

## 1. Department wise list of courses, course numbers and credit hours

Sl. No.	Course Number	Title of the Course	Credit hours
<b>I. Food Process Technology (FDPT)</b>			
1	FDPT 211	Fundamentals of Food Processing	3 (2+1)
2	FDPT 212	Processing Technology of Liquid Milk	2 (1+1)
3	FDPT 213	Processing Technology of Cereals	3 (2+1)
4	FDPT 214	Processing Technology of Dairy Products	3 (2+1)
5	FDPT 215	Processing Technology of Legumes and Oilseeds	3 (2+1)
6	FDPT 216	Processing Technology of Fruits and Vegetables	3 (2+1)
7	FDPT 311	Processing Technology of Beverages	3 (2+1)
8	FDPT 312	Processing of Meat and Poultry Products	3 (2+1)
9	FDPT 313	Bakery, Confectionery and Snack Products	3 (2+1)
10	FDPT 314	Processing of Spices and Plantation Crops	3 (2+1)
11	FDPT 315	Food Packaging Technology and Equipment	3 (2+1)
12	FDPT 316	Processing of Fish and Marine Products	3 (2+1)
13	FDPT 317	Sensory Evaluation of Food Products	3 (1+2)
<b>Total</b>			<b>38(24+14)</b>
<b>II. Food Process Engineering (FDPE)</b>			
1	FDPE 121	Fluid Mechanics	3 (2+1)
2	FDPE 122	Post Harvest Engineering	3 (2+1)
3	FDPE 221	Food Thermodynamics	3 (2+1)
4	FDPE 222	Unit Operations of Food Processing-I	3 (2+1)
5	FDPE 223	Heat and Mass Transfer in Food Processing	3 (2+1)
6	FDPE 224	Unit Operations of Food Processing-II	3 (2+1)
7	FDPE 225	Food Refrigeration and Cold Chain	3 (2+1)
8	FDPE 321	Food Process Equipment Design	3 (2+1)
9	FDPE 322	Food Storage Engineering	3 (2+1)
10	FDPE 421	Instrumentation and Process Control in Food Industry	3 (2+1)
<b>Total</b>			<b>30(20+10)</b>
<b>III. Food Safety and Quality Assurance (FDSQ)</b>			
1	FDSQ 131	General Microbiology	3 (2+1)
2	FDSQ 132	Food Biochemistry and Nutrition	3 (2+1)
3	FDSQ 133	Food Chemistry of Macronutrients	3 (2+1)
4	FDSQ 134	Food Microbiology	3 (2+1)
5	FDSQ 231	Industrial Microbiology	3 (2+1)
6	FDSQ 232	Food Chemistry of Micronutrients	3 (2+1)
7	FDSQ 331	Instrumental Techniques in Food Analysis	3 (1+2)
8	FDSQ 332	Food Biotechnology	3(2+1)
9	FDSQ 333	Food Plant Sanitation	2 (1+1)
10	FDSQ 334	Food Additives and Preservatives	2 (1+1)
11	FDSQ 335	Food Quality, Safety Standards and Certification	2 (2+0)
<b>Total</b>			<b>30(19+11)</b>

<b>IV. Food Business Management (FDBM)</b>			
1	FDBM 141	Business Management and Economics	2 (2+0)
2	FDBM 241	ICT Applications in Food Industry	3 (1+2)
3	FDBM 242	Marketing Management and International Trade	2 (2+0)
4	FDBM 341	Entrepreneurship Development	3 (2+1)
5	FDBM 342	Project Preparation and Management	2 (1+1)
6	FDBM 441	Communication and Soft Skills Development	2 (0+2)
<b>Total</b>			<b>14(8+6)</b>
<b>V. Food Plant Operations (FDPO)</b>			
1	FDPO 451	Student READY - Experiential Learning Programme - I	7 (0+7)
2	FDPO 452	Student READY - Experiential Learning Programme - II	7 (0+7)
3	FDPO 453	Student READY - Research Project	3 (0+3)
4	FDPO 454	Student READY - Seminar	1 (0+1)
5	FDPO 455	Student READY - Industrial Tour	2 (0+2)
6	FDPO 456	Student READY – Internship/In-Plant Training	20 (0+20)
<b>Total</b>			<b>40(0+40)</b>
<b>VI. Basic Engineering (BASE)</b>			
1	BASE 161	Engineering Drawing and Graphics	3 (1+2)
2	BASE 162	Workshop Technology	3 (1+2)
3	BASE 163	Electrical Engineering	3 (2+1)
4	BASE 164	Computer Programming and Data Structures	3 (1+2)
5	BASE 165	Basic Electronics Engineering	3 (2+1)
<b>Total</b>			<b>15(7+8)</b>
<b>VII. Basic Sciences and Humanities (BASH)</b>			
1	BASH 101	Comprehension and Communication Skills in English	2 (1+1)
2	BASH 102	Engineering Mathematics-I	2 (2+0)
3	BASH 103	Crop Production Technology	3 (2+1)
4	BASH 104	Engineering Mathematics-II	2 (2+0)
5	BASH 201	Statistical Methods and Numerical Analysis	2 (1+1)
6	BASH 301	Environmental Science and Disaster Management	2 (1+1)
<b>Total</b>			<b>13(9+4)</b>

