

Syllabus For Pastry/bakery Chef (Patisserie)

Course Name	Pastry/bakery Chef (Patisserie)
Sector	Tourism & Hospitality
Course Code	THC/2024/PBSP/422
Level	4
Occupation	Food Production and kitchen operation
Job Description	The Pastry/bakery Chef (Patisserie) is responsible for preparing wide variety of delicious pastries, cookies, Biscuits etc. They create new and enticing recipes, decorate pastries to ensure beautiful presentation, and maintain the quality of ingredients and equipment. The chef also oversee all aspects of staff management, regulatory compliance, efficient raw material procurement and strategic menu planning.
Course Duration	Total Duration 420 Hrs (T- 90 , P- 210 , OJT-60 and ES-60)
Trainees' Entry Qualification	Grade 12 – Regular OR Vocational OR 10th grade pass plus 2-year NTC/NAC OR Completed 2nd year of 3-year diploma (after 10th) and pursuing Regular diploma OR 10th grade pass and pursuing continuous schooling OR 10th grade pass with 2 years' experience OR Previous relevant Qualification of NSQF Level 3.0 with minimum education as 8th Grade pass with 3 year relevant experience OR Previous relevant qualification of NSQF Level 3.5 with 1.5 year relevant experience
Trainers Qualification	Degree in Hotel Management & Catering Technology from UGC recognized university with one year experience in the relevant field. OR Diploma in Hotel Management & Catering Technology from recognized board of education with two years' experience in the relevant field. OR NTC/NAC passed in the trade of "Catering & Hospitality Assistant" with three years' experience in the relevant field

Structure of Course:

Module No.	Module name	Outcome	Compulsory/ Optional	Theory (Hrs)	Practical (Hrs)	Total (Hrs) [Multiple of 30]
1	Kitchen Hygiene and Safety in Food Service	Maintain hygiene and cleanliness of kitchen, kitchen equipment's	Compulsory	10	20	30

Module No.	Module name	Outcome	Compulsory/ Optional	Theory (Hrs)	Practical (Hrs)	Total (Hrs) [Multiple of 30]
	Operations THC/3805/OC1	and cooking utensils following safety precautions				
2	Identification of Bakery Raw Materials	Identify and select different raw material used in various bakery items	Compulsory	10	20	30
3	Bakery Operations and Management	Demonstrate various operations involved in bakery production	Compulsory	10	20	30
4	Yeast doughing in pastries	Execute Yeast doughing practices for making pastries	Compulsory	10	20	30
5	Cake Making Method	Demonstrate the process involved in cake making	Compulsory	20	40	60
6	Cookies and biscuits making	Prepare various cookies, biscuits, chocolates & Sugar by maintaining proper hygiene	Compulsory	30	90	120
7	OJT	Work in real job situation with special emphasis on basic safety and hazards in this domain (OJT).	Compulsory	--	60	60
8	Employability Skill	As per guided curriculum	Compulsory	60	--	60
TOTAL:				150	270	420

SYLLABUS:**Module 1: Kitchen Hygiene and Safety in Food Service Operations**

Outcome: Maintain hygiene and cleanliness of kitchen, kitchen equipment's and cooking utensils following safety precautions

Theory Content:

- Classifications, principles, equipment required, methods of cooking-boiling, roasting, poaching, braising, grilling, baking, roasting, broiling, stewing, sauteing, blanching steaming, micro-waving etc.
- Different types of the kitchen equipment, different types of special equipment, heat generating, refrigeration, kitchen machinery, storage tables, hand tools, weighing and measuring, pot wash, diagrams, uses, maintenance, criteria for selection.

