## MASTER OF SCIENCE Food Technology & Quality Assurance

## PROGRAMME STRUCTURE AND SYLLABUS 2019-20 ADMISSIONS ONWARDS

(UNDER MAHATMA GANDHI UNIVERSITY PGCSS REGULATIONS 2019)



EXPERT COMMITEE IN FOOD TECHNOLOGY AND QUALITY ASSSURANCE (PG)

MAHATMA GANDHI UNIVERSITY 2019

c. Project

: 5 Credits

d. Viva-voce

: 3 Credits

## **Elective Course**

a. Theory : 12 Credits

Credit (Cr) of a course is a numerical value assign to paper according to the relative importance of the content of the syllabus of the programme.

'Course Credit' One credit of the course is defined as a minimum of 1-hour lecture/ minimum of 2 hours lab /field work per week for 18 weeks in a semester. The course will be considered as completed only by conducting the final examination, regular student shall not register for more than 24 credits and less than 16 credits per semester. The total minimum credits required for completing a PG programme is 80.

'Programme Core Course' (PC) means a course that the student admitted to a particular programme must successfully complete to receive the Degree and which cannot be substituted by any other course.

'Programme Elective Course' (PE) means a course which can be chosen from a list of elective and a minimum number of courses is required to complete the programme.

'Programme Project means a regular project work with stated credits on which the student undergoes a project under the supervision of a teacher in the parent department/ any appropriate research centre in order to submit a dissertation on the project work as specified.

'Academic week' is a Unit of five working days in which distribution of work is organized from day 1 to 5, with five contact hours of 1-hour duration in each day. A sequence of 18 such academic week constitutes a semester.

**Examination:** To be conducted as per rules and regulations framed under credit and semester system.

- There shall be University examination at the end of each semester. Project evaluation and viva voce shall be conducted at the end of the programme only. Project evaluation and viva -voce shall be conducted by two external examiners (for specialized courses one examiner can be opted from the same college itself).
- There shall be one end semester examination of 3 hours duration in each lecturebased course.

## 7. PROGRAMME STRUCTURE

Table 1: Detailed Scheme for the Distribution of Credits and Period of Instruction

Sl.No.	Course code	Title of course	Credit per course	Contact hours per week	Total contact hours for the course	Total credits fo the course
		First Semeste	r			
1	FQ010101	Introduction to Food Science and Technology	3	3	54	
2	FQ010102	Basic Biochemistry	4	4	72	
3	FQ010103	Food Microbiology	4	4	72	19
4	FQ010104	Food Chemistry	4	4	72	
5	FQ010105	Biochemistry and Microbiology- Practical I	4	10	180	
		Second semeste	er	l.	1	
7	FQ010201	Food Engineering	4	4	72	
8	FQ010202	Food Analysis and Instrumentation	4	4	72	
9	FQ010203	Food Preservation Technology	3	4	54	
10	FQ010204	Food Additives and Packaging	3	3	54	22
11	FQ010205	Food Quality Assurance and Management	4	4	72	
12	FQ010206	Food Additives & Food Preservation-Practical II	4	6	108	
		Third semester	r	L	L	
13	FQ010301	Technology of Cereals, Pulses & Oilseeds	4	4	72	
14	FQ010302	Technology of Milk, Meat, Poultry & Fish	4	4	72	23
15	FQ010303	Technology of Fruits &Vegetables	3	3	54	

16	FQ010304	Food Analysis-Practical III	4	6	108	
17	List of elective	Elective	4	4	72	+
18	papers are given in table 2	Elective	4	4	72	
		Fourth semeste	r			
19	List of elective papers are given in table 2	Elective	4	5	90	
20	FQ010404	Food Processing & Sensory Evaluation- Practical IV	4	6	108	16
21	FQ010405	Project Evaluation	5			1
22	FQ010406	Course Viva-Voce	3			-

Table 2: Detailed Scheme of Instruction of the Elective Courses

No	Course code	Title of course	Exam duration (hours)	Credit per course	Contact hours per week	Total credits	
		Elec	tive A				
1	FQ800301	Food Biotechnology	3	4	5	141	
2	FQ800302	Technology of Beverages	3	4	5	12	
3	FQ800403	Bakery and Confectionery	3	4	5		
		Elec	tive B				
1	FQ810301	Proteomics and Genomics	3	4	5		
2	FQ810302	Spices and Flavor Technology	3	4	4	12	
3	FQ810403	Research Methodology and Statistics	3	4	5		
		Elec	tive C			L	
1	FQ820301	Sensory Evaluation and Product Development	3	4	5	Sand of 20 Science	

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2	FQ820302	Food Sanitation and			5	
		Hygiene	3	4		
3	FQ820403	Byproduct utilization and	3	1	1	-
		Waste Management	3	4	4	):