



STANDARD KEMAHIRAN PEKERJAAN KEBANGSAAN  
(NATIONAL OCCUPATIONAL SKILL STANDARD)

HT-013-3:2011

BAKERY PRODUCTION  
*PEMBUATAN ROTI*

LEVEL 3



JABATAN PEMBANGUNAN KEMAHIRAN  
KEMENTERIAN SUMBER MANUSIA, MALAYSIA

## TABLE OF CONTENTS

No.	Contents	Pages
<b>Standard Practice</b>		
1.	Introduction	i-ii
2.	Occupational Structure	iii-iv
3.	Description Of Competency Level	v
4.	Malaysian Skill Certification	vi
5.	Job Competencies	vii
6.	Working Condition	vii
7.	Employment Prospect	vii-viii
8.	Sources Of Additional Information	viii
9.	Approval Date	viii
10.	Acknowledgement	viii
11.	NOSS Development Committee Members	ix
12.	Job Profile Chart	x
13.	Competency Profile (CP)	1-9
<b>Curriculum of Competency Unit (CoCU)</b>		
1.	Bread Preparation	10-21
2.	Puff Preparation	22-33
3.	Croissant Preparation	34-45
4.	Danish Pastry Preparation	46-58
5.	Bakery Product Innovation	59-72
6.	Bakery Production Control	73-83
7.	Bakery Production Stock Control	84-92
8.	Bakery Administrative Functions	93-101
9.	Bakery Product Costing	102-109



STANDARD KEMAHIRAN PEKERJAAN  
KEBANGSAAN  
(NATIONAL OCCUPATIONAL SKILL STANDARD)

STANDARD PRACTICE & STANDARD CONTENT  
FOR

BAKERY PRODUCTION  
LEVEL 3



**Jabatan Pembangunan Kemahiran  
Kementerian Sumber Manusia, Malaysia**



# STANDARD PRACTICE

## NATIONAL OCCUPATIONAL SKILLS STANDARD (NOSS) FOR; BAKERY PRODUCTION LEVEL 3

### 1. INTRODUCTION

This is a new NOSS developed for Bakery Production under the Hospitality and Tourism sub sector of Kitchen. There is a high demand for skilled personnel in this field as the industry is developing rapidly. Based on the National Key Economic Plan (NKEA), the tourism industry will contribute RM103.6 billion in GNI by 2020. This will require the sector to nearly triple GNI contribution from its starting position of RM36.9 billion in 2009. To achieve this ambitious growth target, the tourism industry will need to achieve, among others an additional of 497,200 tourism jobs in the tourism sector by 2020. This represents a 30 percent increase from 2009. The total workforce will however grow at a lower rate compared to tourism receipts due to an anticipated rise in productivity ensuing from attracting and retaining a better quality workforce as well as upgrading the skills of the current workforce.

At present, the Malaysian bread industry is dominated by two national local bakeries, which cater to various regions – namely, the Gardenia and Stanson Bakeries, each with their own popular brands of Gardenia and High 5 respectively. These two companies hold approximately 76% of the retail market (Rydings, 2002). However, they compete between themselves through offering attractive bread products. Gardenia bakeries began operations in Malaysia in 1986 and produce American-style sandwich bread, using the traditional sponge and dough method. Within four short years, it became the bread market leader with an astounding 99% brand recall rate and 80% top-of-mind recall (Anon, 2004a). Today, Gardenia's overall production capacity hit 32,000 loaves per hour (the highest in the region) and produces over 20 varieties of loaf bread, buns, rolls and snack cakes in five different factories. Stanson Bakeries and its marketing unit are subsidiary companies of the Stanson Group under the Silver Bird Group Bhd. The Stanson Bakeries manufactures the European variety of breads. The group, which started in 1999, is currently contributing about RM 46 million, close to 90% of Silver Bird's turnover (Dhesi, 2004).

The demand for qualified and experienced Bakery Production personnel is important as of now and in the near future, based on the above NKEA forecast. Hence, the development of this NOSS is essential for the industry to have certain guidelines and standards based on the level of competencies that have been set by the industrial experts in this field.

This NOSS is developed focusing on the Bakery Production area. Based on the DACUM workshop findings, it was decided that the entry level for Bakery Production Level 3 personnel career is pre-requisite SKM Level 2. The justification is based on the nature of work that requires competent in performing a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy and control or guidance of others is often required.

This NOSS provides first hand information to the workers regarding the Bakery Production working environment. This NOSS also provides a career path and employment development for those involved in this industry.

NOSS development is conducted starting with Occupational Area Analysis (OAA), which is an analysis of the specific area that the NOSS will be developed. The Occupational Structure (OS) of Occupational Analysis (OA) will be the basis for the analysis. In case non-existing OS, the OA session should be conducted for that specific occupational area to produce OS by NOSS panel experts. An existing OS is shown in Figure 1: OS for the *Kitchen – Bakery Sub Sector of the Hospitality and Tourism*.

Consequently, the development of this NOSS at Level 3 (*Refer Figure 1.2 Proposed Occupational Profile Chart for Kitchen – Bakery Production*) is essential so that the sub sector will have complete standards and guidelines to be used by the industry.

The first stage of NOSS development is to identify the Competency Unit (CU) for Bakery Production Level 3. CU can be defined as a meaningful unit of works, which contains several activities to complete a work cycle objectively and the CU must be independent (stand alone). Core CU are the competencies that are common/generic to the job according to the industry. Elective CU is the competencies that are required for a specific industry/ sub sector/ manufacture.

The second stage of NOSS development is to develop Competency Profile (CP). The CP is the summary and analysis of all the competency units that have been identified in the first stage of the development. Each CU will be analysed in order to determine the work activity involve. The performance criteria for each activity will also be determined.

The final stage of NOSS development is to develop the Curriculum of Competency Unit (CoCU). This will be done based on the information of the developed CP.

This NOSS provides first hand information to the workers regarding the Bakery Production working environment. This NOSS also provides a career path and employment development for those involved in this industry.

The minimum entry qualifications are those with interest to work in the area as mentioned above and hold Sijil Kemahiran Malaysia Level 2 in Bakery Production. The candidate must be able to read, write and possess applied skill and have interest in the Bakery Production

## 2. OCCUPATIONAL STRUCTURE

### Existing Occupational Structure

SUB SECTOR	KITCHEN				
LEVEL\JOB AREA	KITCHEN	BAKERY	PASTRY	BUTCHER	STEWARDING
LEVEL 8	No Level	No Level	No Level	No Level	No Level
LEVEL 7	EXECUTIVE CHEF				No Level
LEVEL 6	EXECUTIVE SOUS CHEF				No Level
LEVEL 5	SOUS CHEF				STEWARD MANAGER
LEVEL 4	JUNIOR SOUS CHEF	BAKER	PASTRY CHEF	BUTCHER	CHIEF STEWARD
LEVEL 3	CHEF DE PARTIE	CHEF DE PARTIE BAKERY	CHEF DE PARTIE PASTRY	CHEF DE PARTIE BUTCHER	STEWARD SUPERVISOR
LEVEL 2	DEMI CHEF	DEMI CHEF BAKERY	DEMI CHEF PASTRY	BUTCHER ASSISTANT	SENIOR STEWARD
LEVEL 1	COMMIS KITCHEN	COMMIS BAKERY	COMMIS PASTRY	COMMIS BUTCHERY	STEWARD

Figure 1.1 Existing Occupational Framework matrix for Hospitality and Tourism-Sub sector of Kitchen in Malaysia

### Proposed Occupational Structure

SUB SECTOR	KITCHEN				
LEVEL\JOB AREA	KITCHEN	BAKERY PRODUCTION	PASTRY	BUTCHER	STEWARDING
LEVEL 8	No Level	No Level	No Level	No Level	No Level
LEVEL 7	EXECUTIVE CHEF				No Level
LEVEL 6	EXECUTIVE SOUS CHEF				No Level
LEVEL 5	SOUS CHEF	PASTRY CHEF		CHIEF BUTCHER	STEWARD MANAGER
LEVEL 4	JUNIOR SOUS CHEF	CHIEF BAKER	ASST. PASTRY CHEF	ASST. CHIEF BUTCHER	CHIEF STEWARD
LEVEL 3	CHEF DE PARTIE	BAKERY PRODUCTION	CHEF DE PARTIE PASTRY	CHEF DE PARTIE BUTCHER	STEWARD SUPERVISOR
LEVEL 2	DEMI CHEF	BAKERY PRODUCTION	DEMI CHEF PASTRY	BUTCHER ASSISTANT	SENIOR STEWARD
LEVEL 1	COMMIS KITCHEN	NO LEVEL	COMMIS PASTRY	COMMIS BUTCHERY	STEWARD

Figure 1.2 Proposed Occupational Framework matrix for Hospitality and Tourism-Sub sector of Kitchen in Malaysia



### 3. DESCRIPTION OF COMPETENCY LEVEL

The NOSS is developed for various occupational areas. Candidates for certification must be assessed and trained at certain levels to substantiate competencies. Below is a guideline of each NOSS Level as defined by the Department of Skills Development, Ministry of Human Resources, Malaysia.

Malaysia Skills Certificate Level 1: (Operation and Production Level)	Competent in performing a range of varied work activities, most of which are routine and predictable.
Malaysia Skills Certificate Level 2: (Operation and Production Level)	Competent in performing a significant range of varied work activities, performed in a variety of contexts. Some of the activities are non-routine and required individual responsibility and autonomy.
Malaysia Skills Certificate Level 3: (Supervisory Level)	Competent in performing a broad range of varied work activities, performed in a variety of contexts, most of which are complex and non-routine. There is considerable responsibility and autonomy and control or guidance of others is often required.
Malaysia Skills Diploma Level 4: (Executive Level)	Competent in performing a broad range of complex technical or professional work activities performed in a wide variety of contexts and with a substantial degree of personal responsibility and autonomy. Responsibility for the work of others and allocation of resources is often present.
Malaysia Skills Advanced Diploma Level 5: (Managerial Level)	Competent in applying a significant range of fundamental principles and complex techniques across a wide and often unpredictable variety of contexts. Very substantial personal autonomy and often significant responsibility for the work of others and for the allocation of substantial resources features strongly, as do personal accountabilities for analysis, diagnosis, planning, execution and evaluation.

#### 4. MALAYSIAN SKILLS CERTIFICATION

Candidates after being assessed, verified and fulfilled Malaysian Skill Certification requirements shall be awarded with Sijil Kemahiran Malaysia (SKM) for Level 3 as for Level 4 and 5 shall be awarded with Diploma Kemahiran Malaysia and Diploma Lanjutan Kemahiran Malaysia respectively. All candidates are also recommended to undergo on job training to attain knowledge and skills in the Bakery Production field of work.

Assessment must be in accordance with the following:

This NOSS outlines Competency Unit (CU) in the Bakery Production working environment as required by the industry and has been developed and documented following extensive collaboration across key Malaysian organisations. To meet the requirements of this industry, it is imperative that the CU outlined follow a high standard as well as maintenance of consistency throughout the assessment process. This can only be done by stipulating a precise framework in which the assessment of CU must be conducted. The training & assessment of a Bakery Production practitioner must be deployed in accordance with JPK policy and standard as follows:

- a) The final assessment of competence must include the combination of documented continuous assessment conducted by the facilitator during training and the results of post-training examination;
- b) The post-training examination must be practical in nature and involve demonstration & application of the CU utilizing real equipment and real-world examples;
- c) The CU as outlined in this NOSS must be assessed throughout the training program and during a post-training examination;
- d) The learning environment and facilities need to be in accordance with the requirements of the industries;
- e) The development and assessment of the CU must demonstrate that they develop transferable skills;
- f) The development and assessment of the CU must include documentation by candidates both during training and examination; and
- g) All training and assessment materials must be mapped and verified to be in accordance with the NOSS Bakery Production by a panel of industry subject matter experts appointed by JPK.

## **5. JOB COMPETENCIES**

A Bakery Production (Level 3) is competent in performing:

- Bread preparation
- Puff preparation
- Croissant preparation
- Danish pastry preparation
- Bakery production control
- Stock control
- Bakery product innovation
- Bakery administrative functions
- Bakery product costing

## **6. WORKING CONDITIONS**

Generally they work from under normal working hour from morning to evening depending on organization nature of business. They may be required to work extra hours to fulfill internal and external requirement. In food preparation service, they may be needed to work in shift to accommodate work requirements. They need to use / wear appropriate attire during the commencement of their jobs. They may work individually or in a modular group in a conducive and ventilated environment

## **7. EMPLOYMENT PROSPECTS**

There are excellent prospect in private sectors due to shortage of hands-on expert in food preparation services. In public sector there are lacking of professional and well experience bakery production. This area has a very good job market potential abroad for skilled personnel due to shortage of such highly skilled personnel in this region. Excellent prospects in food production related industries such as Tourism and Hospitality Industries, Food and Beverage Industries.