Practical Content:

- Proper usage of a kitchen knife and hand tools.
- Understanding the usage of small equipment.
- Familiarization, identification of commonly used raw material.
- Basic hygiene practices to be observed in the kitchen.
- First aid for cuts & burns.
- Safety practices to be observed in the kitchen
- Demonstration of fire fighting for kitchen fires

Module No 2: Identification of Bakery Raw Materials

Outcome: Identify and select different raw material used in various bakery items

Theory Content:

- **Wheat & Flour**
 - Explore Various types of flours available in the market
 - Find the pH value and water absorption capacity of different flours.
 - Examine Gluten contents of flour
- **Essential Raw Materials for Bread Making**
 - Role of flour, water, yeast, Salt, sugar, milk and fats in bread production
 - Analyze the factors influencing yeast fermentation and dough development.
 - Recognize the effect of over and under fermentation and under proofing of dough and other fermented goods
- **Bread improvement techniques**
 - Explore the purpose and application of bread improvers in enhancing the physical qualities of bread.
 - Optimize bread quality through the use of improvers.

Practical Content:

- Identify various raw material used in bakery product
- Conduct tests to observe the pH value and water absorption of different flour types.
- Demonstrate different fermentation conditions to observe yeast behavior
- Practice on the application of bread improvers to enhance bread quality.

Tools & Equipment needed: Weighing scales, measuring cups, working table, refrigerators, cutting tools, storage space and containers.

Module No 3: Bakery Operations and Management

Outcome: Demonstrate various operations involved in bakery production

Theory Content:

- **Bakery Layout**
 - The require approvals for setting up a bakery
 - Government procedures and bakery law
 - Detail layout of a bakery
 - Selection criteria of site
 - Selection criteria of equipment
 - Lighting requirement
- **Staff Hierarchy**
 - Organization chart of a bakery

- Duties and responsibilities of staffs
- Report customer complaints or compliments, if any
- **Raw Material Handling and Storage**
 - Receive and check goods against invoice for quality and quantity
 - Assist with stock rotation to check and use the ingredients before their use-by date
 - Label all ingredients and prepared items correctly
 - Ensure all unused ingredients and prepared items are stored at the correct location and in controlled environment in compliance with health & safety regulations
 - Organize the workplace to maintain standards of hygiene and cleanliness as per the health and safety guidelines in the food preparation and service areas at all times
 - Inform chef/manager about the inventory status and help in re-ordering of supplies for pastry/bakery products
 - Assist the chef/manager to plan menus, rotations, and orders, if required
 - Contribute to organizational cost savings through accurate measurements, proper storage, stock rotation (following the rule 'first in, first out'), and timely service

Practical Content:

- Demonstrate basic raw material handling process.
- Role-play organizational chart scenarios.
- Label raw materials in a controlled environment.
- Practice cleanliness as per the industrial standards
- Practice on basic Sponge making & mixing methods
- Collaborate on menu planning and inventory management simulations

Tools & Equipment needed:

Different types of knives, Chopping board, Cooking equipment – small /big, Dough kneader, Pallet Knife, Turn table

Module No 4: Yeast doughing in pastries

Outcome: Execute Yeast doughing practices for making pastries

Theory Content:

- **Bread making methods:**
 - Straight dough method
 - Delayed salt method
 - No time dough method
 - Sponge and dough method
- **Oven & Baking:**
 - Familiarizing with different oven types and their functionalities
 - Baking temperatures for bread,
 - Confectionery goods.
- **Characteristics of good bread**
 - External characteristics such as volume and symmetry of shape.
 - Internal characteristics – Evaluate colour, texture, aroma, clarity and elasticity
 - Identify Bread faults and their remedies

Practical Content:

- Practice on making Crusty white bread, Tomato and rosemary focaccia, Hard rolls, Ciabatta.
- Demonstrate the making process of whole meal Harvest bread, Bagels, Brioche.
- Practice on making Sweet dough, Soft Dinner rolls.

