

**Choice Based Credit System**

**140 Credit (3-Year UG Hons.)**

**MAKAUT Framework**

**w.e.f**

**2020-21**

**B.Sc in Culinary Science**

**CBCS – MAKAUT UG degree (Hons) 140 Credit FRAMEWORK**

<b>Subject Type</b>	<b>Semester I</b>	<b>Semester II</b>	<b>Semester III</b>	<b>Semester IV</b>	<b>Semester V</b>	<b>Semester VI</b>
<b>CC</b>	C1, C2	C3, C4	C5,C6,C7	C8,C9,C10	C11,C12	C13,C14
<b>DSE</b>					DSE1, DSE2	DSE3, DSE4
<b>GE</b>	GE1	GE2	GE3	GE4		
<b>AECC</b>	AECC 1	AECC 2				
<b>SEC</b>			SEC 1	SEC 2		
	4 (20)	5 (20)	4 (26)	5(26)	4 (24)	4 (24)

## **B.Sc in Culinary Science**

### **Program Outcomes** or Graduate Attributes of **B.Sc. Culinary Science** Program under **MAKAUT**

*Graduates will be able to demonstrate the following program outcomes:*

**PO1- Knowledge and Quantitative Skills:** On completion of the program, students will be able to demonstrate the literacy and quantitative skills necessary to understand and interpret information and communicate according to the context of their own discipline or profession as well as interdisciplinary skills relevant to culinary science.

**PO2- Design, Development and Research:** Students will be able to design, evaluate, analyse and interpret information in order to solve problems and make business decisions. They will be able to use information and research to develop and guide their own culinary knowledge, learning, and practice in entrepreneurship employment and further higher education.

**PO3- Ethics:** Exhibit ethical decision making and reasoning to identify creative solutions to ethical problems within their discipline or profession and the consequent responsibilities relevant to the professional culinary service.

**PO4- Communication:** Able to apply VARK (Visual, Auditory, Reading/Writing, Kinesthesia) for professional communication and research and also demonstrate digital citizenship in online learning, professional and social communities, as a member or leader in diverse teams and in multidisciplinary settings.

**PO5- Professional Practice:** Understand, create, select and apply techniques, resources and modern culinary tools and processes for problem solving involving societal health, safety, legal and cultural issues and exhibit ethical decision making and reasoning.

**PO6- Lifelong Learning:** Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the food preparation and presentation of social, environmental and technological change.

### Program Outcomes (PO) Mapping

PO #	Program Outcome	Mapped courses
1	<b>Knowledge and Quantitative Skills</b>	BSCA101,BSCA102,BSCA201,BSCA202,BSCA301,BSCA302,BSCA303,BSCA354,BSCA401, BSCA402,BSCA403,BSCA501,BSCA502,BSCA543,BSCA601,BSCA602,BSCA643,BSCA644
2	<b>Design, Development&amp; Research</b>	BSCA164,BSCA265,BSCA354,BSCA401, BSCA402,BSCA403,BSCA501,BSCA543,BSCA544,BSCA601,BSCA643,BSCA644
3	<b>Ethics</b>	BSCA101,BSCA202,BSCA265,BSCA354,BSCA403, BSCA501,BSCA544,BSCA601,
4	<b>Communication</b>	BSCA164,BSCA354,BSCA455,BSCA543A,BSCA544, BSCA601,BSCA602,BSCA643,BSCA644
5	<b>Professional Practice</b>	BSCA164,BSCA265,BSCA354,BSCA455, BSCA501,BSCA544,BSCA601,BSCA602,BSCA643, BSCA644
6	<b>Life-Long Learning</b>	BSCA102,BSCA201,BSCA202,BSCA301,BSCA265, BSCA302,BSCA303,BSCA354,BSCA401,BSCA402,BSCA403, BSCA501,BSCA502,BSCA543,BSCA544,BSCA643, BSCA644

\*GE Courses are not in the above mapped list. Based on the choice of the learner that would necessarily be part of PO6 and the relevant PO's

