

ALAGAPPA UNIVERSITY

(Accredited with A+ Grade by NAAC (CGPA: 3.64) in the Third Cycle), Graded
as Category-I University and granted autonomy by MHRD-UGC)

DIRECTORATE OF COLLABORATIVE PROGRAMMES



Craft Certificate Course in Bakery and Confectionary

Regulations and Syllabus

[For those who join the Course in July 2023 and after]

CHOICE BASED CREDIT SYSTEM

GENERAL INSTRUCTIONS AND REGULATIONS

Craft Certificate course in Bakery and Confectionery conducted by Alagappa University, Karaikudi, Tamil Nadu through its Collaborative Institution _____ at _____.

Applicable to all the candidates admitted from the academic year **2023** onwards.

1. Eligibility:

A pass in the SSLC Examination conducted by the Government of Tamil Nadu, or an examination accepted as equivalent thereto by the Syndicate for admission to **Craft Certificate course in Bakery and Confectionery**.

2. Admission:

Admission is based on the marks in the qualifying examination.

3. Duration of the course:

The course shall extend over a period of one year under semester pattern

4. Standard of Passing and Award of Division:

- a. Students shall have a minimum of 40% of total marks of the University examinations in each subject. The overall passing minimum is 40% both in aggregate of Continuous Internal Assessment and external in each subject.
- b. The minimum marks for passing in each theory / Lab course shall be 40% of the marks prescribed for the paper / lab.
- c. A candidate who secures 40% or more marks but less than 50% of the aggregate marks, shall be awarded **THIRD CLASS**.
- d. A candidate who secures 50% or more marks but less than 60% of the aggregate marks, shall be awarded **SECOND CLASS**.
- e. A candidate, who secures 60% or more of the aggregate marks, shall be awarded **FIRST CLASS**.
- f. The Practical / Project shall be assessed by the two examiners, by an internal examiner and an external examiner.

5. Continuous internal Assessment:

- a. Continuous Internal Assessment for each paper shall be by means of Written Tests, Assignments, Class tests and Seminars
- b. **25 marks** allotted for the Continuous Internal assessment is distributed for Written Test, Assignment, Class test and Seminars.
- c. Two Internal Tests of 2 hours duration may be conducted during the semester for each course / subject and the best marks may be considered and one Model Examination will be conducted at the end of the semester prior to University examination. Students may be asked to submit at least five assignments in each subject. They should also participate in Seminars conducted for each subject and marks allocated accordingly.
- d. Conduct of the Continuous internal assessment shall be the responsibility of the concerned faculty.
- e. The Continuous internal assessment marks are to be submitted to the University at the end of every year.

- f. The valued answer papers/assignments should be given to the students after the valuation is over and they should be asked to check up and satisfy themselves about the marks they have scored.
- g. All mark lists and other records connected with the continuous Internal Assessments should be in the safe custody of the institute for at least one year after the assessment.

6. Attendance:

Students must have earned 75% of attendance in each course for appearing for the examination.

Students who have earned 74% to 70% of attendance to be applied for condonation in the prescribed form with the prescribed fee.

Students who have earned 69% to 60% of attendance to be applied for condonation in the prescribed form with the prescribed fee along with the medical certificate.

Students who have below 60% of attendance are not eligible to appear for the examination. They shall re-do the semester(s) after completion of the programme.

7. Examination:

Candidate must complete course duration to appear for the university examination. Examination will be conducted with concurrence of Controller of Examinations as per the Alagappa University regulations. **University may send the representatives as the observer during examinations.** University Examination will be held at the end of the each semester for duration of 3 hours for each subject. Certificate will be issued as per the AU regulations. Hall ticket will be issued to the candidates upon submission of the list of enrolled students along with the prescribed course fee.

8. Miscellaneous

- a. Each student possesses the prescribed text books for the subject and the workshop tools as required for theory and practical classes.
- b. Each student is issued with an identity card by the University to identify his / her admission to the course
- c. Students are provided library and internet facilities for development of their studies.
- d. Students are to maintain the record of practicals conducted in the respective laboratory in a separate Practical Record Book and the same will have to be presented for review by the University examiner.
- e. Students who successfully complete the course within the stipulated period will be awarded the degree by the University.

9. Fee structure

Course fee shall be as prescribed by the University and 50% of the course fee should be disbursed to University. Special fees and other fees shall be as prescribed by the Institution and the fees structure must be intimated to the University. Course fees should be only by Demand draft / NEFT and AU has right to revise the fees accordingly.

10. Other Regulations:

Besides the above, the common regulation of the University shall also be applicable to this programme.