Tools & Equipment needed:

Weighing Scale, Offset Spatula, Scarper/ Smoother, Rolling Pin, French Rolling Pin, Whisk(Balloon), measuring jug, Saucepans, Loaf pan, Moulds, Planetary Mixer, Combi Oven, Cooking ranges

Module No 5: Cake Making Method

Outcome: Demonstrate the process involved in cake making

Theory Content:

- Recognize various ingredients used in cake making such as flour, sugar, shortening (fats and oils), moistening agents, and leavening agents etc
- Explore different Cake making Methods such as the Sugar Batter method, Flour Batter method, Genoise method, and Blending and Rubbing method
- Familiarize with Basic pastries
- Elaborate on Pastry making Principles and derivatives
- Evaluate the Characteristics of cake both external and internal considering factors such as appearance, texture, and flavor
- Identify common Cake faults and effective remedies to rectify issues
- Familiarize with various types of icing

Practical Content:

- Practice on making Victoria Sponge Cake, Genoise sponge cake, Pound cake, Muffins
- Demonstrate the making process of Cup Cakes, Brownie, Lamington cake, Christmas cakes
- Practice on making Birthday cake decoration, Ginger bread, banana loaf, carrot cake.

Tools & Equipment needed:

Weighing Scale, Offset Spatula, Scarper/ Smoother, Rolling Pin, French Rolling Pin, Whisk (Balloon), measuring jug, Saucepans, Loaf pan, Moulds, Planetary Mixer, Combi Oven, Cooking ranges

Module No 6: Cookies and biscuits making

Outcome: Prepare various cookies, biscuits, chocolates & Sugar by maintaining proper hygiene

Theory Content:

- Elaborate the process of preparing Cookies and biscuits
- Explore different recipes for cookies, such as chocolate chip and oatmeal.
- Recipes of biscuits
- Differentiation between Cookies and biscuits
- Factors affecting the quality of cookies and biscuits
- Identify different forms in which cocoa and chocolate are available
- Elaborate the Process of chocolate tempering
- Methods for creating chocolate designs, garnishes, and presenting desserts
- Identify the different stages of cooking sugar
- Explore the process of caramelizing sugar for use in desserts.

Practical Content:

- Practice on making Chocolate chip cookies, Classic oatmeal cookies, chocolate chip and cinnamon cookies, Banana and raisin cookies.
- Demonstrate the making process of melting moments, Naan khatai, Golden goodies, Frosted orange biscuits, Spiced rum biscuits, Caramelization of sugar, Sugar garnishes.
- Use caramelized Sugar for dessert and presentation

Tools & Equipment needed:

Weighing Scale, Offset Spatula, Scarper/ Smoother, Rolling Pin, French Rolling Pin, Whisk (Balloon), measuring jug, Saucepans, Loaf pan, Moulds, Planetary Mixer, Combi Oven, Cooking ranges, Sugar thermometer, silicon mat, and Heat resistant gloves.

Module No 7: OJT

Outcome: Work in real job situation with special emphasis on basic safety and hazards in this domain

Practical Content:

Assessor will check report prepared for this component of Practical training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain. (The trainee is expected to undertake work in actual workplace under any supervisor / contractor for **60 Hours**.)

Module No 8: Employability Skills (60 Hrs)**Key Learning Outcomes****Introduction to Employability Skills**

Duration: 1.5 Hours

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

Constitutional values - Citizenship

Duration: 1.5 Hours

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

Becoming a Professional in the 21st Century

Duration: 2.5 Hours

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

Basic English Skills

Duration: 10 Hours

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

Career Development & Goal Setting

Duration: 2 Hours

11. Create a career development plan with well-defined short- and long-term goals

Communication Skills

Duration: 5 Hours

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

Diversity & Inclusion

Duration: 2.5 Hours

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

Financial and Legal Literacy

Duration: 5 Hours

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids

Essential Digital Skills

Duration: 10 Hours

21. Describe the role of digital technology in today's life
22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
24. Create sample word documents, excel sheets and presentations using basic features
25. utilize virtual collaboration tools to work effectively

Entrepreneurship

Duration: 7 Hours

26. Explain the types of entrepreneurship and enterprises
27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
29. Create a sample business plan, for the selected business opportunity