## B.Sc.in Culinary Science Curriculum Structure

### 1st Semester

Subject Type	Course Name	Credit Points	Credit Distribution			Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial	Offline	Online	Blended	
CC 1	<b>Basics of Food &amp; Beverage Production</b>	6	5	0	1	✓			As per MAKAUT notification
<b>BSCA 101</b>									
CC 2	<b>Food Production Operation - I</b>	6	5	0	1	✓			
<b>BSCA 102</b>									
GE 1	<b>Students have to select from the GE Basket</b>	6	6					✓	
AECC 1	<b>English Communication</b>	2	2	0	0	✓			
<b>BSCA 164</b>									
<b>Semester Credit</b>		<b>20</b>							

## 2<sup>nd</sup> Semester

Subject Type	Course Name	Credit Points	Credit Distribution			Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial	Offline	Online	Blended	
CC 3	Indian Regional Cuisine	6	5	0	1	✓			As per MAKAUT notification
<b>BSCA 201</b>									
CC4	Food & Beverage Studies	6	5	0	1	✓			
<b>BSCA 202</b>									
GE 2	<b>Students have to select from the GE Basket</b>							✓	
AECC 2	Environmental Science	2	2	0	0	✓			
<b>BSCA 265</b>									
<b>Semester Credit</b>	<b>20</b>								

### 3<sup>rd</sup> Semester

Subject Type	Course Name	Credit Points	Credit Distribution			Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial	Offline	Online	Blended	
CC 5	International Culinary & Baking Skills	6	4	2	0	✓			As per MAKAUT notification
<b>BSCA 301</b>									
CC 6	Indian Regional Cuisine and Quantity Food Production	6	5	0	1	✓			
<b>BSCA 302</b>									
CC 7	Larder, Charcuterie and Intermediate Bakery	6	4	2	0	✓			
<b>BSCA 303</b>									
GE 3	<b>Students have to select from the GE Basket</b>							✓	
SEC 1	Fundamentals of Information Technology (Pr.)	2	2	0	0	✓			
<b>BSCA 354</b>									
<b>Semester Credit</b>	<b>26</b>								

### 4<sup>th</sup> Semester

Subject Type	Course Name	Credit Points	Credit Distribution			Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial	Offline	Online	Blended	
CC 8 <b>BSCA 401</b>	Advanced Food Production	6	5	0	1	✓			As per MAKAUT notification
CC 9 <b>BSCA 402</b>	Contemporary Asian and World cuisine	6	5	0	1	✓			
CC 10 <b>BSCA 403</b>	Principles of Food Legislation & Food Cost Controls	6	5	0	1	✓			
GE 4	<b>Students have to select from the GE Basket</b>							✓	
SEC 2 <b>BSCA 455</b>	Personality Development	2	2	0	0	✓			
<b>Semester credits</b>	26								

### 5<sup>th</sup> Semester

Subject Type	Course Name	Credit Points	Credit Distribution			Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial	Offline	Online	Blended	
CC 11 <b>BSCA 501</b>	Kitchen Facility Planning	6	5	0	1	✓			As per MAKAUT notification
CC12 <b>BSCA502</b>	Advanced Bakery and Confectionary	6	5	0	1	✓			
DSE 1	Elective 1	6	1	0	5			✓	
DSE 2	Elective 2	6	1	0	5			✓	
<b>Semester Credits</b>		24							



### 6<sup>th</sup> Semester

Subject Type	Course Name	Credit Points	Credit Distribution			Mode of Delivery			Proposed Moocs
			Theory	Practical	Tutorial	Offline	Online	Blended	
CC13	Research Work (On Selected Trade based Topics)	6	4	2	0	✓			As per MAKAUT notification
<b>BSCA 601</b>									
CC 14	Course Specific Certification (MOOCs)	6	4	2	0	✓			
<b>BSCA 602</b>									
DSE 3	Capstone Project	6	1	0	5			✓	
DSE 4	Dissertation & Viva Voce	6	1	0	5			✓	
<b>Semester Credits</b>		<b>24</b>							
<b>Program Credit</b>		<b>140</b>							

## Semester 1

### Paper: Basics of Food and Beverage Production

**Code: BSCA 101**

**Course Objective:** The course is designed to provide a preliminary knowledge and skills of culinary arts. Students will be able to understand & develop basics of culinary arts, which will promote them to next level.