Other related occupation with respect to employment opportunities are:

- Celebrity Chef
- Marketing Executive for food and beverage company
- Personal Chef for Celebrity and Royalty
- Food Promoter for Multinational Food Company
- Lecturer
- Food Ambassador (Ministry of Tourism Malaysia-Fabulous Food Malaysia campaign)

Other related industries with respect to employment opportunities are:

- Training Institution
- Food Manufacturing
- Public Sector
- Food Processing

## **8. SOURCES OF ADDITIONAL INFORMATION**

### **Local**

- Chefs Association of Malaysia  
15B Jalan Pandan Indah  
1/23B Pandan Indah  
55100 Kuala Lumpur  
URL: [www.malaysiachefs.com](http://www.malaysiachefs.com)  
Tel: 603-9274 0217
- Malaysian Association of Hotels  
C5-3 Wisma MAH,  
Jalan Ampang Utama 1/1  
One Ampang Avenue  
68000 Ampang  
Selangor  
URL : <http://www.hotels.org.my>  
Tel: 603-4251 8477

## **9. APPROVAL DATE**

The National Skills Development Board (NSDB), Ministry of Human Resources has agreed and endorsed this Standard on .....

## **10. ACKNOWLEDGEMENT**

The Director General of DSD would like to extend his gratitude to the organisations and individuals who have been involved in developing this standard.

## 11. NOSS DEVELOPMENT COMMITTEE MEMBERS

**BAKERY PRODUCTION**

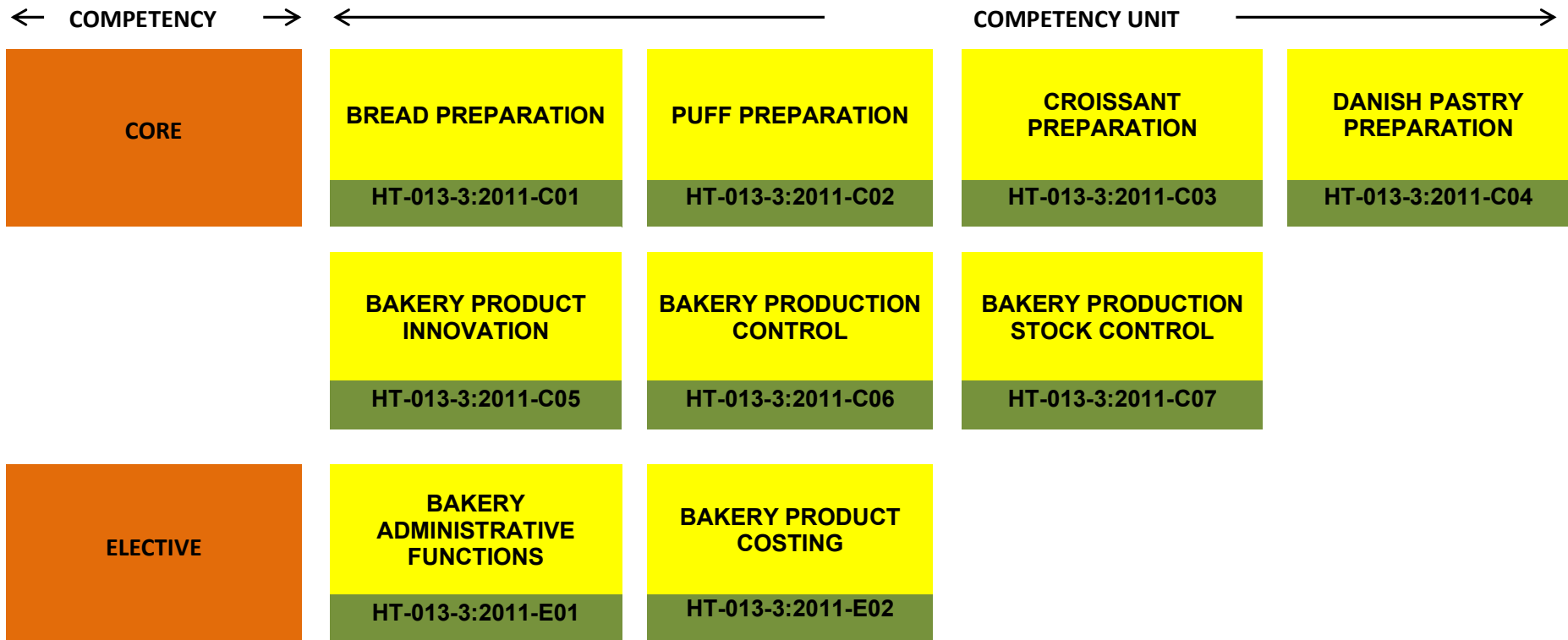
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**LEVEL 3**

PANEL		
1.	En. Mohd Ghouse Bin Ishak	Pastry Chef Berjaya Times Square Hotel & Convention Centre Kuala Lumpur
2.	Pn. Zaharah Bte Md Razi	Pastry Chef Seri Pacific Kuala Lumpur
3.	En. Mohd Irwan Bin Bani Ismail	Pastry Chef Swiss Garden Hotel Kuala Lumpur
4.	En. Ahmad Shahreen Bin Mohamed Salleh	Executive Chef Subang Jaya Medical Center, Selangor
5.	En. Badarol Hisham Bin Abd Hamid	Jr Sous Chef Ritz Carlton, Kuala Lumpur
6.	En. Ramaesvaran AL Paramaesvaran	Sous Chef Ritz Carlton, Kuala Lumpur
7.	En. Ahmad Sanif Bin Latif	Pastry Chef JW Marriot Hotel Kuala Lumpur
8.	En. Zamri Bin Jalal	Culinary Lecturer SILVERSPoon International College, Selangor
9.	Pn. Annis Bte Jamaludin	Lecturer ITTAR-IPP (PJ) Sdn Bhd.
10.	En. Mohd Roizziddin	Pastry Chef Berjaya University Kuala Lumpur
FACILITATOR		
11.	En. Khairul Anuar Bin Yahya	
CO-FACILITATOR		
12.	Pn. Eliza Bte Ramly	

## JOB PROFILE CHART (JPC)

<b>SECTOR</b>	<b>HOSPITALITY AND TOURISM</b>		
<b>SUB SECTOR</b>	<b>KITCHEN</b>		
<b>JOB AREA</b>	<b>BAKERY PRODUCTION</b>		
<b>JOB LEVEL</b>	<b>THREE (3)</b>	<b>JOB AREA CODE</b>	<b>HT-013-3:2011</b>



## COMPETENCY PROFILE (CP)

<b>Sub Sector</b>	KITCHEN			
<b>Job Area</b>	BAKERY PRODUCTION			
<b>Level</b>	Three (3)			
<b>CU Title</b>	<b>CU Code</b>	<b>CU Descriptor</b>	<b>CU Work Activities</b>	<b>Performance Criteria</b>
1. Bread preparation	<b>HT-013-3:2011-C01</b>	Bread preparation is to produce bread product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in bread preparation shall be able to carry out bread preparation, finishing, decoration and end product display to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify bread preparation requirements</li> <li>2. Prepare bread <i>mise en place</i></li> <li>3. Carry out bread preparation</li> <li>4. Carry out bread product finishing</li> <li>5. Evaluate bread product quality and quantity</li> <li>6. Record bread preparation activities</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of bread product, production quantity and delivery time determined</li> <li>1.2 Bread product standard recipe, ingredients and production workflow determined</li> <li>2.1 Cooking utensils arranged and oven preheated according to requirements</li> <li>2.2 Ingredients scaled and weighted according to standard recipe</li> <li>3.1 Bread product dough mixed, divided, rounded, moulded, panned and baked according to standard recipe</li> <li>4.1 Bread product glazed and topped according to standing order</li> <li>4.2 Bread end product plated according to requirements</li> <li>5.1 Bread product colour, texture, flavour, taste, shape, size, aroma and quantity meets the standard requirement and standing order</li> <li>6.1 Bread preparation activities reported to superior</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
2. Puff preparation	<b>HT-013-3:2011-C02</b>	Puff preparation is to produce puff product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in puff preparation shall be able to carry out puff preparation, product finishing, decoration and end product display to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify puff preparation requirements</li> <li>2. Prepare puff <i>mise en place</i></li> <li>3. Carry out puff preparation</li> <li>4. Carry out puff finishing</li> <li>5. Evaluate puff quality and quantity</li> <li>6. Record puff preparation activities</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of puff product, production quantity and delivery time determined</li> <li>1.2 Puff product standard recipe, ingredients and production workflow determined</li> <li>2.1 Cooking utensils arranged and oven preheated according to requirements</li> <li>2.2 Ingredients scaled and weighted according to standard recipe</li> <li>3.1 Puff product dough mixed, divided, rounded, moulded, panned, filled and baked according to standard recipe</li> <li>4.1 Puff product glazed and topped according to standing order</li> <li>4.2 Puff end product plated according to requirements</li> <li>5.1 Puff product colour, texture, flavour, taste, shape, size, aroma and quantity meets the standard requirement and standing order</li> <li>6.1 Puff preparation activities reported to superior</li> </ol>



CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
3. Croissant preparation	<b>HT-013-3:2011-C03</b>	Croissant preparation is to produce croissant product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in croissant preparation shall be able to carry out croissant preparation, product finishing, decoration and end product display to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify croissant preparation requirements</li> <li>2. Prepare croissant <i>mise en place</i></li> <li>3. Carry out croissant preparation</li> <li>4. Carry out croissant finishing</li> <li>5. Evaluate croissant quality and quantity</li> <li>6. Record croissant preparation activities</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of croissant product, production quantity and delivery time determined</li> <li>1.2 Croissant product standard recipe, ingredients and production workflow determined</li> <li>2.1 Cooking utensils arranged and oven preheated according to requirements</li> <li>2.2 Ingredients scaled and weighted according to standard recipe</li> <li>3.1 Croissant product dough mixed, divided, rounded, moulded, panned and baked according to standard recipe</li> <li>4.1 Croissant product glazed and topped according to standing order</li> <li>4.2 Croissant end product plated according to requirements</li> <li>5.1 Croissant product colour, texture, flavour, taste, shape, size , aroma and quantity meets the standard requirement and standing order</li> <li>6.1 Croissant preparation activities reported to superior</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
4. Danish pastry preparation	<b>HT-013-3:2011-C04</b>	Danish pastry preparation is to produce Danish pastry product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in Danish pastry preparation shall be able to carry out Danish pastry preparation, product finishing, decoration and end product display to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify Danish pastry preparation requirements</li> <li>2. Prepare Danish pastry <i>mise en place</i></li> <li>3. Carry out Danish pastry preparation</li> <li>4. Carry out Danish pastry finishing</li> <li>5. Evaluate Danish pastry quality and quantity</li> <li>6. Record Danish pastry preparation activities</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of Danish pastry product, production quantity and delivery time determined</li> <li>1.2 Danish pastry product standard recipe, ingredients and production workflow determined</li> <li>2.1 Cooking utensils arranged and oven preheated according to requirements</li> <li>2.2 Ingredients scaled and weighted according to standard recipe</li> <li>3.1 Danish pastry product dough mixed, divided, rounded, moulded, panned and baked according to standard recipe</li> <li>4.1 Danish pastry product glazed and topped according to standing order</li> <li>4.2 Danish pastry end product plated according to requirements</li> <li>5.1 Danish pastry product colour, texture, flavour, taste, shape, size , aroma and quantity meets the standard requirement and standing order</li> <li>6.1 Danish pastry preparation activities reported</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
5. Bakery product innovation	<b>HT-013-3:2011-C05</b>	Bakery product innovation is to produce recycle bakery product in accordance with standard recipe, production requirement, standing order Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in bakery product innovation shall be able to carry out bakery product innovation to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify bakery product innovation requirement</li> <li>2. Prepare bakery product innovation <i>mise en place</i></li> <li>3. Carry out bakery product innovation</li> <li>4. Carry out bakery product innovation finishing</li> <li>5. Evaluate bakery product innovation quality and quantity</li> <li>6. Record bakery product innovation production activities</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of bakery product innovation, production quantity and delivery time determined</li> <li>1.2 Bakery product standard recipe, ingredients and production workflow determined</li> <li>2.1 Cooking utensils arranged according to requirements</li> <li>2.2 Ingredients scaled and weighted according to standard recipe</li> <li>3.1 Bakery product innovation produced according to standard recipe</li> <li>3.2 Bakery product innovation product glazed and topped according to standing order</li> <li>3.3 Bakery product innovation end product plated according to requirements</li> <li>4.1 Bakery product innovation colour, texture, flavour, taste, shape, size, aroma and quantity confirmed according to standing order</li> <li>5.1 Bakery product innovation production activities reported to superior</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
6. Bakery production control	<b>HT-013-3:2011-C06</b>	Bakery production control is to manage and control production in accordance with Standard Operating Procedure (SOP), production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in production control shall be able to prepare production subordinate tasking and monitor bakery production activities to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify bakery production control requirements</li> <li>2. Plan bakery production control activities</li> <li>3. Carry out bakery production control activities</li> <li>4. Evaluate effectiveness of bakery production control activities</li> <li>5. Prepare bakery production control activities report</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Bakery product, production capacity and availability determined</li> <li>1.2 Bakery production process/workflow determined</li> <li>2.1 Bakery production checklist, standing order, materials requisition, subordinate tasking and schedule prepared</li> <li>3.1 Subordinate tasking circulated and briefed</li> <li>3.2 Bakery production monitored and bakery product quality inspected</li> <li>3.3 Bakery products appropriated delivered to customer</li> <li>4.1 Bakery production comply with production plan</li> <li>4.1 Bakery product colour, texture, flavour, taste, shape, size , aroma and quantity meets the standard requirement and standing order</li> <li>5.1 Bakery production activities reported to superior</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
7. Bakery production stock control	<b>HT-013-3:2011-C07</b>	Bakery production stock control is to manage and control stock in accordance with Standard Operating Procedure (SOP), production requirement, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in stock control shall be able to carry out stock control activities to meet required quality.	<ol style="list-style-type: none"> <li>1. Identify stock control Requirements</li> <li>2. Plan stock control activities</li> <li>3. Carry out stock control activities</li> <li>4. Evaluate stock control activities</li> <li>5. Prepare stock control report</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of raw material, space and humidity temperature determined</li> <li>1.2 Store management process/workflow determined</li> <li>2.1 Stock management documentation listed out</li> <li>3.1 Schedule for receiving and issuing of stock circulated and briefed, inventory stock record updated, store requisition filled up and stock arrangement confirmed</li> <li>4.1 Stock keeping record and filing updated</li> <li>4.2 Issuing and ordering of stock complied with procedures</li> <li>5.1 Stock control report prepared and submitted to superior</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
8. Bakery administrative function	<b>HT-013-3:2011-E01</b>	Bakery administrative function is to administer subordinate on career development in accordance with Standard Operating Procedure (SOP) and production requirement. The personnel who are competent in bakery administrative function shall be able to carry out bakery administrative function activities to meet required quality and quantity.	<ol style="list-style-type: none"> <li>1. Identify bakery administrative function requirements</li> <li>2. Plan bakery administrative function activities</li> <li>3. Carry out bakery administrative function activities</li> <li>4. Evaluate effectiveness of bakery administrative function activities</li> <li>5. Prepare bakery administrative function activities report</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Staff qualification and staff development requirement determined</li> <li>2.1 Subordinates performance appraisal obtained, staff development program plan and staff development program proposal prepared according company objective and business plan.               <ol style="list-style-type: none"> <li>3.1 Staff development program schedule determined</li> <li>3.2 Staff development program coordinated</li> </ol> </li> <li>4.1 Suitability of staff development program schedule, functionality &amp; suitability of training equipment and materials and effectiveness of staff development program coordination checked</li> <li>5.1 Bakery administrative function activities reported to superior</li> </ol>

