

## SEMESTER-WISE DISTRIBUTION OF COURSES OF B.TECH. (DAIRY TECHNOLOGY)

### Semester I

S. No.	Course Code	Title of the Course	Credit Hours
1	DE-111	Workshop Practice	2 (1+1)
2	DE-112	Fluid Mechanics	3 (2+1)
3	DE-113	Engineering Drawing	1 (0+1)
4	DC-111	Biochemistry	2 (1+1)
5	DM-111	Fundamentals of Microbiology	3 (2+1)
5	DBM-111	Milk Production Management and Dairy Development	3 (2+1)
6	DBM-112	Communication Skills	2 (1+1)
7	DBM-113	Fundamentals of Dairy Extension	3 (2+1)
8	NC-1	Food Safety Regulations	2 (2+0)
9	NSS/NCC/Sports-1	National Service Scheme/National Cadet Corps/Sports	1 (0+1)
		<b>Total</b>	<b>19 (11+8)</b>

### Semester II

S. No.	Course Code	Title of the Course	Credit hours
1	DE-121	Thermodynamics	2 (1+1)
3	DE-122	Heat & Mass Transfer	3 (2+1)
4	DE-123	Boilers and Steam Generation	2 (1+1)
5	DT-121	Market Milk	4 (3+1)
6	DT-122	Fat Rich Dairy Products	3 (2+1)
7	DC-121	Physical Chemistry of Milk	3 (2+1)
8	DC-122	Human Nutrition	1 (1+0)
9	DM-121	Microbiology of fluid milk	3 (2+1)
10	DBM-121	Economic Analysis	2 (2+0)
11	NC-2	Nutraceuticals and Functional Foods	2 (2+0)
12	NSS/NCC/Sports-2	National Service Scheme/National Cadet Corps/Sports	1 (0+1)
		<b>Total</b>	<b>23 (16+7)</b>
13	DT-123	Student READY Rural Dairy Work Experience Programme-I (Summer Break)	5 (0+5)

### Semester III

S. No.	Course Code	Title of the Course	Credit Hours
1	DE-211	Refrigeration & Air-conditioning	3 (2+1)
2	DE-212	Basic Electrical Engineering	3 (2+1)
3	DT-211	Traditional Indian Dairy Products	3 (2+1)
4	DT-212	Condensed and Dried Milks	4 (3+1)
5	DC-211	Chemistry of Milk	3 (2+1)
6	DM-211	Starter Cultures and Fermented Milk Products	3 (2+1)
7	DBM-211	Computer and Application Software Packages	2 (1+1)

8	DBM-212	Marketing Management and International Trade	2 (2+0)
9	NSS/NCC/Sports-3	National Service Scheme/National Cadet Corps/Sports	1 (0+1)
		<b>Total</b>	<b>23 (16+7)</b>

#### Semester IV

S. No.	Course Code	Title of the Course	Credit Hours
1	DE-221	Dairy Engineering	3 (2+1)
2	DE-222	Instrumentation and Process Control	3 (2+1)
3	DT-221	Cheese Technology	5 (3+2)
4	DT-222	Ice-cream & Frozen Desserts	3 (2+1)
5	DC-221	Chemistry of Dairy Products	3 (2+1)
6	DM-221	Microbiology of Dairy Products	2 (1+1)
7	DBM-221	Environmental Studies	2 (1+1)
8	NSS/NCC/Sports-4	National Service Scheme/National Cadet Corps/Sports	1 (0+1)
		<b>Total</b>	<b>21 (13+8)</b>
9	DT-223	Student READY Rural Dairy Work Experience Programme-II (Summer Break)	5 (0+5)

#### Semester V

S. No.	Course Code	Title of the Course	Credit Hours
1	DE-311	Material Strength and Dairy Machine Design	3 (2+1)
2	DE-312	Dairy Process Engineering	3 (2+1)
3	DT-311	By-Products Technology	3 (2+1)
4	DT-312	Packaging of Dairy Products	3 (2+1)
5	DC-311	Chemical Quality Assurance	2 (1+1)
6	DM-311	Quality and Safety Monitoring in Dairy Industry	3 (2+1)
7	DBM-311	ICT in Dairy Industry and Operation Research	4 (2+2)
8	NC-3	Emerging Dairy Processing Technologies	2 (2+0)
		<b>Total</b>	<b>21 (13+8)</b>

#### Semester VI

S. No.	Discipline	Title of the Course	Credit Hours
1	DE-321	Food Engineering	3 (2+1)
2	DE-322	Dairy Plant Design and Layout	2 (1+1)
3	DE-323	Energy Conservation and Management	2 (1+1)
4	DT-321	Sensory Evaluation of Dairy Products	3 (2+1)
5	DT-322	Food Technology - I	3 (2+1)
6	DC-321	Food Chemistry	3 (2+1)
7	DM-321	Food and Industrial Microbiology	3 (2+1)
8	DBM-321	Financial Management and Cost Accounting	3 (2+1)
		<b>Total</b>	<b>22 (14+8)</b>

#### Semester VII

S. No.	Course Code	Title of the Course	Credit Hours
1	DT-411	Student READY In- Plant Training	20 (0+20)
		<b>Total</b>	<b>20 (0+20)</b>

### Semester VIII

S. No.	Course Code	Title of the Course	Credit Hours
1	DT-421	Dairy Plant Management	2 (1+1)
2	DT-422	Waste Disposal and Pollution Abatement	2 (1+1)
3	DT-423	Food Technology -II	3 (2+1)
4	DBM-421	Entrepreneurship Development and Industrial Consultancy	2 (2+0)
5	DBM-422	Industrial Statistics	2 (1+1)
6	DT-424	Student READY Experiential Learning Module	10 (0+10)
		<b>Total</b>	<b>22 (7+14)</b>