Sl	Course Outcome	Mapped modules
1	Remember and Understand the history of various cuisine of the world and their unique factors and skills involved	M1, M2
2	Remember and explain the level of skill, Attitude and Hygiene in the hospitality kitchen	M1 ,M2
3	Outline and illustrate kitchen Hierarchy, Duties and Responsibilities of Kitchen staff	M2, M3
4	Articulate and identify the commodities used in food production, their quality requirement, procurement and storage	M4, M5, M6
5	Categorize & demonstrate of equipment and of cooking methods, and their objectives.	M1 ,M4, M5, M6
6	Application of basic techniques of cooking	M2, M4, M5 ,M6

Module Number	Content	Total Hours	%age of questions	Blooms Level (if applicable)	Remarks (If any)
M 1	<b>Culinary History</b>	8	10	1,2	
M 2	<b>Level of skill, Attitude and Hygiene in the kitchen</b>	10	20	1,2	
M 3	<b>Culinary Brigade</b>	10	25	1,2	
M 4	<b>Commodities</b>	12	20	2,3	
M 5	<b>Equipment's &amp; Methods of cooking</b>	4	15	2,3	
M 6	<b>Preliminary culinary</b>	16	10	2,3	

	<b>techniques</b>				
		<b>60</b>	<b>100</b>		

### Detailed Syllabus

#### Semester 1

**Paper: Basics of Food and Beverage Production (CC1)**

**Code: BSCA-101**

**Contacts Hours / Week: 5L + 1T**

**Credits: 6**

**Module 1 – Culinary History:** Origin of modern cookery, concept of Continental, International and Indian Cuisine, Evolution of French cuisine, Famous Chefs in History, Nouvelle cuisine and cuisine Minceur, Culinary terms. (8 Hours)

**Module 2 – Levels of Skill, Attitude and Hygiene in Kitchen:** Levels of skill in kitchen, Attitude of Kitchen personnel, Kitchen uniform, Food storage, Food borne illness, garbage disposal, sanitization of workplace equipment and personnel in kitchen, hygiene standards for personnel and environment, fundamentals of HACCP. (10 Hours)

**Module 3 –Culinary Brigade:**Kitchen hierarchy, classical brigade, Modern day staffing in various category of hotels, duties and responsibilities of kitchen personnel, co-ordination with other departments. (10 Hours)

**Module 4 – Commodities:** Vegetables, Fruits, Mushrooms, Milk and milk product, herbs, Cereals, Rice, Pulses, Flour, Thickening agents, Eggs, Salt, Sugar, Fats and Oils, Raising agents, fish, meat and poultry. Identification of commodities (12 Hours)

**Module 5 – Equipment and Methods of Cooking:**Equipment identification maintenance and care, Hygiene – Kitchen etiquettes, Practices & knife handling. (4 Hours)

**Module 6 -Preliminary Culinary Techniques:** Basic cutting of vegetables - dices, cubes, shred, mirepoix, Brunnoise, Paysanne, Mignonette, Jardinere, Macedoine, Julienne , Egg cookery, methods of cooking, Blanching of Tomatoes and Capsicum, Preparation of concasse, Boiling (potatoes, Beans, Cauliflower), Frying – (deep frying, shallow frying, sautéing), Braising, Starch cooking (Rice, Pasta, Potatoes). (16 Hours)

