SEMESTER WISE COURSE STRUCTURE & EVALUATION SCHEME

B. TECH. CHEMICAL TECHNOLOGY- DEPARTMENT OF LEATHER AND FASHION TECHNOLOGY

(Applicable from Session 2025-26)

Year-I, Semester-I

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab.	Total		
1	BSC	Engineering Physics	NPH-101	4	3	0	2	15	20	15	50	50	100
2	BSC	Engineering Mathematics-I	NMA-101	4	3	1	0	30	20	-	50	50	100
3	ESC	Introduction to Electrical Engineering	NEE-101	4	3	0	2	15	20	15	50	50	100
4	ESC	Introduction to Mechanical Engineering	NME-101	4	3	1	0	15	20	15	50	50	100
5	HSMC	Professional Communication	NHS-103	4	2	1	2	15	20	15	50	50	100
6	ESC	Engineering Graphics	NCE-103	2	0	0	4	30	20	-	50	50	100
		Total Credits 22											**600**

Year-I, Semester-II

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1	BSC	Engineering Chemistry	NCY-102	4	3	0	2	15	20	15	50	50	100
2	ESC	Introduction to Computer Science Engineering	NCS-102	4	3	1	0	30	20	-	50	50	100
3	ESC	Introduction to Electronics Engineering	NET-102	4	3	1	0	30	20	-	50	50	100
4	ESC	Introduction to Civil Engineering	NCE-102	4	3	1	0	30	20	-	50	50	100
5	ESC	Introduction to Chemical Engineering & Chemical Technology	NCT-102	4	3	1	0	30	20	-	50	50	100
6	ESC	Workshop Practice	NWS-102	2	0	0	4	-	20	30	50	50	100
		Total Credits 22											**600**

Syllabus B. Tech. Chemical Technology-Leather and Fashion Technology

(Applicable from Session 2025-26)

Year-II, Semester-III

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1	BSC	Engineering Mathematics-II	NMA-201	4	3	1	0	30	20	-	50	50	100
2	ESC	Fluid Mechanics and Mechanical operation	NCT-201	4	3	0	2	15	20	15	50	50	100
3	PCC	Leather Microscopy & Skin Proteins	NLT-201	4	3	1	0	30	20	-	50	50	100
4	PCC	Pre-Tanning & Tanning of Hides & Skins	NLT-203	4	3	1	0	30	20	-	50	50	100
5	PCC	Chemical Process Calculations	NCT-205	3	3	0	0	30	20	-	50	50	100
6	HSMC	Industrial Economics & Management	NHS-201	3	3	0	0	30	20	-	50	50	100
7	PCC	Leather Microscopy & Skin Pre-Tannages Lab	NLT-207	2	0	0	4	-	20	30	50	50	100
	Total Credits 24												**700**

Year-II, Semester-IV

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1	BSC	Modern Analytical Techniques	NCY-202	4	3	1	0	30	20	-	50	50	100
2	ESC	Computer Oriented Numerical Methods	NMA-204	4	3	0	2	15	20	15	50	50	100
3	PCC	Analysis of Materials of Leather Manufacture	NLT-202	4	3	1	0	30	20	-	50	50	100
4	PCC	Chemical Engineering Thermodynamics	NCT-204	4	3	1	0	30	20	-	50	50	100
5	PCC	Heat Transfer Operations	NCT-206	3	3	0	0	30	20	-	50	50	100
6	PCC	Introduction to Fashion Technology	NLT-208	3	3	0	0	30	20	-	50	50	100
7	PCC	Analysis of Materials of Leather Manufacture Lab	NLT-210	2	0	0	4	-	20	30	50	50	100
	Total Credits 24												**700**

(Applicable from Session 2025-26)

Year-III, Semester-V

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1	PCC	Processing of Leather	NLT-301	4	3	0	2	15	20	15	50	50	100
2	PCC	Theory of Tannages	NLT-303	4	3	1	0	30	20	-	50	50	100
3	PCC	Leather Goods and Garments Technology	NLT-305	3	3	0	0	30	20	-	50	50	100
4	PCC	Mass Transfer Operations	NCT-307	3	3	0	0	30	20	-	50	50	100
5	PCC	Chemical Reaction Engineering	NCT-309	3	3	0	0	30	20	-	50	50	100
6	PCC	Post Tanning & Finishing Operations	NLT-311	3	3	0	0	30	20	-	50	50	100
7	HSMC	Entrepreneurship Development	NHS-301	2	2	0	0	30	20	-	50	50	100
	Total Credits			**22**									**700**

Year-III, Semester-VI

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab.	Total		
1	PCC	Instrumentation & Process Control	NLT-302	4	3	0	2	15	20	15	50	50	100
2	PCC	Footwear Technology	NLT-304	4	3	0	2	15	20	15	50	50	100
3	PCC	Tannery Waste Management	NLT-306	3	3	0	0	30	20	-	50	50	100
4	PCC	Leather Analysis and Quality Control	NLT-308	3	2	0	1	15	20	15	50	50	100
5	PCC	Leather Trades Engineering	NLT-310	3	3	0	0	30	20	-	50	50	100
6	PEC-I	1. Process Equipment Design 2. Process Modeling & Simulation 3. Process Optimization	NCT-322 NCT-324 NCT-326	3	3	0	0	30	20	-	50	50	100
7	OEC-I	Leather Manufacture from Skins & Hide	OLT-302	2	2	0	0	30	20	-	50	50	100
		Total Credits		**22**									**700**

(Applicable from Session 2025-26)

Year-IV, Semester-VII

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1	PEC-II	**Programme Elective Course II** 1. Leather Auxiliaries Technology 2. Science and Technology of Leather Supplements and Synthetics 3. Leather Dyes and Dyestuffs chemistry	NLT-421 NLT-423 NLT-425	4	3	1	0	30	20	-	50	50	100
2	PEC-III	**Programme Elective Course III** 1. Computer Aided Leather Product Design 2. Advance Science of Hide & Skin 3. Safety and Hazardous Management in Leather Industry	NLT-441 NLT-443 NLT-445	3	3	0	0	30	20	-	50	50	100
3	PEC-IV	**Programme Elective Course IV** 1. Animal and Tannery by Products 2. Professional Areas of Leather Technology 3. Fashion Forecasting for Leather and Leather Products	NLT-461 NLT-463 NLT-465	3	3	0	0	30	20	-	50	50	100
5	Industrial Training	Industrial Training	NLT-481	2	0	0	4	-	50	-	50	50	100
5	OEC-II	Entrepreneurship for Leather Sector	OLT-401	2	2	0	0	30	20	-	50	50	100
6	Minor Project	Minor Project	NLT-491	6	0	0	12	-	50	-	50	50	100
7	Seminar	Seminar	NLT-471	2	0	0	4	-	50	-	50	50	100
	Total Credits 22												**700**

Year-IV, Semester-VIII

Sl. No.	Course Type	Course Title	Subject Code	Credits	Periods			Sessional Marks				ESE	Total Marks
					L	T	P	MSE	TA	Lab	Total		
1	PEC-V	**Programme Elective Course V** 1. Marketing and Merchandising in Leather Industry. 2. Footwear Material Components 3. Total Quality Management	NLT-422 NLT-424 NLT-426	4	3	1	0	30	20	-	50	50	100
2	OEC-III	Leather Machinery	OLT-402	2	2	0	0	30	20	-	50	50	100
3		Project	NLT-492	16	0	0	24	-	100	100	200	200	400
		Total Credits 22											**600**