CU Title	CU Code	CU Descriptor	CU Work Activities	Performance Criteria
9. Bakery product costing	<b>HT-013-3:2011-E02</b>	Bakery product costing is to calculate bakery product cost in accordance with Standard Operating Procedure (SOP) and production requirement. The personnel who are competent in bakery product costing shall be able to carry out bakery product costing activities to meet required quality.	<ol style="list-style-type: none"> <li>1. Identify bakery product costing requirements</li> <li>2. Plan bakery product costing activities</li> <li>3. Carry out bakery product costing activities</li> <li>4. Evaluate accuracy of bakery product costing</li> <li>5. Prepare bakery product costing activities report</li> </ol>	<ol style="list-style-type: none"> <li>1.1 Types of bakery product and product costing works flow determined</li> <li>2.1 Bakery product standard recipe and materials price list obtained</li> <li>2.2 Costing sheet format prepared</li> <li>3.1 Bakery product costing tabulated and calculated</li> <li>4.1 accuracy of bakery product costing calculation checked</li> <li>5.1 Bakery product costing activities reported to superior</li> </ol>

## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	BREAD PREPARATION						
<b>Competency Unit Descriptor</b>	Bread preparation is to produce bread product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in bread preparation shall be able to carry out bread preparation, finishing, decoration and end product display to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-C01	<b>Level</b>	3	<b>Training Duration</b>	120 Hours	<b>Credit Hours</b>	12
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify bread preparation requirements	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Bread standing order iii. Production quantity iv. Delivery time v. Bread standard recipe vi. Types of bread such as: <ul style="list-style-type: none"> <li>• Lean               <ul style="list-style-type: none"> <li>– French bread</li> </ul> </li> </ul>			3 hours	Lecture	i. Standing order interpreted ii. Production quantity determined iii. Delivery time determined iv. Standard recipe obtained v. Types of bread determined vi. Bread preparation workflow determined	



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>- White sandwich bread</li> <li>• Rich               <ul style="list-style-type: none"> <li>- Multigrain</li> <li>- Wholemeal</li> <li>- Rye bread</li> </ul> </li> <li>• Plaited               <ul style="list-style-type: none"> <li>- Raisin</li> <li>- Cheese</li> <li>- Dry fruit</li> </ul> </li> <li>vii. Bread preparation workflow</li> </ul>					
		<ul style="list-style-type: none"> <li>i. Interpret standing order</li> <li>ii. Determine production quantity</li> <li>iii. Determine delivery time</li> <li>iv. Obtain standard recipe</li> <li>v. Determine types of bread</li> <li>vi. Determine bread preparation workflow</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Resourceful in identifying bread preparation requirements</li> </ul>	6 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Safety:</u> -Not applicable-			
2. Prepare bread <i>mise en place</i>	i. Types of cooking utensils and equipment such as; <ul style="list-style-type: none"> <li>• Pan</li> <li>• Scale</li> <li>• Measurement cups</li> <li>• Mixer</li> <li>• Oven</li> </ul> ii. Function and usage of cooking utensils and equipment bread preparation iii. Bread ingredients such as; <ul style="list-style-type: none"> <li>• Sugar</li> <li>• Salt</li> <li>• Milk</li> <li>• Yeast</li> <li>• Flour</li> <li>• Milk powder</li> <li>• Egg</li> <li>• Ice water</li> <li>• Grains</li> </ul>			12 hours	Lecture	i. Function and usage of cooking utensils and equipment determined ii. Cooking utensils and equipment arranged iii. Bread ingredients according to standard recipe determined
		i. Determine function and usage of cooking utensils and equipment		20 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		ii. Arrange cooking utensils and equipment iii. Determine bread ingredients according to standard recipe	<u>Attitude:</u> i. Organise in preparing bread <i>mise en place</i>  <u>Safety:</u> i. Careful in checking and testing equipment in good condition ii. Adhere to safety practice			
3. Carry out bread preparation	i. Method of mixing bread dough <ul style="list-style-type: none"> <li>• Straight dough method</li> <li>• Sponge method</li> </ul> ii. Techniques of bread preparation <ul style="list-style-type: none"> <li>• Mixing</li> <li>• Kneading</li> <li>• Rolling</li> <li>• Shaping</li> <li>• Proofing</li> <li>• Baking</li> </ul>			20 hours	Lecture	i. Bread standard recipe followed ii. Utensils and equipment utilised iii. Bread ingredients measured according to standard recipe

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Cooling</li> </ul> iii. Procedure of bread preparation					iv. Bread ingredients mixed according to standard recipe v. Bread dough proved according to standard recipe vi. Techniques of bread baking applied vii. Procedure of bread preparation followed
		i. Follow bread standard recipe ii. Utilise utensils and equipment iii. Measure bread ingredients according to standard recipe iv. Mix bread ingredients according to standard recipe v. Prove bread dough according to standard recipe vi. Apply techniques of bread baking vii. Follow procedure of bread preparation	<u>Attitude:</u> i. Adhere to hygiene practise ii. Neat and tidy in carrying out bread preparation  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE)	35 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<ul style="list-style-type: none"> <li>ii. Careful when handling sharp utensils and electrical equipment</li> <li>i. Adhere to kitchen safety, hygiene and health procedure</li> </ul>			
4. Carry out bread finishing	<ul style="list-style-type: none"> <li>i. Types of bread finishing               <ul style="list-style-type: none"> <li>• Glazing</li> <li>• Dusting</li> </ul> </li> <li>ii. Technique of glazing and dusting</li> <li>iii. Method of bread product display and packaging</li> </ul>			4 hours	Lecture	<ul style="list-style-type: none"> <li>i. Types of bread finishing determined</li> <li>ii. Bread product glazed and dusted according to standing order</li> </ul>
		<ul style="list-style-type: none"> <li>i. Determine types of bread finishing</li> <li>ii. Glaze and dust bread product according to standing order</li> <li>iii. Display and pack bread product according to requirements</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Adhere to hygiene practise</li> <li>ii. Neat and tidy in carrying out bread finishing work</li> </ul>	8 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>iii. Bread product displayed and packed according to requirements</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Careful when handling equipment iii. Adhere to kitchen safety and health procedure			
5. Evaluate bread quality and quantity	i. Bread shape ii. Bread texture iii. Bread aroma iv. Bread colour v. Bread flavour and taste vi. Bread appearance vii. Bread quantity and quality contribution factors <ul style="list-style-type: none"> <li>• Preparation process</li> <li>• Temperature</li> </ul>			2 hours	Lecture	i. Bread shape checked ii. Bread texture checked iii. Bread aroma checked iv. Bread colour checked v. Bread flavour and taste checked vi. Bread appearance checked vii. Bread quantity meets with standing order confirmed
		i. Check bread shape ii. Check bread texture iii. Check bread aroma iv. Check bread colour v. Check bread flavour and taste vi. Check bread appearance		4 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		vii. Confirm bread quantity meets with standing order	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Responsible in checking bread quality and quantity</li> <li>ii. Adhere to hygiene practise</li> </ul> <p><u>Safety:</u></p> <ul style="list-style-type: none"> <li>i. Wear appropriate Personal Protective Equipment (PPE)</li> <li>ii. Adhere to kitchen safety, hygiene and health procedure</li> </ul>			
6. Record bread preparation activities	<ul style="list-style-type: none"> <li>i. Flow of reporting line</li> <li>i. Bread preparation reporting format</li> <li>ii. Method of reporting bread preparation activities <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> </li> <li>iii. Procedure of reporting bread preparation activities</li> </ul>			2 hours	Lecture	<ul style="list-style-type: none"> <li>i. Personnel involved determined</li> <li>ii. Bread preparation activities reporting format determined</li> <li>iii. Method of reporting bread</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Determine personnel involved</li> <li>ii. Determine bread preparation activities reporting format</li> <li>iii. Apply method of reporting bread preparation activities</li> <li>iv. Generate bread preparation activities report</li> <li>v. Follow procedure of reporting bread preparation activities</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Meticulous in writing report</li> <li>ii. Clarity and responsible in reporting bread preparation activities</li> <li>iii. Adhere to report submission dateline</li> </ul> <p><u>Safety:</u> -Not applicable-</p>	4 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>preparation activities applied</li> <li>iv. Bread preparation activities report generated</li> <li>v. Procedure of reporting bread preparation activities followed</li> </ul>



## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

**Tools, Equipment and Materials (TEM)**

ITEMS	RATIO (TEM : Trainees)
1. Stationery	As required
2. Kitchen utensils(Pan, Scale, Measurement spoon & cups, Mixing bowl, bread cutter, rolling pin, scrapper, baking tray, wooden spoon, pastry brush, sieve)	1:2
3. Working table	1:4
4. Mixer machine	1:10
5. Stove	1:4
6. Oven	1:10
7. Chillers	1:20
8. Freezer	1:20
9. Bread ingredients	1:1
10. Bread standard recipe	1:1
11. Personal Protective Equipment (safety boot, Chef hat, disposable glove apron)	1:1

## References

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2. Friberg B., John Wiley & Sons (2002), *The Professional Pastry Chef: Fundamental of Baking and Pastry* (4<sup>th</sup> edition)
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4. Gisslen W., John Wiley & Sons Inc (2009), *Professional Baking*. 5<sup>th</sup> Edition
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## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	PUFF PREPARATION						
<b>Competency Unit Descriptor</b>	Puff preparation is to produce puff product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in puff preparation shall be able to carry out puff preparation, product finishing, decoration and end product display to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-C02	<b>Level</b>	3	<b>Training Duration</b>	40 Hours	<b>Credit Hours</b>	4
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify puff preparation requirements	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Puff standing order iii. Production quantity iv. Delivery time v. Puff standard recipe vi. Shape of puff such as: <ul style="list-style-type: none"> <li>• Triangle</li> <li>• Square</li> <li>• Round</li> </ul>			3 hours	Lecture	i. Standing order interpreted ii. Production quantity determined iii. Delivery time determined iv. Standard recipe obtained v. Shape of puff determined vi. Puff preparation workflow determined	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Rectangular</li> <li>• Half moon</li> <li>• <i>Vol au vent / Bouchee</i></li> </ul> vii. Puff preparation workflow					
		i. Interpret standing order ii. Determine production quantity iii. Determine delivery time iv. Obtain standard recipe v. Determine shape of puff vi. Determine puff preparation workflow	<u>Attitude:</u> i. Resourceful in identifying puff preparation requirements  <u>Safety:</u> -Not applicable-	4 hours	Demonstration & Observation	
2. Prepare puff <i>mise en place</i>	i. Types of cooking utensils and equipment such as; <ul style="list-style-type: none"> <li>• Pan</li> <li>• Scale</li> </ul>			1 hour	Lecture	i. Types of cooking utensils and equipment determined