#### **Suggested Readings:**

- Cooking Essentials for the New Professional Chef - Food Production Operations: Parvinder S Bali, Oxford University Press
- Larder Chef By M J Leto & W K H Bode Publisher: Butterworth- Heinemann
- Modern Cookery (Vol- I) By Philip E. Thangam, Publisher: Orient Longman
- Practical Cookery By Kinton & Cessarani
- Practical Professional Cookery By Kauffman & Cracknell
- Professional Cooking by Wayne Gislen, Publisher Le Cordon Bleu
- Purchasing Selection and Procurement for the Hospitality Industry By Andrew Hale Feinstein and John M. Stefanelli
- The Professional Chef: Le Rol A. Polsom
- Theory of Catering By Kinton & Cessarani
- Theory of Cookery By K Arora, Publisher: Frank Brothers

**Course: Basic of Food & Beverage Operation (CC 2)****Code: BSCA 102**

**Course Objective:** The course is designed to provide a thorough knowledge and skills of foundation ingredients in culinary arts like stocks, soups and sauces. They will also gain knowledge and skill of foundation bakery products like breads, cookies, biscuits and puddings.

SI	Course Outcome	Mapped modules
1	Understand about stock their classification, uses and storage	M1, M2
2	Understand about various soups, their presence in menu, garnish & service	M1 ,M2
3	Understand & memorise the sauces, techniques of preparations' and usefulness,	M1, M3
4	Understand about the commodities used in bakery and basic bakery products	M4, M5
5	Understand & know the application of process and ingredients used in custards and puddings	M4, M5
6	Understand & know the application of process and ingredients used in cakes and chocolate products	M5 ,M6

Module Number	Content	Total Hours	%age of questions	Blooms Level (if applicable)	Remarks (If any)
M 1	<b>Stock</b>	8	15	1,2	
M 2	<b>Soup</b>	10	20	2,3	
M 3	<b>Sauce</b>	12	20	2,3	
M 4	<b>Fundamental Bakery</b>	12	20	2,3	
M 5	<b>Custard &amp; Pudding</b>	8	10	3,4	
M 6	<b>Basic cakes and Chocolate</b>	10	15	3,4	
		<b>60</b>	<b>100</b>		

**Paper: Food Production Operation I (CC2)**

**Code: BSCA-102**

**Contacts Hours / Week: 5L+ 1T**

**Credits: 6**

**Module 1 – Stocks:** Definition, Classification and types of Stock, basic ingredients used in stock making and their roles, uses of Stock in modern day cookery, Storage of Stocks. (8 hours)

**Module 2 – Soups:** Definition, classification of soups, importance of soups in menu, basic ingredients and thickening agents used in soups, Preparation of soups and garnishes and accompaniments of soup (10 Hours)

**Module 3 –Sauces:**Mother Sauces and derivatives, uses and characteristics and importance of sauces, thickening agents used in sauces, other types of sauces. Preparation of Mother Sauces and derivatives, uses, thickening agents used in sauces, butter and special sauces.(12 Hours)

**Module 4 – Fundamental Bakery:** Role of various basic ingredients in bakery, bakery terms, basic methods of bread making, various types of bread and international breads, quick breads, Demonstration & Preparation of Simple and enriched bread recipes Bread Loaf (White and Brown), Bread Rolls (Various shapes), French Bread, Brioche, cookies and biscuits, muffins and breakfast rolls, Demonstration and Preparation of simple cookies like Nan Khatai, Golden Goodies, Melting moments, Chocolate chip Cookies.(12 Hours)

**Module 5 – Custards and Puddings:**Basic custard mixtures, Crème Anglaise / Pastry Cream, Various types of custards and puddings, Caramel Custard, Bread and Butter Pudding, Soufflé – Lemon / Pineapple, Mousse (Chocolate Coffee), Bavaroise, Diplomat Pudding, Albert Pudding.(8 Hours)

**Module 6 –Basic cakes and Chocolate:** Basic Cake mixtures, methods of making sponge, sponge and Icing Assembly, Demonstration & Preparation of Simple and enriched Cakes, Sponge, Genoese, Fatless, Swiss roll, Fruit Cake, Rich Cakes, Dundee, Madeira, Chocolate, Handling Chocolate Tempering, the function of Chocolate in Bakery and Confectionary. (10 Hours)