CRAFT CERTIFICATE COURSE IN BAKERY AND CONFECTIONARY

Semester	Subject Code	Subject Name	Credits	Int. Marks	Ext. Marks	Total
I	20911	Bakery & Confectionery	2	25	75	100
	20912	Bakery Practical	2	25	75	100
	20913	Confectionery Practical	2	25	75	100
	20914	Bakery Hygiene And Work Safety	2	25	75	100
		Total	8	100	300	400
II	20921	Industrial Exposure Training	8	50	150	200
		Total	16	150	450	600

SEMESTER I

Subject Code	Subject Name	Credits
20911	BAKERY & CONFECTIONARY	2
Unit I	<p>Wheat, structure of wheat grain, types of wheat. Milling of wheat and role of bran and germ.</p> <p>Different types of flour. Composition of flour, gluten.</p> <p>Water absorption power of flour. Ph value of flour, Raw material required for bread making.</p> <p>Flour, yeast, sugar, salt, water, milk, milk products, shortening and egg.</p> <p>Different methods of bread making, Straight dough method, delayed salt method. No time dough method, Sponge and dough method. Different process in bread making.</p>	
Unit II	<p>Characteristics of good bread.</p> <p>External characteristics (volume, symmetry shape, bloom crust colour, evenness of bake, oven break, cleanliness)</p> <p>Internal characteristics (colour, structure, texture and sheen, flavour and aroma, crumb clarity and elasticity, moistness)</p> <p>Bread faults and remedies. An elementary knowledge of Bakers yeast. Role of yeast in fermentation and conditioning in dough. Effect of under and over fermentation. Effect of under and over proofing.</p> <p>Bread diseases-“Rope” and “Mold” Causes and prevention, bread improver. Improving physical quality. Packing, costing and marketing.</p>	
Unit III	<p>Cake making ingredients-Flour, sugar and egg, Fats and oils. Moistening agent. Leavening agent. Cake making methods</p> <p>Sugar-batter method, Flour-batter method, All in process, Blending method, Boiled method, Sugar water method.</p> <p>Characteristics of cake Internal-Volume, Colour of crust, Symmetry of form, Crust character, Bloom. External -Grain, Crumb colour, Aroma, Taste, Texture, shelf life Balancing of cake formula and oven temperature. Cake faults and remedies.</p>	
Unit IV	<p>Different types of icing and its uses in confectionery. Flavour and food colour</p> <p>Setting agent- Gelatine, pectin and agar-agar. Cocoa products and types of chocolate.</p> <p>Hot and cold desserts-souffle, mousse and pudding.</p>	
Unit V	<p>Pastry-Types of pastries, principles involved in pastry making.</p> <p>Pastry faults and remedies.</p> <p>Preparation of cookies and biscuits</p> <p>Factors affecting the quality of cookies and biscuits</p> <p>Cookies faults and causes.</p>	

Reference Book:

WAYNE GISSLEN – Professional Baking, 5th Edition, John Wiley USA. HANEMAN L.J. Bakery: Flour Confectionery HEINMAN

MERMAID BOOKS The Book of Ingredients DOWELL PHILIP JOHN WILEY

Understanding Baking AMENDOLA JOSEPH

NEW AGE INTERNATIONAL, A Professional Text to Bakery and Confectionery,

KINGSLEE JOHN VIRTUE AND COMPANY LTD., The New International Confectioner:

WILFRED J. FRANCE CHARRETTE JACQUES, Great Cakes and Pastries, TEUBNER CHRISTIAN

JOSEPH AMENDOLA, Baker’s Manual, 5th Edition, NICOLE REES

Subject Code	Subject Name	Credits
20912	BAKERY PRACTICAL	2
<ol style="list-style-type: none"> 1. Bread rolls- Soft roll and Hard roll 2. Buns- Sweet Bun, Fruit bun, Hot cross bun, Burger bun, Pav bun 3. Bread- Salt bread, Garlic bread, French bread, Brown bread, Fancy bread, Milk bread, Fruit bread, Rye bread, Pumpernickel bread, Pizza, Foccacia, Bread stick, Varkey, Rusk, Oat meal loaf, Pullman loaf. 4. Breakfast rolls- Croissant, Danish pastry, Dough nuts, Brioche, scones, Muffins, Bagels. 		