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Measurement cups</li> <li>• Pastry cutter</li> <li>• Mixer</li> <li>• Oven</li> </ul> ii. Function and usage of cooking utensils and equipment for puff preparation iii. Puff ingredients such as; <ul style="list-style-type: none"> <li>• Sugar</li> <li>• Salt</li> <li>• Milk</li> <li>• Flour</li> <li>• Egg</li> <li>• Ice water</li> <li>• Pastry butter</li> </ul>					ii. Function and usage of cooking utensils and equipment determined iii. Cooking utensils and equipment arranged iv. Puff ingredients according to standard recipe determined
		i. Determine types of cooking utensils and equipment ii. Determine function and usage of cooking utensils and equipment iii. Arrange cooking utensils and equipment iv. Determine puff ingredients according to standard recipe		2 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Attitude:</u> i. Organise in preparing puff <i>mise en place</i>  <u>Safety:</u> i. Careful in checking and testing equipment in good condition ii. Adhere to safety practice			
3. Carry out puff preparation	i. Method of mixing (straight dough) ii. Techniques of puff preparation <ul style="list-style-type: none"> <li>• Mixing</li> <li>• Kneading</li> <li>• Rolling</li> <li>• Folding</li> <li>• Shaping</li> <li>• Baking</li> </ul> iii. Procedure of puff preparation			1 hour	Lecture	i. Puff standard recipe followed ii. Utensils and equipment utilised iii. Puff ingredients measured according to standard recipe
		i. Follow puff standard recipe ii. Utilise utensils and equipment iii. Measure puff ingredients according to standard recipe		4 hours	Demonstration & Observation	iv. Puff dough ingredients mixed according to standard recipe v. Technique of

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		iv. Mix puff dough ingredients according to standard recipe v. Apply technique of puff dough folding vi. Apply technique of puff shaping according to standing order vii. Apply techniques of puff baking viii. Follow procedure of puff preparation	<p><u>Attitude:</u></p> i. Adhere to hygiene practise ii. Neat and tidy in carrying out puff preparation			puff dough folding applied vi. Technique of puff shaping applied according to standing order vii. Techniques of puff baking applied viii. Procedure of puff preparation followed



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
4. Carry out puff finishing	i. Types of puff finishing <ul style="list-style-type: none"> <li>• Filling</li> <li>• Glazing</li> <li>• Topping</li> </ul> ii. Technique of filling, glazing and topping iii. Method of puff product display and packaging			2 hour	Lecture	i. types of puff finishing Determined ii. Puff product filled, glazed and topped according to standing order
		i. Determine types of puff finishing ii. Fill, glaze and top puff product according to standing order iii. Display and pack puff product according to requirements	<u>Attitude:</u> i. Adhere to hygiene practise ii. Neat and tidy in carrying out finishing work  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Careful when handling equipment	5 hours	Demonstration & Observation	iii. Puff product displayed and packed according to requirements

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			iii. Adhere to kitchen safety and health procedure			
5. Evaluate puff quality and quantity	i. Puff shape ii. Puff texture iii. Puff aroma iv. Puff colour v. Puff flavour and taste vi. Puff appearance vii. Puff quantity and quality contribution factors <ul style="list-style-type: none"> <li>• Preparation process</li> <li>• Temperature</li> </ul>			3 hours	Lecture	i. Puff shape checked ii. Puff texture checked iii. Puff aroma checked iv. Puff colour checked v. Puff flavour and taste checked vi. Puff appearance checked vii. Puff quantity meets with standing order confirmed
		i. Check puff shape ii. Check puff texture iii. Check puff aroma iv. Check puff colour v. Check puff flavour and taste vi. Check puff appearance vii. Confirm puff quantity meets with standing order	<u>Attitude:</u> i. Responsible in checking puff quality and quantity ii. Adhere to hygiene practise	10 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Adhere to kitchen safety, hygiene and health procedure			
6. Record puff preparation activities	i. Flow of reporting line ii. Puff preparation reporting format iii. Method of reporting puff preparation activities <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> iv. Procedure of reporting puff preparation activities			2 hour	Lecture	i. Personnel involved determined ii. Puff preparation activities reporting format determined iii. Method of reporting puff preparation activities applied
		i. Determine personnel involved ii. Determine puff preparation activities reporting format iii. Apply method of reporting puff preparation activities		3 hours	Demonstration & Observation	iv. Puff preparation activities report generated v. Procedure of reporting

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		iv. Generate puff preparation activities report v. Follow procedure of reporting puff preparation activities	<p><u>Attitude:</u></p> i. Meticulous in writing report ii. Clarity and responsible in reporting puff preparation activities iii. Adhere to report submission dateline <p><u>Safety:</u>            -Not applicable-</p>			puff preparation activities followed

## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

### Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Stationery	As required
2. Kitchen utensils(Pan, Scale, Measurement spoon & cups, Mixing bowl, puff cutter, rolling pin, scrapper, baking tray, wooden spoon, brush, sieve)	1:2
3. Working table	1:4
4. Mixer machine	1:4
5. Dough sheeter	1:20
6. Stove	1:4
7. Oven	1:20
8. Chillers	1:20
9. Freezer	1:20
10. Puff ingredients	1:1
11. Puff standard recipe	1:1
12. Packaging material	1:1
13. Personal Protective Equipment (Safety boot, chef hat, disposable glove, apron)	1:1

## References

### REFERENCES

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## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	CROISSANT PREPARATION						
<b>Competency Unit Descriptor</b>	Croissant preparation is to produce croissant product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in croissant preparation shall be able to carry out croissant preparation, product finishing, decoration and end product display to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-C03	<b>Level</b>	3	<b>Training Duration</b>	240 Hours	<b>Credit Hours</b>	24
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify croissant preparation requirements	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Croissant standing order iii. Production quantity iv. Delivery time v. Croissant standard recipe vi. Shape of croissant such as:			6 hours	Lecture	i. Standing order interpreted ii. Production quantity determined iii. Delivery time determined iv. Standard recipe obtain v. Shape of croissant determined vi. Croissant preparation workflow determined	



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Crescent</li> <li>• Straight</li> </ul> vii. Croissant preparation workflow					
		i. Interpret standing order ii. Determine production quantity iii. Determine delivery time iv. Obtain standard recipe v. Determine shape of croissant vi. Determine croissant preparation workflow	<u>Attitude:</u> i. Resourceful in identifying croissant preparation requirements  <u>Safety:</u> -Not applicable-	12 hours	Demonstration & Observation	
2. Prepare croissant <i>mise en place</i>	i. Types of cooking utensils and equipment such as; <ul style="list-style-type: none"> <li>• Pan</li> <li>• Scale</li> <li>• Measurement cups</li> </ul>			24 hours	Lecture	i. Types of cooking utensils and equipment listed out ii. Function and

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Mixer</li> <li>• Oven</li> </ul> ii. Function and usage of cooking utensils and equipment croissant preparation iii. Croissant ingredients such as; <ul style="list-style-type: none"> <li>• Sugar</li> <li>• Salt</li> <li>• Milk</li> <li>• Yeast</li> <li>• Flour</li> <li>• Egg</li> <li>• Ice water</li> <li>• Pastry butter</li> </ul>					usage of cooking utensils and equipment determined iii. Cooking utensils and equipment arranged iv. Croissant ingredients according to standard recipe determined
		i. Determine types of cooking utensils and equipment ii. Determine function and usage of cooking utensils and equipment iii. Arrange cooking utensils and equipment iv. Determine croissant ingredients according to standard recipe		40 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Attitude:</u> i. Organise in preparing croissant <i>mise en place</i>  <u>Safety:</u> i. Careful in checking and testing equipment in good condition ii. Adhere to safety practice			
3. Carry out croissant preparation	i. Method of mixing (straight dough) ii. Techniques of croissant preparation <ul style="list-style-type: none"> <li>• Mixing</li> <li>• Kneading</li> <li>• Rolling</li> <li>• Folding</li> <li>• Shaping</li> <li>• Proofing</li> <li>• Baking</li> </ul> iii. Procedure of croissant preparation			40 hours	Lecture	i. Croissant standard recipe followed ii. Utensils and equipment utilised iii. Croissant ingredients measured according to standard recipe iv. Croissant ingredients mixed according to standard recipe
		i. Follow croissant standard recipe ii. Utilise utensils and equipment iii. Measure croissant		70 hours	Demonstration & Observation	i. Croissant standard recipe followed ii. Utensils and equipment utilised iii. Croissant ingredients measured according to standard recipe iv. Croissant ingredients mixed according to standard recipe

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		ingredients according to standard recipe iv. Mix croissant ingredients according to standard recipe v. Prove croissant dough according to standard recipe vi. Apply technique of croissant baking vii. Follow procedure of croissant preparation	<u>Attitude:</u> i. Adhere to hygiene practise ii. Neat and tidy in carrying out croissant preparation  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Careful when handling sharp utensils and electrical equipment iii. Adhere to kitchen safety, hygiene and health procedure			v. Croissant dough proved according to standard recipe vi. Technique of croissant baking applied vii. Procedure of croissant preparation followed

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
4. Carry out croissant finishing	i. Types of croissant finishing <ul style="list-style-type: none"> <li>• Glazing</li> <li>• Topping</li> </ul> ii. Technique of glazing and topping iii. Method of croissant product display and packaging			8 hours	Lecture	i. Types of croissant finishing determined ii. Croissant product glazed and topped according to standing order
		i. Determine types of croissant finishing ii. Glaze and top croissant product according to standing order iii. Display and pack croissant product according to requirements	<u>Attitude:</u> <ul style="list-style-type: none"> <li>i. Adhere to hygiene practise</li> <li>ii. Neat and tidy in carrying out finishing work</li> </ul> <u>Safety:</u> <ul style="list-style-type: none"> <li>i. Wear appropriate Personal Protective Equipment (PPE)</li> <li>ii. Careful when</li> </ul>	16 hours	Demonstration & Observation	iii. Croissant product displayed and packed according to requirements

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			handling equipment iii. Adhere to kitchen safety and health procedure			
5. Evaluate croissant quality and quantity	i. Croissant shape ii. Croissant texture iii. Croissant aroma iv. Croissant colour v. Croissant flavour and taste vi. Croissant appearance vii. Croissant quantity and quality contribution factors <ul style="list-style-type: none"> <li>• Preparation process</li> <li>• Temperature</li> </ul>			4 hours	Lecture	i. Croissant shape checked ii. Croissant texture checked iii. Croissant aroma checked iv. Croissant colour checked v. Croissant flavour and taste checked
		i. Check croissant shape ii. Check croissant texture iii. Check croissant aroma iv. Check croissant colour v. Check croissant flavour and taste vi. Check croissant appearance vii. Confirm croissant quantity meets with standing order		8 hours	Demonstration & Observation	vi. Croissant appearance checked vii. Croissant quantity meets with standing order confirmed

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Attitude:</u> i. Responsible in checking croissant quality and quantity ii. Adhere to hygiene practise  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Adhere to kitchen safety, hygiene and health procedure			
6. Record croissant preparation activities	i. Flow of reporting line ii. Croissant preparation reporting format iii. Method of reporting croissant preparation activities <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> iv. Procedure of reporting croissant preparation activities			4 hours	Lecture	i. Personnel involved determined ii. Croissant preparation activities reporting format determined iii. Method of reporting croissant preparation activities

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Determine personnel involved</li> <li>ii. Determine croissant preparation activities reporting format</li> <li>iii. Apply method of reporting croissant preparation activities</li> <li>iv. Generate croissant preparation activities report</li> <li>v. Follow procedure of reporting croissant preparation activities</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Meticulous in writing report</li> <li>ii. Clarity and responsible in reporting croissant preparation activities</li> <li>iii. Adhere to report submission dateline</li> </ul> <p><u>Safety:</u> -Not applicable-</p>	8 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>applied</li> <li>iv. Croissant preparation activities report generated</li> <li>v. Procedure of reporting croissant preparation activities followed</li> </ul>



## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

### Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Stationery	As required
2. Kitchen utensils(Pan, Scale, Measurement spoon & cups, Mixing bowl, croissant cutter, rolling pin, scrapper, baking tray, wooden spoon, brush, sieve)	1:2
3. Working table	1:4
4. Mixer machine	1:4
5. Dough sheeter	1:20
6. Stove	1:4
7. Proover	1:20
8. Oven	1:20
9. Chillers	1:20
10. Freezer	1:20
11. Croissant ingredients	1:1
12. Croissant standard recipe	1:1
13. Packaging material	1:1
14. Personal Protective Equipment (safety boot, Chef hat, disposable glove, apron)	1:1

## References

### REFERENCES

1. Courtine R.J. & Larousse The Hamlyn Publishing Group (1988) *Gastronomique Cookery Encyclopaedia*, ISBN 0-749-30316-6
2. Friberg B., John Wiley & Sons (2002), *The Professional Pastry Chef: Fundamental of Baking and Pastry* (4<sup>th</sup> edition)
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4. Gisslen W., John Wiley & Sons Inc (2009), *Professional Baking*. 5<sup>th</sup> Edition
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## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	DANISH PASTRY PREPARATION						
<b>Competency Unit Descriptor</b>	Danish pastry preparation is to produce Danish pastry product in accordance with standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in Danish pastry preparation shall be able to carry out Danish pastry preparation, product finishing, decoration and end product display to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-C04	<b>Level</b>	3	<b>Training Duration</b>	240 Hours	<b>Credit Hours</b>	24
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify Danish pastry preparation requirements	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Danish pastry Standing order iii. Production quantity iv. Delivery time v. Danish pastry standard recipe vi. Shape of Danish pastry			6 hours	Lecture	i. Standing order interpreted ii. Production quantity determined iii. Delivery time determined iv. Standard recipe obtained v. Shape of Danish pastry determined vi. Danish pastry	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	such as: <ul style="list-style-type: none"> <li>• Windmill</li> <li>• Comb</li> <li>• Pocket</li> <li>• Roll</li> </ul> vii. Danish pastry preparation workflow					preparation workflow determined
		i. Interpret standing order ii. Determine production quantity iii. Determine delivery time iv. Obtain standard recipe v. Determine shape of Danish pastry vi. Determine Danish pastry preparation workflow	<u>Attitude:</u> i. Resourceful in identifying Danish pastry preparation requirements  <u>Safety:</u> -Not applicable-	12 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Prepare Danish pastry <i>mise en place</i>	i. Types of cooking utensils and equipment such as; <ul style="list-style-type: none"> <li>• Pan</li> <li>• Scale</li> <li>• Measurement cups</li> <li>• Mixer</li> <li>• Oven</li> </ul> ii. Function and usage of cooking utensils and equipment for Danish pastry preparation iii. Danish pastry ingredients such as; <ul style="list-style-type: none"> <li>• Sugar</li> <li>• Salt</li> <li>• Milk</li> <li>• Yeast</li> <li>• Flour</li> <li>• Egg</li> <li>• Ice water</li> <li>• Pastry butter</li> </ul>			24 hours	Lecture	i. Types of cooking utensils and equipment determined ii. Function and usage of cooking utensils and equipment determined iii. Cooking utensils and equipment arranged iv. Danish pastry ingredients according to standard recipe determined
		i. Determine types of cooking utensils and equipment ii. Determine function and usage of cooking utensils and equipment		40 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		i. Arrange cooking utensils and equipment ii. Determine Danish pastry ingredients according to standard recipe	<u>Attitude:</u> i. Organise in preparing Danish pastry <i>mise en place</i>  <u>Safety:</u> i. Careful in checking and testing equipment in good condition ii. Adhere to safety practice			
3. Carry out Danish pastry preparation	i. Method of mixing (straight dough) ii. Techniques of Danish pastry preparation <ul style="list-style-type: none"> <li>• Mixing</li> <li>• Kneading</li> <li>• Rolling</li> <li>• Folding</li> <li>• Shaping</li> <li>• Prooving</li> <li>• Baking</li> <li>• Cooling</li> </ul>			40 hours	Lecture	i. Danish pastry standard recipe interpreted ii. Use utensils and equipment iii. Danish pastry ingredients measured

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	iii. Procedure of Danish pastry preparation	<ul style="list-style-type: none"> <li>i. Interpret Danish pastry standard recipe</li> <li>ii. Use utensils and equipment</li> <li>iii. Measure Danish pastry ingredients according to standard recipe</li> <li>iv. Mix Danish pastry ingredients according to standard recipe</li> <li>v. Prove Danish pastry dough according to standard recipe</li> <li>vi. Apply technique of Danish pastry baking</li> <li>vii. Follow procedure of Danish pastry preparation</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Adhere to hygiene practise</li> <li>ii. Neat and tidy in carrying out Danish pastry preparation</li> </ul> <p><u>Safety:</u></p> <ul style="list-style-type: none"> <li>i. Wear appropriate Personal Protective Equipment (PPE)</li> </ul>	70 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>according to standard recipe</li> <li>iv. Danish pastry ingredients mixed according to standard recipe</li> <li>v. Danish pastry dough proved according to standard recipe</li> <li>vi. Technique of Danish pastry baking applied</li> <li>vii. Procedure of Danish pastry preparation followed</li> </ul>



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			ii. Careful when handling sharp utensils and electrical equipment iii. Adhere to kitchen safety, hygiene and health procedure			
4. Carry out Danish pastry finishing	i. Types of Danish pastry finishing <ul style="list-style-type: none"> <li>• Glazing</li> <li>• Topping</li> <li>• Filling</li> </ul> ii. Technique of glazing, topping and filling iii. Method of Danish pastry product display and packaging			8 hours	Lecture	i. Types of Danish pastry finishing determined ii. Danish pastry product glazed, topped and filled according to standing order
		i. Determine types of Danish pastry finishing ii. Glazed, topped and filled Danish pastry product according to standing order iii. Display and pack Danish pastry product according to requirements		16 hours	Demonstration & Observation	iii. Danish pastry product displayed and packed according to requirements

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Attitude:</u> i. Adhere to hygiene practise ii. Neat and tidy in carrying out finishing work  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Careful when handling equipment iii. Adhere to kitchen safety and health procedure			
5. Evaluate Danish pastry quality and quantity	i. Danish pastry shape ii. Danish pastry texture iii. Danish pastry aroma iv. Danish pastry colour v. Danish pastry flavour and taste vi. Danish pastry appearance vii. Danish pastry quantity and quality contribution factors <ul style="list-style-type: none"> <li>• Preparation process</li> <li>• Temperature</li> </ul>			4 hours	Lecture	i. Danish pastry shape checked ii. Danish pastry texture checked iii. Danish pastry aroma checked iv. Danish pastry colour checked v. Danish pastry flavour

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Check Danish pastry shape</li> <li>ii. Check Danish pastry texture</li> <li>iii. Check Danish pastry aroma</li> <li>iv. Check Danish pastry colour</li> <li>v. Check Danish pastry flavour and taste</li> <li>vi. Check Danish pastry appearance</li> <li>vii. Confirm Danish pastry quantity meets with standing order</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Responsible in checking Danish pastry quality and quantity</li> <li>ii. Adhere to hygiene practise</li> </ul> <p><u>Safety:</u></p> <ul style="list-style-type: none"> <li>i. Wear appropriate Personal Protective Equipment (PPE)</li> <li>ii. Adhere to kitchen safety, hygiene and health procedure</li> </ul>	8 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>and taste checked</li> <li>vi. Danish pastry appearance checked</li> <li>i. Danish pastry quantity meets with standing order confirmed</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
6. Record Danish pastry preparation activities	<ul style="list-style-type: none"> <li>i. Flow of reporting line</li> <li>ii. Danish pastry preparation reporting format</li> <li>iii. Method of reporting Danish pastry preparation activities</li> <li>iv. Procedure of reporting Danish pastry preparation activities</li> </ul>			4 hours	Lecture	<ul style="list-style-type: none"> <li>i. Personnel involved determined</li> <li>ii. Danish pastry preparation activities reporting format determined</li> <li>iii. Method of reporting Danish pastry preparation activities applied</li> </ul>
		<ul style="list-style-type: none"> <li>i. Determine personnel involved</li> <li>ii. Determine Danish pastry preparation activities reporting format</li> <li>iii. Apply method of reporting Danish pastry preparation activities</li> <li>iv. Generate Danish pastry preparation activities report</li> <li>v. Follow procedure of reporting Danish pastry preparation activities</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Meticulous in writing report</li> <li>ii. Clarity and responsible in reporting Danish pastry</li> </ul>	8 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>iv. Danish pastry preparation activities report generated</li> <li>v. Procedure of reporting Danish pastry preparation activities followed</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			preparation activities iii. Adhere to report submission dateline  <u>Safety:</u> -Not applicable-			

## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

### Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Stationery	As required
2. Kitchen utensils(Pan, Scale, Measurement spoon & cups, Mixing bowl, Danish pastry cutter, rolling pin, scrapper, baking tray, wooden spoon, brush, sieve)	1:2
3. Working table	1:4
4. Mixer machine	1:4
5. Dough sheeter	1:20
6. Stove	1:4
7. Oven	1:20
8. Chillers	1:20
9. Freezer	1:20
10. Danish pastry ingredients	1:1
11. Danish pastry standard recipe	1:1
12. Packaging material	1:1
13. Personal Protective Equipment (safety boot, Chef hat, disposable glove, apron)	1:1

## References

### REFERENCES

1. Courtine R.J. & Larousse The Hamlyn Publishing Group (1988) *Gastronomique Cookery Encyclopaedia*, ISBN 0-749-30316-6
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3. Gail Sokol Thomson Delmar Learning (2006). *About Professional Baking*. 2<sup>nd</sup> Edition
4. Gisslen W., John Wiley & Sons Inc (2009), *Professional Baking*. 5<sup>th</sup> Edition
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12. Y.H.Hui, Harold Corke, Wiley Blacwell (2006), *Bakery Products, Science and Technology*, ISBN: 9-780-81380187-2



## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	BAKERY PRODUCT INNOVATION						
<b>Competency Unit Descriptor</b>	Bakery product innovation is to produce improvement of existing products in accordance with Standard Operating Procedure (SOP), standard recipe, production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in producing innovation bakery product shall be able to carry out bakery product innovation to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-C05	<b>Level</b>	3	<b>Training Duration</b>	122 Hours	<b>Credit Hours</b>	12
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify bakery product innovation requirement	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Product innovation standing order iii. Production quantity iv. Delivery time v. Bakery product innovation standard			4 hours	Lecture	i. Standing order interpreted ii. Production quantity listed out iii. Delivery time determined iv. Types of bakery product innovation listed out v. Bakery product innovation preparation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	recipe vi. Types of bakery product innovation such as: <ul style="list-style-type: none"> <li>• Bread crumb</li> <li>• Bread pudding</li> <li>• Bread stick</li> </ul> vii. Bakery product innovation preparation workflow					workflow listed out
		i. Interpret standing order ii. Determine production quantity iii. Determine delivery time iv. Obtain standard recipe v. Determine types of bakery product innovation vi. Determine bakery product innovation preparation workflow	<u>Attitude:</u> i. Resourceful in identifying bakery product innovation preparation	6 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental requirements	Training Hours	Delivery Mode	Assessment Criteria
			<p><u>Safety:</u> -Not applicable-</p>			
2. Prepare bakery product innovation <i>mise en place</i>	<p>i. Types of cooking utensils and equipment such as;</p> <ul style="list-style-type: none"> <li>• Pan</li> <li>• Scale</li> <li>• Measurement cups</li> <li>• Bakery cutter</li> <li>• Mixer</li> <li>• Oven</li> </ul> <p>ii. Function and usage of cooking utensils and equipment for bakery product innovation preparation</p> <p>iii. Bakery product innovation ingredients such as;</p> <ul style="list-style-type: none"> <li>• Bun</li> <li>• Bread</li> <li>• Puff</li> <li>• Croissant</li> <li>• Danish bakery</li> <li>• Muffin</li> <li>• Sour dough</li> </ul>			6 hour	Lecture	<p>i. Types of cooking utensils and equipment listed out</p> <p>ii. function and usage of cooking utensils and equipment listed out</p> <p>iii. Cooking utensils and equipment Arranged accordingly</p> <p>iv. Bakery product innovation ingredients determined according to standard recipe</p>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Determine types of cooking utensils and equipment</li> <li>ii. Determine function and usage of cooking utensils and equipment</li> <li>iii. Arrange cooking utensils and equipment</li> <li>iv. Determine bakery product innovation ingredients according to standard recipe</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Organise in preparing bakery product innovation <i>mise en place</i></li> </ul> <p><u>Safety:</u></p> <ul style="list-style-type: none"> <li>i. Careful in checking and testing equipment in good condition</li> <li>ii. Adhere to safety practice</li> </ul>	8 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
3. Carry out bakery product innovation	i. Straight mixing method ii. Techniques of bakery product innovation preparation <ul style="list-style-type: none"> <li>• Mixing</li> <li>• Kneading</li> <li>• Rolling</li> <li>• Folding</li> <li>• Shaping</li> <li>• Baking</li> </ul>			22 hour	Lecture	i. Bakery product innovation standard recipe followed thoroughly ii. Utensils and equipment utilised correctly iii. Bakery product innovation ingredients according to standard recipe measured
		i. Follow bakery product innovation standard recipe ii. Utilise utensils and equipment iii. Measure bakery product innovation ingredients according to standard recipe iv. Mix bakery product innovation ingredients according to standard recipe v. Apply bakery product innovation dough folding technique vi. Apply shaping technique according to standing order vii. Apply bakery product		48 hours	Demonstration & Observation	iv. bakery product innovation dough ingredients mixed according to standard recipe v. Bakery product innovation dough folding technique