**Suggested Readings:**

- Cooking Essentials for the New Professional Chef - Food Production Operations: Parvinder S Bali, Oxford University Press
- Professional Baking, Wayne Glasslen
- Modern Cookery (Vol- I) By Philip E. Thangam, Publisher: Orient Longman
- Practical Cookery By Kinton&Cessarani
- Practical Professional Cookery By Kauffman &Cracknell
- Professional Cooking by Wayne Gislen, Publisher Le Cordon Bleu
- Purchasing Selection and Procurement for the Hospitality Industry By Andrew Hale Feinstein and John M. Stefanelli
- The Professional Chef: Le Rol A. Polsom
- Theory of Catering By Kinton&Cessarani
- Theory of Cookery By K Arora, Publisher: Frank Brothers

**Course: English Communication****Code : BSCA 164**

**Course Objective:** The course is designed to develop the student's communicative competence in English by giving adequate exposure in the four communication skills - LSRW - listening, speaking, reading and writing and the related sub-skills, thereby, enabling the student to apply the acquired communicative proficiency in social and professional contexts.

Sl	Course Outcome	Mapped modules
1	Students will be able to Remember & Understand the basic concepts of the usage of English grammar & vocabulary in communication.	M1
2	Students will be able to Comprehend facts and ideas by organizing, comparing, translating, interpreting, giving descriptions, and stating the main ideas given in written texts.	M1,M2
3	Students will be able to Synthesise and Apply acquired linguistic knowledge in producing various types of written texts	M1, M3
4	Students will be able to Comprehend facts and ideas from aural inputs and Synthesise and Apply acquired linguistic knowledge in giving spoken response	M1, M4

Module Number	Content	Total Hours	%age of questions	Blooms Level (if applicable)	Remarks (If any)
M 1	Functional Grammar & Vocabulary	2	10	1,2	
M 2	Reading Skills	2	20	1,2	
M 3	Writing Skills	8	40	2,3,4	
M 4	Listening & Speaking Skills	8	30	2,3,4	
		<b>20</b>	<b>100</b>		

**Detailed**  
**Syllabus**

**Paper: English Communication**

**Code: BSCA 164**

**Contact Hours / Week: 2L**

**Credits: 2**

**Module 1 : Functional Grammar & Vocabulary :** Tense: Formation and application; Affirmative / Negative / Interrogative formation; Modals and their usage; Conditional sentences; Direct and indirect speech; Active and passive voice; usage of common phrasal verbs, synonyms & antonyms.

1L + 1T

**Module 2 : Reading Skills:** Comprehension passages; reading and understanding articles from technical writing. Interpreting texts: analytic texts, descriptive texts, discursive texts; SQ3R reading strategy.

1L + 1T

**Module 3 : Writing Skills:** Writing business letters - enquiries, complaints, sales, adjustment, collection letters, replies to complaint & enquiry letters; Job applications, Résumé, Memo, Notice, Agenda, Reports – types & format, E-mail etiquette, advertisements

4L + 4T

**Module 4 : Listening & Speaking**

Listening: Listening process, Types of listening; Barriers in effective listening, strategies of effective listening

Speaking: Presentations, Extempore, Role-plays, GD, Interview

4L + 4T

**Suggested readings:**

1. Bhatnagar, M & Bhatnagar, N (2010) Communicative English for Engineers and Professionals. New Delhi: Pearson Education.
2. Raman, M & Sharma, S (2017) Technical Communication. New Delhi: OUP.
3. Kaul, Asha (2005) The Effective Presentation: Talk your way to success. New Delhi: SAGE Publication.
4. Sethi, J & Dhamija, P.V. (2001), A Course in Phonetics and Spoken English. New Delhi: PHI.
5. Murphy, Raymond (2015), English Grammar in Use. Cambridge: Cambridge University Press.