications.
3. Diagnose and rectify product processes and faults in biscuit production	3.1. Under baked and over baked products are diagnosed and analysed to determine cause. 3.2. Corrective action is recorded and faults rectified according to procedures and food safety standards.
4. Inspect equipment and production area to ensure they meet hygiene requirements.	5.1 Equipment and production area are inspected to ensure they are clean and they meet hygiene requirements 5.2 Waste is disposed of according to workplace procedures.

Range of Variables	
Variable	Range (may include but not limited to)
1. Equipment	1.1 Thermometer, hydrometer, digital scale, Ph meter, moisture tester equipment,
2. Ingredients and raw materials	2.1. Raw materials include those used to manufacture biscuit products. 2.2. Ingredients relate to those ingredients used in product, materials may include packaging consumables. 2.3. Biscuit styles and types include but are not limited to plain biscuits, short bread types, macaroon, piped biscuit, etc.
3. PPE (Personal Protective Equipment)	3.1. Protective clothing, gloves, hair net and other PPE as per OSH requirements.
Special Notes ➤ Causes of unacceptable quality may relate to raw materials, processing and/or storage. ➤ Remove/isolate and report ingredients/materials of unacceptable quality. ➤ Determine likely causes of unacceptable final product relating to raw ingredients. ➤ Determine likely causes of unacceptable final product relating to the process and/or storage conditions. ➤ Preparation requirements for use. This may include conditioning fruit. ➤ Biscuit styles, types and textures. This includes an awareness of the labelling requirements for types of biscuit consistent with the Food Standards Code. ➤ Principles of processing techniques used to achieve finished products. This includes: 1) Types of mixtures used 2) Shape of biscuits 3) Oven types 4) Methods of delivering product to the oven ➤ Storage and handling conditions for raw ingredients and finished product ➤ Factors that can affect shelf-life, including: 1) Ingredients used 2) Biscuit types 3) Storage conditions 4) Packaging 5) Environmental factors	
Evidence Guide The evidence must be authentic, valid, sufficient, reliable, consistent and recent and meet the requirements of the current version of the Unit of Competency.	

1. Critical aspect of competency	1.1 Equipment must be clean before and after Production. 1.2 Quality of ingredients and storing procedures. 1.3 Monitor process factors and reactions. 1.4 Effects of under baking and over baking. 1.5 Waste is disposed of according to workplace procedure.
2. Underpinning knowledge	2.1. Basic composition, characteristics and function of each main ingredient used. This includes: 2.2. Form/grade of ingredient supplied 2.3. Behaviour/changes occurring during processing 2.4. Role and purpose 2.5. Preparation requirements for use. This may include conditioning fruit and bringing ingredients to the required temperature 2.6. Styles, types and textures of finished products 2.7. Impact of ingredient cost and yields on profit margin 2.8. Baking methods. This may include boiling, steaming and baking 2.9. Browning and caramelisation 2.10. Methods of assembly and finishing 2.11. Effect of typical reactions during mixing and baking. This varies depending on product range. 2.12. For biscuit it may include: 2.13. Emulsification 2.14. Aeration – this includes the role of eggs in aeration 2.15. Browning and caramelisation 2.16. Formula balance and ingredient addition sequence 2.17. Impact of ingredient cost and yields on profit margin 2.18. Recipe and preparation requirements relevant to product type. This can include starting and finishing temperatures of ingredients and dough; the amount of work input/mixing time; and factors such as time, temperature and humidity during each proving stage, and during baking, depanning and cooling

	2.19.Storage and handling conditions for raw ingredients and finished product 2.20.Procedures for reworking or disposing of unacceptable product 2.21.Factors that can affect shelf-life, including: 2.22.Product type 2.23.Ingredients used 2.24.Preparation methods 2.25.Storage conditions 2.26.Packaging 2.27.Environmental factors
3. Underpinning skill	3.1.Access workplace information relating to troubleshooting 3.2.Select, fit and use personal protective clothing and/or equipment 3.3.Use relevant observation and/or test methods to confirm raw ingredient characteristics 3.4.Remove/isolate and report ingredients/materials of unacceptable quality 3.5.Determine likely causes of unacceptable final product relating to raw ingredients 3.6.Determine likely causes of unacceptable final product relating to the process and/or storage conditions 3.7.Develop procedures to prevent or minimise the likelihood of recurrence of the problem
4. Required attitude	4.1 Commitment to occupational health and safety 4.2 Promptness in carrying out activities 4.3 Sincere and honest to duties 4.4 Environmental concerns 4.5 Eagerness to learn 4.6 Tidiness and timeliness 4.7 Respect for rights of peers and seniors in workplace 4.8 Communication with peers, sub-ordinates and seniors in workplace
5. Resource implication	5.1 Tools, equipment and facilities appropriate to the process or activities. 5.2 Materials relevant to the proposed activity.
6. Method of assessment	6.1 Demonstration with oral questioning 6.2 Direct observation 6.3 Written test 6.4 Portfolio 6.5 Log book

7. Context of assessment	7.1 Competencies may be assessed in the work place or a simulated work place
Accreditation Requirements Training Providers must be accredited by Bangladesh Technical Education Board (BTEB), the national quality assurance body, or a body with delegated authority for quality assurance to conduct training and assessment against this unit of competency for credit towards the award of any national qualification. Accredited providers assessing against this unit of competency must meet the quality assurance requirements set by BTEB.	