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		innovation baking technique	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Adhere to hygiene practise</li> <li>ii. Neat and tidy in carrying out bakery product innovation preparation</li> </ul> <p><u>Safety:</u></p> <ul style="list-style-type: none"> <li>i. Wear appropriate Personal Protective Equipment (PPE)</li> <li>ii. Careful when handling sharp utensils and electrical equipment</li> <li>iii. Adhere to kitchen safety, hygiene and health procedure</li> </ul>			<ul style="list-style-type: none"> <li>vi. Shaping technique applied according to standing order</li> <li>vii. Bakery product innovation baking technique applied</li> </ul>
4. Carry out bakery product innovation finishing and decoration	<ul style="list-style-type: none"> <li>i. Types of bakery product innovation finishing <ul style="list-style-type: none"> <li>• Filling</li> <li>• Glazing</li> <li>• Topping</li> </ul> </li> <li>ii. Technique of filling, glazing, coating and</li> </ul>			4 hour	Lecture	<ul style="list-style-type: none"> <li>i. Types of bakery product innovation finishing listed out</li> <li>ii. Filled, glazed,</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	topping iii. Method of bakery product innovation product display and packaging					coated and topped bakery product innovation according to standing order
		i. Determine types of bakery product innovation finishing ii. Fill, glaze, coat and top bakery product innovation according to standing order iii. Display and pack bakery product innovation according to requirements	<u>Attitude:</u> i. Adhere to hygiene practise ii. Neat and tidy in carrying out finishing and decoration  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Careful when	12 hours	Demonstration & Observation	iii. Displayed and packed bakery product innovation according to requirements

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			handling equipment Adhere to kitchen safety and health procedure			
5. Check bakery product innovation quality and quantity	i. Bakery product innovation appearance ii. Bakery product innovation shape iii. Bakery product innovation texture iv. Bakery product innovation aroma v. Bakery product innovation colour vi. Bakery product innovation flavour and taste vii. Bakery product innovation appearance viii. Bakery product innovation quantity and quality contribution factors <ul style="list-style-type: none"> <li>• Preparation process</li> <li>• Temperature</li> </ul>			2 hours	Lecture	i. Bakery product innovation appearance confirmed ii. Bakery product innovation shape confirmed iii. Bakery product innovation texture confirmed iv. Bakery product innovation aroma confirmed v. Bakery product innovation colour confirmed



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Check bakery product innovation appearance</li> <li>ii. Check bakery product innovation shape</li> <li>iii. Check bakery product innovation texture</li> <li>iv. Check bakery product innovation aroma</li> <li>v. Check bakery product innovation colour</li> <li>vi. Check bakery product innovation flavour and taste</li> <li>vii. Check bakery product innovation appearance</li> <li>viii. Confirm bakery product innovation quantity meets with standing order</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Responsible in checking bakery product innovation quality and quantity</li> <li>ii. Adhere to hygiene practise</li> </ul> <p><u>Safety:</u></p>	4 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>vi. Bakery product innovation flavour and taste confirmed</li> <li>vii. Bakery product innovation appearance confirmed</li> <li>viii. Bakery product innovation quantity confirmed</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<ul style="list-style-type: none"> <li>i. Wear appropriate Personal Protective Equipment (PPE)</li> <li>ii. Adhere to kitchen safety, hygiene and health procedure</li> </ul>			
6. Record bakery product innovation production activities	<ul style="list-style-type: none"> <li>i. Flow of reporting line</li> <li>ii. Bakery product innovation reporting format</li> <li>iii. Method of reporting bakery product innovation activities <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> </li> <li>iv. Procedure of reporting bakery product innovation activities</li> </ul>			2 hour	Lecture	<ul style="list-style-type: none"> <li>i. Bakery product innovation activities reporting format determined</li> <li>ii. Method of reporting bakery product innovation activities applied</li> </ul>
		<ul style="list-style-type: none"> <li>i. Determine personnel involved</li> <li>ii. Determine bakery product innovation activities reporting format</li> <li>iii. Apply method of reporting bakery product innovation</li> </ul>		4 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>iii. Bakery product innovation activities report generated</li> <li>iv. Procedure of reporting bakery product</li> </ul>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		activities iv. Generate bakery product innovation activities report v. Follow procedure of reporting bakery product innovation activities	<u>Attitude:</u> i. Meticulous in writing report ii. Clarity and responsible in reporting bakery product innovation preparation activities iii. Adhere to report submission dateline  <u>Safety:</u> -Not applicable-			innovation activities followed

## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

**Tools, Equipment and Materials (TEM)**

ITEMS	RATIO (TEM : Trainees)
1. Stationery	As required
2. Kitchen utensils (Pan, Scale, Measurement spoon & cups, Mixing bowl, bakery product innovation cutter, rolling pin, scrapper, baking tray, wooden spoon, brush, sieve)	1:4
3. Working table	1:4
4. Mixer machine	1:4
5. Dough sheeter	1:20
6. Stove	1:4
7. Oven	1:20
8. Chillers	1:20
9. Freezer	1:20
10. Bakery product innovation ingredients	1:1
11. Bakery product innovation standard recipe	1:1
12. Packaging material	1:1
13. Personal Protective Equipment (safety boot, Chef hat, disposable glove, apron)	1:1

## References

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1. Bo Friberg Van Nostrand Reinhold A Division of International Thompson Publishing Inc, The PROFESSIONAL Bakery Chef, Third Edition, ISBN 0-442-01597-6
2. Courtine R.J., The Hamlyn Publishing Group London (1988) Larousse Gastronomique Cookery Encyclopaedia, ISBN 0-749-30316-6
3. Friberg, B., John Wiley & Sons. (2002). The Professional Bakery Chef: Fundamental of Baking and Bakery 4<sup>th</sup> edition.
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5. Gail Sokol, Thomson Delmar Learning (2006), About Professional Baking 2<sup>nd</sup> Edition.
6. Gisslen, W., John Wiley & Sons, Inc. (2009), Professional Baking 5<sup>th</sup> Edition.
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9. Lian M., Times Book International Singapore (1981), Guide to Hotel & Catering Services, ISBN 9-971-65093-2
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## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	BAKERY PRODUCTION CONTROL						
<b>Competency Unit Descriptor</b>	Bakery production control is to manage, control, planning and scheduling production in accordance with Standard Operating Procedure (SOP), production requirement, standing order, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in production control shall be able to prepare production subordinate tasking and monitor bakery production activities to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-C06	<b>Level</b>	3	<b>Training Duration</b>	60 Hours	<b>Credit Hours</b>	6
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify bakery production control requirements	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Types of bakery product such as: <ul style="list-style-type: none"> <li>• Bun</li> <li>• Bread</li> <li>• Pizza</li> </ul>			3 hours	Lecture	i. Types of bakery product listed out ii. Determine bakery production workflow listed out iii. Production capacity and capability determined iv. Production quantity and quality specification	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Croissant</li> <li>• Danish</li> </ul> iii. Bakery production workflow iv. Determine production capacity and capability <ul style="list-style-type: none"> <li>• Manning</li> <li>• Utensils and Equipment</li> <li>• Materials</li> </ul> v. Delivery procedure					determined v. Delivery procedure determined
		i. Determine types of bakery product ii. Determine bakery production workflow iii. Determine production capacity and capability iv. Determine production quantity and quality specification v. Determine delivery procedure	<u>Attitude:</u> i. Resourceful in identifying bakery production control requirements  <u>Safety:</u> -Not applicable-	3 hours	Demonstration & Observation	



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Arrange bakery production control activities	<ul style="list-style-type: none"> <li>i. Production checklist</li> <li>ii. Standing order</li> <li>iii. Bakery products standard recipe</li> <li>iv. Materials requisition</li> <li>v. Production subordinate tasking and schedule</li> <li>vi. Functionality of tools and equipment</li> <li>vii. Maintenance schedule</li> </ul>			2 hour	Lecture	<ul style="list-style-type: none"> <li>i. Production checklist prepared</li> <li>ii. Standing order prepared kitchen work order</li> <li>iii. Materials requisition prepared</li> <li>iv. Production subordinate tasking and schedule planned</li> </ul>
		<ul style="list-style-type: none"> <li>i. Prepare production checklist</li> <li>ii. Prepare standing order/kitchen work order</li> <li>iii. Obtain standard recipe</li> <li>iv. Prepare materials requisition</li> <li>v. Plan production subordinate tasking and schedule</li> <li>vi. Check functionality of tools and equipment</li> <li>vii. Organise maintenance schedule</li> </ul>		6 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>v. Functionality of tools and equipment checked</li> <li>vi. Maintenance schedule organised</li> </ul>
			<u>Attitude:</u> <ul style="list-style-type: none"> <li>i. Organise in arranging bakery production control activities</li> </ul>			

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Safety:</u> i. Adhere to safety practice			
3. Carry out bakery production control activities	i. Subordinate tasking ii. Bakery production activities iii. Bakery products quality and quantity iv. Product compliance with standard recipe and standing order v. Food testing activities to control quality of products vi. Customer feedback on bakery products quality			8 hour	Lecture	i. Subordinate tasking assigned ii. bakery products production activities monitored iii. Bakery products quality and quantity inspected iv. Product compliance checked with standard recipe and standing order
		i. Assign subordinate tasking ii. Monitor bakery products production activities iii. Inspect bakery products quality and quantity iv. Check product compliance with standard recipe and standing order		26 hours	Demonstration & Observation	v. Food testing activities executed vi. Bakery products delivery coordinated

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		v. Execute food testing activities to control quality of products vi. Coordinate bakery products delivery vii. Obtain customer feedback on bakery products quality	<p><u>Attitude:</u></p> i. Responsible and firm in checking product quality ii. Adhere to hygiene practise			
			<p><u>Safety:</u></p> i. Wear appropriate Personal Protective Equipment (PPE) ii. Adhere to kitchen safety and health procedure			
4. Check effectiveness of bakery production control activities	i. Effectiveness of subordinate's schedule and tasking ii. Bakery products quality and quantity iii. Validity of customer feedback			2 hour	Lecture	i. Effectiveness of subordinate's schedule and tasking confirmed ii. Bakery products quality

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	iv. Effectiveness of quality control activities in order to avoid spoilage and wastage of bakery products					and quantity confirmed iii. Validity of customer feedback confirmed
		i. Evaluate effectiveness of subordinate's schedule and tasking ii. Evaluate bakery products quality and quantity iii. Evaluate validity of customer feedback iv. Evaluate effectiveness of quality control activities in order to avoid spoilage and wastage of bakery products	<u>Attitude:</u> i. Responsible in checking bakery production control effectiveness ii. Adhere to hygiene practise  <u>Safety:</u> i. Wear appropriate Personal Protective	4 hours	Demonstration & Observation	iv. Effectiveness of quality control activities in order to avoid spoilage and wastage of bakery products confirmed

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			Equipment (PPE) ii. Adhere to kitchen safety, hygiene and health procedure			
5. Prepare bakery production control activities report	i. Flow of reporting line ii. Bakery production control reporting format iii. Method of reporting bakery production control activities <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> iv. Procedure of reporting bakery production control activities			2 hour	Lecture	i. Bakery production control activities reporting format determined ii. Method of reporting bakery production control activities applied iii. Bakery production control activities report generated
		i. Determine personnel involved ii. Determine bakery production control activities reporting format iii. Apply method of reporting bakery production control activities iv. Generate bakery production control		4 hours	Demonstration & Observation	iv. Procedure of reporting bakery production control activities followed

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		activities report v. Follow procedure of reporting bakery production control activities	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Meticulous in writing report</li> <li>ii. Clarity and responsible in reporting bakery production control activities</li> <li>iii. Adhere to report submission dateline</li> </ul> <p><u>Safety:</u> -Not applicable-</p>			

## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.10 Provide consultations and counselling. 03.11 Monitor and evaluate performance of human resources. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 03.17 Identify staff training needs and facilitate access to training. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

**Tools, Equipment and Materials (TEM)**

<b>ITEMS</b>	<b>RATIO (TEM : Trainees)</b>
1. Stationery 2. Kitchen utensils 3. Kitchen equipment 4. Bakery ingredients 5. Bakery product standard recipe 6. Quality control documents(Checklist form, requisition form, Inter kitchen form, spoilage form) 7. Personal Protective Equipment (safety boot, Chef hat, disposable glove, apron)	As required 1:4 1:20 1:1 1:1 1:1 1:1