Subject Code	Subject Name	Credits
20913	CONFECTIONARY PRACTICAL	2
<ol style="list-style-type: none"> 1. Cakes- Fatless Sponge, Plain sponge, Genoise sponge, Gel sponge, Cup Cakes, Fruit Cake, Plum cake, Flourless cake. 2. Cookies Biscuits- Salt cookies, Vanilla cookies, Melting moments, Nan-Khatai, Coconut cookies, Marble cookies, Chocolate cookies, Macaroons, Butter Cookies. 3. Pastries- Short crust pastry (Tart, Pie and Flans) 4. Puff Pastry (Patties, Cheese straws, mille-feuille, Khara Biscuits, cream horns)Choux Pastry (Profiterole, Éclair, Swanpuff) Flaky Pastry (Strudels and Baklava) 5. Icing- Butter icing, Royal icing, Marzipan, Gum paste, Ganache, Meringue, Almond Paste, glace icing, whipping cream (non dairy) 6. Frozen desserts- Ice cream varieties, Parfait varieties. 7. Cake Decoration- Birthday, Wedding, anniversary, Ornamental works, Christmascake. 8. Desserts- Baba-au Rum, Meringue, Souffle, Mousse Bavaois, Tiramisu, Warm 9. Chocolate cake, Brownie chocolate, Mould chocolate, Chocolate Decorations. 		

Subject Code	Subject Name	Credits
20914	BAKERY HYGIENE AND WORK SAFETY	2
Unit I	QUALITY BAKERY GOODS <ul style="list-style-type: none"> • Quality control for raw materials, dough and finished products. Storage methods for raw materials and finished products to avoid Bread diseases. 	
Unit II	FOOD SAFETY METHODS <ul style="list-style-type: none"> • Definition of food poisoning. • Food Infection and food Intoxication. • Food poisoning bacteria and their prevention. • Food safety methods. (HACCP, COSHH, Danger zone temp, cross contamination, colourcoding). General rules of sanitary food handling 	
Unit III	PREMISES HYGIENE <ul style="list-style-type: none"> • Good structural details for a hygienic bakery. (Floors, Walls, Ceilings, Drainage, plumbing, lighting and ventilation) • Ill effects of Garbage and Eco-friendly methods of Garbage disposal. • Pest and diseases, pest control techniques. Equipment Hygiene • Definition of Disinfection, Sterilization and sanitation • Cleaning methods for electrical, large and small equipment. Two and Three sink dishwashing methods. 	
Unit IV	PERSONAL SAFETY <ul style="list-style-type: none"> • Good grooming standards and care of body parts for personal hygiene. • Importance of oral Hygiene. Comfortable and protective clothing. • Causes of Accidents and their preventive methods. Basic first aid for minor Injuries (Burns, Scalds, cuts and wounds, Insect bites) 	
Unit V	FOOD SAFETY AND FIRE SAFETY <ul style="list-style-type: none"> • Food safety laws. (Including Adulteration) • Fire safety. General safety rules to avoid accidents. 	
Reference Book: Theory of catering – Victor cessarani Preventive medicine – Park and park		

SEMESTER II

SUBJECT CODE	SUBJECT NAME	CREDITS
20921	INDUSTRIAL EXPOSURE TRAINING	8

Note:

- Internship for 8 weeks at a stretch is compulsory.
- After the internship, practical examination for internship will be conducted during the IISemester examinations.

Mark Allocation:

Internal Marks:

Log Book	35	
Attendance	15	50

External Marks:

Training Report	60	
Presentation	60	
Viva	30	150

Total Marks

200

Certificate Programme

Passing minimum

- A candidate shall be declared to have passed in each course if he/she secures not less than 40% marks in the End Semester Examinations and 40% marks in the Internal Assessment and not less than 40% in the aggregate, taking Continuous assessment and End Semester Examinations marks together.
- The passing minimum for CIA shall be 40% out of 25 marks (i.e.10 marks) in Theory/ Practical Examinations.
- The passing minimum for University Examinations shall be 40% out of 75 marks (i.e. 30 marks) for Theory /Practical papers.
- The candidates not obtain 40% in the Internal Assessment are permitted to improve their Internal Assessment marks in the subsequent semesters (2 chances will be given) by writing the CIA tests or by submitting assignments.
- Candidates, who have secured the pass marks in the End-Semester Examination and in the CIA but failed to secure the aggregate minimum pass mark (E.S.E + C I.A), are permitted to improve their Internal Assessment mark in the following semester and/or in University examinations.
- A candidate shall be declared to have passed in the Dissertation/Project report/Internship report if he/she gets not less than 40% marks in the Internal Assessment and End Semester Examinations and not less than 40% in the aggregate, taking Continuous assessment and End Semester Examinations marks together.
- A candidate who gets less than 40% in the Dissertation / Internship/ Project Report must resubmit the thesis. Such candidates need to take again the Viva-Voce on the resubmitted report/thesis.