## 2. Semester wise course numbers, courses, and credit hours `

Sl. No.	Course number	Course title	Credit hours
<b>I Semester</b>			
1	BASH 101	Comprehension and Communication Skills in English	2 (1+1)
2	BASH 102	Engineering Mathematics-I	2 (2+0)
3	BASH 103	Crop Production Technology	3 (2+1)
4	FDSQ 131	General Microbiology	3 (2+1)
5	FDSQ 132	Food Biochemistry and Nutrition	3 (2+1)
6	FDBM 141	Business Management and Economics	2(2+0)
7	BASE 161	Engineering Drawing and Graphics	3 (1+2)
8	BASE 162	Workshop Technology	3 (1+2)
9	COCA 100	NSS/NCC (Non-credit)	1 (0+1)
			<b>21 (13+8)</b>
<b>II Semester</b>			
1	BASH 104	Engineering Mathematics-II	2 (2+0)
2	FDPE 121	Fluid Mechanics	3 (2+1)
3	FDPE 122	Post Harvest Engineering	3 (2+1)
4	FDSQ 133	Food Chemistry of Macronutrients	3 (2+1)
5	FDSQ 134	Food Microbiology	3 (2+1)
6	BASE 163	Electrical Engineering	3 (2+1)
7	BASE 164	Computer Programming and Data Structures	3 (1+2)
8	BASE 165	Basic Electronics Engineering	3 (2+1)
9	COCA 200	Physical Education(Non-credit)	1 (0+1)
			<b>23 (15+8)</b>
<b>III Semester</b>			
1	BASH 201	Statistical Methods and Numerical Analysis	2 (1+1)
2	FDPT 211	Fundamentals of Food Processing	3 (2+1)
3	FDPT 212	Processing Technology of Liquid Milk	2 (1+1)
4	FDPT 213	Processing Technology of Cereals	3 (2+1)
5	FDPE 221	Food Thermodynamics	3 (2+1)
6	FDPE 222	Unit Operations in Food Processing-I	3 (2+1)
7	FDSQ 231	Industrial Microbiology	3 (2+1)
8	FDSQ 232	Food Chemistry of Micronutrients	3 (2+1)
9	COCA 300	Yoga, Ethics and Moral Education (Non-credit)	1(0+1)
			<b>22 (14+8)</b>
<b>IV Semester</b>			
1	FDPT 214	Processing Technology of Dairy Products	3 (2+1)
2	FDPT 215	Processing Technology of Legumes and Oilseeds	3 (2+1)
3	FDPT 216	Processing Technology of Fruits and Vegetables	3 (2+1)
4	FDPE 223	Heat and Mass Transfer in Food Processing	3 (2+1)
5	FDPE 224	Unit Operations in Food Processing-II	3 (2+1)
6	FDPE 225	Food Refrigeration and Cold Chain	3 (2+1)
7	FDBM 241	ICT Applications in Food Industry	3 (1+2)
8	FDBM 242	Marketing Management and International Trade	2 (2+0)
			<b>23(15+8)</b>

<b>V Semester</b>			
1	BASH 301	Environmental Sciences & Disaster Management	2 (1+1)
2	FDPT 311	Processing Technology of Beverages	3 (2+1)
3	FDPT 312	Processing of Meat and Poultry Products	3 (2+1)
4	FDPT 313	Bakery, Confectionery and Snack Products	3 (2+1)
5	FDPE 321	Food Process Equipment Design	3 (2+1)
6	FDPE 322	Food Storage Engineering	3 (2+1)
7	FDSQ 331	Instrumental Techniques in Food Analysis	3 (1+2)
8	FDSQ 332	Food Biotechnology	3 (2+1)
			<b>23 (14+9)</b>
<b>VI Semester</b>			
1	FDPT 314	Processing of Spices and Plantation Crops	3 (2+1)
2	FDPT 315	Food Packaging Technology and Equipment	3 (2+1)
3	FDPT 316	Processing of Fish and Marine Products	3 (2+1)
4	FDPT 317	Sensory Evaluation of Food Products	3 (1+2)
5	FDSQ 333	Food Plant Sanitation	2 (1+1)
6	FDSQ 334	Food Additives and Preservatives	2(1+1)
7	FDSQ 335	Food Quality, Safety Standards and Certification	2 (2+0)
8	FDBM 341	Entrepreneurship Development	3 (2+1)
9	FDBM 342	Project Preparation and Management	2(1+1)
			<b>23 (14+9)</b>
<b>VII Semester</b>			
1	FDPE 421	Instrumentation and Process Control in Food Industry	3 (2+1)
2	FDBM 441	Communication and Soft Skills Development	2 (0+2)
3	FDPO 451	Student READY - Experiential Learning Programme - I	7 (0+7)
4	FDPO 452	Student READY - Experiential Learning Programme - II	7 (0+7)
5	FDPO 453	Student READY - Research Project	3 (0+3)
6	FDPO 454	Student READY - Seminar	1 (0+1)
			<b>23 (2+21)</b>
<b>VIII Semester</b>			
1	FDPO 455	Student READY - Industrial Tour	2 (0+2)
2	FDPO 456	Student READY - Internship/In-Plant Training	20 (0+20)
			<b>22 (0+22)</b>
<b>Grand Total</b>			<b>180(87+93)</b>