## References

### REFERENCES

1. Bo Friberg Van Nostrand Reinhold A Division of International Thompson Publishing Inc, The PROFESSIONAL Bakery Chef, Third Edition, ISBN 0-442-01597-6
2. Courtine R.J., The Hamlyn Publishing Group London (1988) Larousse Gastronomique Cookery Encyclopaedia, ISBN 0-749-30316-6
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## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	BAKERY PRODUCTION STOCK CONTROL						
<b>Competency Unit Descriptor</b>	Stock control is to manage and control stock in accordance with Standard Operating Procedure (SOP), production requirement, Hazard Analysis and Critical Control Points (HACCP), Good Manufacturing Practice (GMP) and Halal requirements. The personnel who are competent in stock control shall be able to carry out stock control activities to meet required quality.						
<b>Competency Unit ID</b>	HT-013-3:2011-C07	<b>Level</b>	3	<b>Training Duration</b>	60 Hours	<b>Credit Hours</b>	6
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify bakery production stock control requirements	i. Safety, health and hygiene practices guidelines such as; <ul style="list-style-type: none"> <li>• OSHA</li> <li>• Environmental Quality Act 1974 (Act127)</li> <li>• Halal product compliance</li> <li>• HACCP</li> <li>• GMP</li> </ul> ii. Production quantity iii. Types of stock control such as; <ul style="list-style-type: none"> <li>• Materials               <ul style="list-style-type: none"> <li>– Perishable</li> <li>– Dry</li> <li>– Frozen</li> </ul> </li> </ul>			3 hours	Lecture	i. Production quantity determined ii. Types of stock control determined iii. Stock control Standard Operating Procedures (SOP) determined iv. Stock control workflow determined	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Utensils</li> <li>• Equipment</li> </ul> iv. Types of storage area <ul style="list-style-type: none"> <li>• Dry store</li> <li>• Chillers</li> <li>• Freezer</li> <li>• Chocolate room</li> </ul> v. Stock control workflow					
		i. Determine production quantity ii. Determine types of stock control iii. Determine storage area iv. Determine stock control Standard Operating Procedures (SOP) v. Determine stock control workflow	<u>Attitude:</u> i. Resourceful in identifying bakery production stock control requirements  <u>Safety:</u> -Not applicable-	3 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
2. Arrange bakery production stock control activities	i. Organisation chart ii. Stock control documentation such as; <ul style="list-style-type: none"> <li>• Requisition form</li> <li>• Inter kitchen transfer form</li> <li>• Market list</li> <li>• Spoilage form</li> <li>• Forecast report</li> </ul> iii. Schedule format for receiving and issuing stock iv. Procedures of receiving and issuing of stock			4 hour	Lecture	i. Schedule for receiving and issuing organised of stock
		i. Determine personnel/department involved ii. Obtain stock control documentation iii. Organise schedule for receiving and issuing of stock	<u>Attitude:</u> i. Organise in arranging bakery production stock control activities	6 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<u>Safety:</u> i. Adhere to safety practice			
3. Carry out bakery production stock control activities	i. Inventory stock record format ii. Stock arrangement procedures			10 hour	Lecture	i. Consumption usage of bakery material determined ii. Inventory stock record updated
		i. Determine consumption usage of bakery material ii. Update inventory stock record iii. Fill up stock requisition form iv. Verify stock arrangement	<u>Attitude:</u> i. Meticulous in updating inventory record  <u>Safety:</u> i. Wear appropriate Personal Protective Equipment (PPE) ii. Adhere to kitchen safety and health	24 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			procedure			
4. Check bakery production stock control activities	i. Stock keeping record and filing ii. Procedures of issuing and ordering of stock			2 hour	Lecture	i. Stock inventory accurately confirmed ii. Stock keeping record and filing accessibility checked
		i. Check stock inventory accurately ii. Check stock keeping record and filing accessibility iii. Check issuing and ordering of stock comply with procedures	<u>Attitude:</u> i. Responsible in checking stock control  <u>Safety:</u> -Not applicable	4 hours	Demonstration & Observation	
5. Prepare bakery production stock control report	i. Flow of reporting line ii. Stock control reporting format iii. Method of reporting stock control activities • Verbal			2 hour	Lecture	i. Method of reporting stock control activities applied ii. Stock control

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	<ul style="list-style-type: none"> <li>• Checklist</li> <li>• Written</li> </ul> iv. Procedure of reporting stock control activities	i. Determine personnel involved ii. Determine stock control activities reporting format iii. Apply method of reporting stock control activities iv. Generate stock control activities report v. Follow procedure of reporting stock control activities	<p><u>Attitude:</u></p> i. Meticulous in writing report ii. Clarity and responsible in reporting bakery production stock control activities iii. Adhere to report submission dateline	2 hours	Demonstration & Observation	iii. activities report generated procedure of reporting stock control activities followed

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			-Not applicable-			



## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques.            01.11 Apply thinking skills and creativity.            02.09 Prepare flowcharts.            02.10 Prepare reports and instructions.            02.11 Convey information and ideas to people.            03.09 Manage and improve performance of individuals.            03.10 Provide consultations and counselling.            03.11 Monitor and evaluate performance of human resources.            03.12 Provide coaching/on-the-job training.            03.13 Develop and maintain team harmony and resolve conflicts.            03.14 Facilitate and coordinate teams and ideas.            03.15 Liaise to achieve identified outcomes.            03.16 Identify and assess client/customer needs.            03.17 Identify staff training needs and facilitate access to training.            04.06 Allocate work.            05.01 Implement project/work plans.            05.02 Inspect and monitor work done and/or in progress.            06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"> <li>1. Communication skills</li> <li>2. Conceptual skills</li> <li>3. Interpersonal skills</li> <li>4. Multitasking and prioritizing</li> <li>5. Self-discipline</li> <li>6. Teamwork</li> </ol>

### Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Stationery	As required
2. Kitchen utensils	As required
3. Kitchen equipment	As required
4. Bakery product material	1:1
5. Packaging material	1:1
6. Personal Protective Equipment (Safety boot, chef hat, disposable glove, apron)	1:1
7. Requisition form	1:1
8. Inter kitchen transfer form	1:1
9. Market list	1:1
10. Spoilage form	1:1

## References

### REFERENCES

1. Bo Friberg Van Nostrand Reinhold A Division of International Thompson Publishing Inc, The PROFESSIONAL Bakery Chef, Third Edition, ISBN 0-442-01597-6
2. Gisslen, W., John Wiley & Sons, Inc. (2009), Professional Baking 5<sup>th</sup> Edition.
3. Joseph Amendola, Nicole Rees, John Wiley & Sons. (2002) The Baker's Manual Fifth Edition, ISBN 0-471-40525-6
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## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	BAKERY ADMINISTRATIVE FUNCTION						
<b>Competency Unit Descriptor</b>	Bakery administrative function is to administer subordinate on career development in accordance with Standard Operating Procedure (SOP) and production requirement. The personnel who are competent in bakery administrative function shall be able to carry out bakery administrative function activities to meet required quality and quantity.						
<b>Competency Unit ID</b>	HT-013-3:2011-E01	<b>Level</b>	3	<b>Training Duration</b>	60 Hours	<b>Credit Hours</b>	6
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify bakery administrative function requirements	i. Staff qualification requirement ii. Staff development needs iii. Area of improvement			2 hours	Lecture	i. Staff qualification requirement determined ii. Staff development requirement determine	
		i. Determine staff qualification requirement ii. Determine staff development requirement iii. Determine area of improvement	<u>Attitude:</u> i. Resourceful in identifying bakery administrative function	4 hours	Demonstration & Observation	iii. Area of improvement listed out	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			requirements <u>Safety:</u> -Not applicable-			
2. Plan bakery administrative activities	i. Subordinates performance appraisal ii. Subordinates profile iii. Types of staff development program such as; <ul style="list-style-type: none"> <li>• Training session</li> <li>• Counseling session</li> <li>• Motivation session</li> </ul> iv. Training requirements <ul style="list-style-type: none"> <li>• Schedule</li> <li>• Personnel</li> <li>• Location</li> <li>• Budget</li> <li>• Facilities</li> </ul> v. Procedure to prepare staff development proposal			4 hour	Lecture	i. Subordinates qualification/ capabilities determined ii. Plan staff development program planned iii. Prepare staff development program proposal generated iv. Training requirements determined
		i. Obtain subordinates performance appraisal ii. Determine subordinates qualification/ capabilities		8 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		iii. Plan staff development program iv. Prepare staff development program proposal v. Determine training requirements vi. Follow procedure to prepare staff development proposal	<u>Attitude:</u> i. Resourceful in obtaining subordinates performance appraisal ii. Responsible in preparing staff development program proposal  <u>Safety:</u> -Not applicable-			
3. Carry out bakery administrative activities	i. Staff development program schedule ii. Training equipment and materials iii. Staff development program coordination			8 hour	Lecture	i. Staff development program schedule determined ii. Staff

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
	iv. Subordinates appraisal v. Staff career development					development program coordinated
		i. Determine staff development program schedule ii. Obtain training equipment and materials iii. Coordinate staff development program iv. Conduct subordinates appraisal v. Propose staff career development	<u>Attitude:</u> i. Systematic in coordinating staff development program ii. No bias in proposing staff career development  <u>Safety:</u> -Not applicable	24 hours	Demonstration & Observation	iii. Subordinates appraisal conducted iv. Staff career development proposed

<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>
4. Evaluate effectiveness of bakery administrative activities	<ul style="list-style-type: none"> <li>i. Suitability of staff development program schedule</li> <li>ii. Functionality &amp; suitability of training equipment and materials</li> <li>iii. Effectiveness of staff development program coordination</li> <li>iv. Staff development program effectiveness</li> <li>v. Validity of subordinates appraisal</li> <li>vi. Suitability of staff career development proposal</li> </ul>			2 hour	Lecture	<ul style="list-style-type: none"> <li>i. Suitability of staff development program schedule confirmed</li> <li>ii. Functionality &amp; suitability of training equipment and materials confirmed</li> <li>iii. Effectiveness of staff development program coordination confirmed</li> </ul>
		<ul style="list-style-type: none"> <li>i. Check suitability of staff development program schedule</li> <li>ii. Check functionality &amp; suitability of training equipment and materials</li> <li>iii. Check effectiveness of staff development program coordination</li> <li>iv. Examine staff development program effectiveness</li> <li>v. Check validity of subordinates appraisal</li> </ul>		4 hours	Demonstration & Observation	<ul style="list-style-type: none"> <li>iv. Validity of subordinates appraisal confirmed</li> <li>v. Suitability of staff career development proposal confirmed</li> </ul>



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		vi. Check suitability of staff career development proposal	<p><u>Attitude:</u></p> <p>i. Responsible in checking effectiveness of bakery administrative activities</p> <p><u>Safety:</u></p> <p>-Not applicable-</p>			
5. Prepare bakery administrative activities report	<p>i. Flow of reporting line</p> <p>ii. Bakery administrative function reporting format</p> <p>iii. Method of reporting bakery administrative function activities</p> <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> <p>iv. Procedure of reporting bakery administrative function activities</p>			2 hour	Lecture	<p>i. Bakery administrative function activities reporting format determined</p> <p>ii. Method of reporting bakery administrative function activities applied</p>

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Determine personnel involved</li> <li>ii. Determine bakery administrative function activities reporting format</li> <li>iii. Apply method of reporting bakery administrative function activities</li> <li>iv. Generate bakery administrative function activities report</li> <li>v. Follow procedure of reporting bakery administrative function activities</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Meticulous in writing report</li> <li>ii. Clarity and responsible in reporting bakery administrative activities</li> <li>iii. Adhere to report submission dateline</li> </ul> <p><u>Safety:</u> -Not applicable-</p>	2 hours	Demonstration & Observation	iii. Bakery administrative function activities report generated

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria

## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques. 01.11 Apply thinking skills and creativity. 02.09 Prepare flowcharts. 02.10 Prepare reports and instructions. 02.11 Convey information and ideas to people. 03.09 Manage and improve performance of individuals. 03.10 Provide consultations and counselling. 03.11 Monitor and evaluate performance of human resources. 03.12 Provide coaching/on-the-job training. 03.13 Develop and maintain team harmony and resolve conflicts. 03.14 Facilitate and coordinate teams and ideas. 03.15 Liaise to achieve identified outcomes. 03.16 Identify and assess client/customer needs. 03.17 Identify staff training needs and facilitate access to training. 04.06 Allocate work. 05.01 Implement project/work plans. 05.02 Inspect and monitor work done and/or in progress. 06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"><li>1. Communication skills</li><li>2. Conceptual skills</li><li>3. Interpersonal skills</li><li>4. Multitasking and prioritizing</li><li>5. Self-discipline</li><li>6. Teamwork</li></ol>

### Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Stationeries 2. Audio Visual Aids (LCD projector, Computer set ) 3. Training materials 4. Standard Operating Procedures (SOP)	1:1 1:20 1:1 1:1

### References

REFERENCES
1. Bo Friberg Van Nostrand Reinhold A Division of International Thompson Publishing Inc, The PROFESSIONAL Bakery Chef, Third Edition, ISBN 0-442-01597-6 2. Courtine R.J., The Hamlyn Publishing Group London (1988) Larousse Gastronomique Cookery Encyclopaedia, ISBN 0-749-30316-6 3. Gisslen, W., John Wiley & Sons, Inc. (2009), Professional Baking 5 <sup>th</sup> Edition. 4. Lian M., Times Book International Singapore (1981), Guide to Hotel & Catering Services, ISBN 9-971-65093-2 5. Y.H.Hui, Harold Corke, Wiley Blacwell (2006), Bakery Products, Science and Technology, ISBN: 9-780-81380187-2 6. Mary L.Tanke, Thomson Learning (2 <sup>nd</sup> Edition), Human Resource Management for the Hospitality Industry, ISBN: 0-8273-7321-x 7. M.J.Boella, (2000), Human Resource Management in the Hospitality Industry, ISBN: 0-7487-4566-0 8. Robert J. Martin, Donald E. (1992) Human Relation for the Hospitality Industry

## CURRICULUM of COMPETENCY UNIT (CoCU)

<b>Sub Sector</b>	FOOD AND BEVERAGES						
<b>Job Area</b>	BAKERY PRODUCTION						
<b>Competency Unit Title</b>	BAKERY PRODUCT COSTING						
<b>Competency Unit Descriptor</b>	Bakery product costing is to calculate and estimate bakery product cost in accordance with Standard Operating Procedure (SOP) and production requirement. The personnel who are competent in Bakery product costing shall be able to carry out bakery product costing activities to meet required quality.						
<b>Competency Unit ID</b>	HT-013-3:2011-E02	<b>Level</b>	3	<b>Training Duration</b>	36 Hours	<b>Credit Hours</b>	3
<b>Work Activities</b>	<b>Related Knowledge</b>	<b>Applied Skills</b>	<b>Attitude / Safety / Environmental</b>	<b>Training Hours</b>	<b>Delivery Mode</b>	<b>Assessment Criteria</b>	
1. Identify bakery product costing requirements	i. Organisation chart ii. Types of bakery products such as; <ul style="list-style-type: none"> <li>• Confectionary</li> <li>• Cakes</li> <li>• Frozen desserts</li> <li>• Pudding</li> <li>• Cookies</li> <li>• Malaysian desserts</li> </ul> iii. Bakery product cost <ul style="list-style-type: none"> <li>• Raw materials cost</li> <li>• Packaging cost</li> <li>• Labour cost</li> <li>• Other overheads cost</li> </ul> iv. Bakery product costing workflow			2 hours	Lecture	i. Types of bakery product listed out ii. Bakery product cost listed out iii. Bakery product costing workflow determined	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		<ul style="list-style-type: none"> <li>i. Determine types of bakery product</li> <li>ii. Determine personnel/department involve</li> <li>iii. Determine bakery product cost</li> <li>iv. Determine bakery product costing workflow</li> </ul>	<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Resourceful in identifying bakery product costing</li> </ul> <p><u>Safety:</u></p> <p>-Not applicable-</p>	2 hours	Demonstration & Observation	
2. Arrange bakery product costing activities	<ul style="list-style-type: none"> <li>i. Bakery product standard recipe</li> <li>ii. Materials price list</li> <li>iii. Costing sheet format</li> </ul>			2 hour	Lecture	<ul style="list-style-type: none"> <li>i. Costing sheet format prepared</li> </ul>
		<ul style="list-style-type: none"> <li>i. Obtain bakery product standard recipe</li> <li>ii. Obtain materials price list</li> </ul>		2 hours	Demonstration & Observation	

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		iii. Prepare costing sheet format	<p><u>Attitude:</u></p> <p>i. Resourceful in obtaining materials price list</p> <p>ii. Organise in arranging bakery product costing activities</p> <p><u>Safety:</u></p> <p>-Not applicable-</p>			
3. Carry out bakery product costing activities	<p>i. Basic mathematical skill such as;</p> <ul style="list-style-type: none"> <li>• Conversion unit</li> <li>• Formula</li> </ul> <p>ii. Tabulate bakery product costing</p> <p>iii. Calculate bakery product costing</p>			4 hour	Lecture	<p>i. Bakery product recipe interpreted thoroughly</p> <p>ii. basic mathematical skill applied</p> <p>iii. Bakery product costing tabulated</p>
		<p>i. Interpret bakery product recipe</p> <p>ii. Apply basic mathematical skill</p> <p>iii. Tabulate bakery product costing</p>		20 hours	Demonstration & Observation	<p>iv. Bakery product costing calculated</p>



Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
		iv. Calculate bakery product costing	<u>Attitude:</u> i. Meticulous in calculating product costing <u>Safety:</u> -Not applicable-			
4. Check accuracy of bakery product costing	i. Accuracy of bakery product costing tabulation ii. Accuracy of bakery product costing calculation			1 hour	Lecture	i. Accuracy of bakery product costing tabulation confirmed ii. Accuracy of bakery product costing calculation confirmed
		i. Check accuracy of bakery product costing tabulation ii. Check accuracy of bakery product costing calculation	<u>Attitude:</u> i. Responsible in checking accuracy of bakery product costing  <u>Safety:</u> -Not applicable-	1 hours	Demonstration & Observation	ii. Accuracy of bakery product costing calculation confirmed

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
5. Prepare bakery product costing activities report	i. Flow of reporting line ii. Bakery product costing reporting format iii. Method of reporting bakery product costing activities <ul style="list-style-type: none"> <li>• Verbal</li> <li>• Checklist</li> <li>• Written</li> </ul> iv. Procedure of reporting bakery product costing activities			1 hour	Lecture	i. Bakery product costing activities reporting format determined ii. Method of reporting bakery product costing activities applied
		i. Determine personnel involved ii. Determine bakery product costing activities reporting format iii. Apply method of reporting bakery product costing activities iv. Generate bakery product costing activities report v. Follow procedure of reporting bakery product costing activities		1 hours	Demonstration & Observation	iii. Bakery product costing activities report generated

Work Activities	Related Knowledge	Applied Skills	Attitude / Safety / Environmental	Training Hours	Delivery Mode	Assessment Criteria
			<p><u>Attitude:</u></p> <ul style="list-style-type: none"> <li>i. Meticulous in writing report</li> <li>ii. Clarity and responsible in reporting bakery production stock control activities</li> <li>iii. Adhere to report submission dateline</li> </ul> <p><u>Safety:</u> -Not applicable-</p>			

## Employability Skills

Core Abilities	Social Skills
<p>01.10 Apply a variety of mathematical techniques.            01.11 Apply thinking skills and creativity.            02.09 Prepare flowcharts.            02.10 Prepare reports and instructions.            02.11 Convey information and ideas to people.            03.09 Manage and improve performance of individuals.            03.10 Provide consultations and counselling.            03.11 Monitor and evaluate performance of human resources.            03.12 Provide coaching/on-the-job training.            03.13 Develop and maintain team harmony and resolve conflicts.            03.14 Facilitate and coordinate teams and ideas.            03.15 Liaise to achieve identified outcomes.            03.16 Identify and assess client/customer needs.            03.17 Identify staff training needs and facilitate access to training.            04.06 Allocate work.            05.01 Implement project/work plans.            05.02 Inspect and monitor work done and/or in progress.            06.07 Develop and maintain networks.</p>	<ol style="list-style-type: none"> <li>1. Communication skills</li> <li>2. Conceptual skills</li> <li>3. Interpersonal skills</li> <li>4. Multitasking and prioritizing</li> <li>5. Self-discipline</li> <li>6. Teamwork</li> </ol>

### Tools, Equipment and Materials (TEM)

ITEMS	RATIO (TEM : Trainees)
1. Stationeries	1:1
2. Computer set	1:4
3. Calculation tool	1:1
4. Bakery product standard recipe	1:1
5. Materials price list	1:1
6. Costing sheet	1:1
7. Standard Operating Procedures (SOP)	1:1

### References

REFERENCES
1. Bo Friberg Van Nostrand Reinhold A Division of International Thompson Publishing Inc, The PROFESSIONAL Bakery Chef, Third Edition, ISBN 0-442-01597-6

2. Courtine R.J., The Hamlyn Publishing Group London (1988) Larousse Gastronomique Cookery Encyclopaedia, ISBN 0-749-30316-6
3. Gisslen, W., John Wiley & Sons, Inc. (2009), Professional Baking 5<sup>th</sup> Edition.
4. Lian M., Times Book International Singapore (1981), Guide to Hotel & Catering Services, ISBN 9-971-65093-2
5. Y.H.Hui, Harold Corke, Wiley Blacwell (2006), Bakery Products, Science and Technology, ISBN: 9-780-81380187-2
6. Lea R.DOpson & David K.Heyes, John Wiley & Sons (2009) Managerial Accounting for the Hospitality Industry

**SUMMARY OF TRAINING DURATION FOR BAKERY PRODUCTION (LEVEL 3)**

NO. ID	COMPETENCY UNIT TITLE	WORK ACTIVITIES	RELATED KNOWLEDGE (A)	RELATED SKILLS (B)	HOURS (A) + (B)	TOTAL (HRS)
HT-013-3:2011-C01	BREAD PREPARATION	Identify bread preparation requirements	3	6	9	120
		Prepare bread mise en place	12	20	32	
		Carry out bread preparation	20	35	55	
		Carry out bread product finishing	4	8	12	
		Evaluate bread product quality and quantity	2	4	6	
		Record bread preparation activities	2	4	6	
HT-013-3:2011-C02	PUFF PREPARATION	Identify puff preparation requirements	3	4	7	40
		Prepare puff mise en place	1	2	3	
		Carry out puff preparation	1	4	5	
		Carry out puff product finishing	2	5	7	
		Evaluate puff product quality and quantity	3	10	13	
		Record puff preparation activities	2	3	5	
HT-013-3:2011-C03	CROISSANT PREPARATION	Identify croissant preparation requirements	6	12	18	240
		Prepare croissant mise en place	24	40	64	
		Carry out croissant preparation	40	70	110	
		Carry out croissant product finishing	8	16	24	
		Evaluate croissant product quality and quantity	4	8	12	
		Record croissant preparation activities	4	8	12	
HT-013-3:2011-C04	DANISH PASTRY PREPARATION	Identify Danish pastry preparation requirements	6	12	18	240
		Prepare Danish pastry mise en place	24	40	64	
		Carry out Danish pastry preparation	40	70	110	
		Carry out Danish pastry product finishing	8	16	24	
		Evaluate Danish pastry product quality and quantity	4	8	12	
		Record Danish pastry preparation activities	4	8	12	
HT-013-3:2011-C05	BAKERY PRODUCT INNOVATION	Identify bakery product innovation requirement	4	6	10	122
		Prepare bakery product innovation mise en place	6	8	14	
		Carry out bakery product innovation	22	48	70	
		Carry out bakery product innovation finishing	4	12	16	
		Evaluate bakery product innovation quality and quantity	2	4	6	
		Record bakery product innovation production activities	2	4	6	
HT-013-3:2011-C06	BAKERY PRODUCTION CONTROL	Identify bakery product control requirement	3	3	6	60
		Plan bakery production control activities	2	6	8	
		Carry out bakery production control activities	8	26	34	
		Evaluate effectiveness of bakery production control activities	2	4	6	
		Prepare bakery production control activities report	2	4	6	

HT-013-3:2011-C07	BAKERY PRODUCTION STOCK CONTROL	Identify stock control Requirements	3	3	6	60
		Plan stock control activities	4	6	10	
		Carry out stock control activities	10	24	34	
		Evaluate stock control activities	2	4	6	
		Prepare stock control report	2	2	4	
<b>TOTAL HOURS (Core Competencies)</b>			<b>305</b>	<b>577</b>	<b>882</b>	<b>882</b>
HT-013-3:2011-E01	BAKERY ADMINISTRATIVE FUNCTIONS	Identify bakery administrative function requirements	2	4	6	60
		Plan bakery administrative function activities	4	8	12	
		Carry out bakery administrative function activities	8	24	32	
		Evaluate effectiveness of bakery administrative function activities	2	4	6	
		Prepare bakery administrative function activities report	2	2	4	
HT-013-3:2011-E02	BAKERY PRODUCT COSTING	Identify bakery product costing requirements	2	2	4	36
		Plan bakery product costing activities	2	2	4	
		Carry out bakery product costing activities	4	20	24	
		Evaluate accuracy of bakery product costing	1	1	2	
		Prepare bakery product costing activities report	1	1	2	
<b>TOTAL HOURS (+ Elective Competency)</b>			<b>333</b>	<b>645</b>	<b>978</b>	<b>978</b>