Customer Service

Duration: 5 Hours

30. Describe the significance of analyzing different types and needs of customers
31. Explain the significance of identifying customer needs and responding to them in a professional manner.
32. Discuss the significance of maintaining hygiene and dressing appropriately

Getting ready for apprenticeship & Jobs

Duration: 8 Hours

33. Create a professional Curriculum Vitae (CV)
34. Use various offline and online job search sources such as employment exchanges,

- recruitment agencies, and job portals respectively
35. Discuss the significance of maintaining hygiene and confidence during an interview
 36. Perform a mock interview
 37. List the steps for searching and registering for apprenticeship opportunities

Learning Outcome – Assessment Criteria

Module No.	Outcome	Assessment Criteria
1	Maintain hygiene and cleanliness of kitchen, kitchen equipment's and cooking utensils following safety precautions	<p>After completion of this module students will be able to:</p> <ol style="list-style-type: none"> 1.1 Explain different methods of cooking like boiling, broiling and braising 1.2 Identify and select different types of kitchen equipment like pans. OTG, Boilers, Salamander 1.3 Demonstrate Proper usage of a kitchen knife and hand tools. 1.4 Exhibit first aid practices
2	Identify and select different raw material used in various bakery items	<p>After completion of this module students will be able to:</p> <ol style="list-style-type: none"> 2.1 Identify raw materials accurately during practical sessions. 2.2 Analyze pH and water absorption of flour types. 2.3 Observe and interpret yeast behavior effectively. 2.4 Apply bread improvers to enhance bread quality. 2.5 Illustrate yeast fermentation process 2.6 Address the issues like over- fermentation and under proofing.
3	Demonstrate various operations involved in bakery production	<p>After completion of this module students will be able to:</p> <ol style="list-style-type: none"> 3.1 Identify bakery layout requirements for approval and compliance. 3.2 Execute staff hierarchy duties for efficient operations. 3.3 Set up and close kitchen 3.4 Monitor stock movement 3.5 Execute basic sponge making and mixing techniques 3.6 Participate in menu planning and inventory management 3.7 Maintain customer-centric service orientation 3.8 Communicate with customer and colleagues
4	Execute Yeast doughing practices for making pastries	<p>After completion of this module students will be able to:</p> <ol style="list-style-type: none"> 4.1 Arrange wood kindling, paper, and charcoal, as required 4.2 Illustrate bread-making methods with precision and clarity. 4.3 Make dough as per requirements

Module No.	Outcome	Assessment Criteria
		4.4 Make Indian bread from the dough as per the size requirements 4.5 Identify various types of oven 4.6 Evaluate bread characteristics for quality assurance. 4.7 Create marinades and rubs 4.8 Identify and remedy bread faults efficiently. 4.9 Maintain cleanliness and sanitation of the tandoor oven before start and end of day's business
5	Demonstrate the process involved in cake making	After completion of this module students will be able to: 5.1 Recognize flour, sugar, fats, leavening agents. 5.2 Explore various cake making methods 5.3 Assess appearance, texture, flavor both internally and externally of cake 5.4 Identify and resolve common faults and their remedies. 5.4 Explain various icing techniques
6	Prepare various cookies, biscuits, chocolates & Sugar by maintaining proper hygiene	After completion of this module students will be able to: 6.1 Illustrate various cookies and biscuits recipes 6.2 Differentiate between cookies and biscuits accurately 6.3 Explain the factors influencing cookie and biscuit quality 6.4 Explain chocolate tempering process 6.5 Utilize caramelized sugar for dessert garnishes
7	OJT	Assessor will check report prepared for this component of Practical training of the course and assess whether competency has been developed to work in the real job situation with special emphasis on basic safety and hazards in this domain. (The trainee is expected to undertake work in actual workplace under any supervisor / contractor for 60 Hours.)
8	Employability Skill	As per guided curriculum

List of Tools, Equipment & materials needed for 30 Trainees (Practical)

SL No	Tool/ Equipment Name	Minimum number of Equipment required (per batch of 30 trainees)
1	Silipat For Sponge	30
2	10" Cake Ring	8
3	7" Cake Ring Steel	8
4	Fondat Tolls	8
5	Fondant Mat	8
6	Heat Gun	1
7	Spray Gun	1
8	Entremets Mould	20
9	Chocolate Mould	10
10	Silipat	10
11	Kitchen Aids	10
12	First Aid Kit	2
13	Temperature Probes	2
14	Chocolate Tempering Machine	1
15	Moulds	30
16	Cutters	10
17	Sieve	10
18	Measuring Jugs	10
19	Special Tin	30
20	Flan Ring	30
21	Tart Tin	30
22	Dough Scraper Plastic	30
23	Dough Scraper Steel	30
24	Bowls(Large)	60
25	Bowls(Medium)	60
26	Bowls(Small)	60
27	Duster Or Kitchen Towels	30
28	Knives	30
29	Bread Knife	10
30	Pizza Cutter	10
31	Pie Dish	30
32	Rolling Pin Small	10
33	Plastic Crates	6
34	Baking Tray	10
35	Caramel Custard Mould	30
36	Steel Strainer	4
37	Collander	10
38	Chopping Board	10
39	Bread Moulds (800Gms)	30
40	Pie Mould (Detachable Base)	30
41	Tartlet Mould	30
42	Muffins Mould (Aluminium)	30
43	Platters	40
44	Crockery	40
45	Thermometers	2
46	Blow Torch	1
47	Heating Gun	1
48	Cooling /Glazing Racks	5

49	Weighing Scales	10
50	Ingredient Boxes	20
51	Hand Gloves	100
52	Wooden Laddle	30
53	Spoons	30
54	Tongs	20
55	Ss Mousse Setter/Frames	10
56	Chocolate Moulds	10
57	Silicon Moulds	10
58	Cake Turn Table	30
59	Whisk	30
60	Piping Bags (With 5 Nozzles)	30
61	Pallet Knife	30
62	Steel Saute Pan	10
63	Steel Saucepan (2/1 Ltr Approx.)	6
64	Steel Stock Pot (4 Ltr Approx.)	10
65	Exhaust	1
66	Cease Fire/Fire Extinguisher	4
67	Lpg Cylinders (Gas Bank) Or Induction Vestibules	6
68	Combi Oven	3
69	Spiral Mixer	1
70	Refrigerator	2
71	Flour Bins	2
72	Dust Bins	10
73	Tabletop Mixers	4
74	Hand Blenders	10
75	Mixer / Grinder	2
76	Dry Storage Cabinet	4
77	Ss Kitchen Rack	5
78	Dough Kneader	2
79	Blast Freezer	1
80	Dough Sheeter	1
81	Proofer	1
82	Freezers	2
83	Sink With Attached Taps	4
84	Convection Deck Oven (Gas /Electrical)	3
85	Electric Induction	10

Marks Distribution

Outcome	Outcome Code	Total Th marks	Total Pr marks	Total OJT marks
Maintain hygiene and cleanliness of kitchen, kitchen equipment's and cooking utensils following safety precautions	THC/3811/OC1	20	90	0
Identify and select different raw material used in various bakery items	THC/3811/OC2	20	90	0
Demonstrate various operations involved in bakery production	THC/3811/OC3	20	90	0
Execute Yeast doughing practices for making pastries	THC/3811/OC4	20	90	0
Demonstrate the process involved in cake making	THC/3811/OC5	30	110	0
Prepare various cookies, biscuits, chocolates & Sugar by maintaining proper hygiene	THC/3811/OC6	40	180	0
Work in real job situation with special emphasis on basic safety and hazards in this domain (OJT).	THC/3811/OC7	0	0	150
Employability Skills - 60 Hrs	DGT/VSQ/N0102	50	0	0