

# Master of Technology in Textile Engineering

Department of Textile and Fibre Engineering

## The overall credits structure

Category	PC	PE	OE	Total
<b>Credits</b>	<b>42</b>	<b>12</b>	<b>0</b>	<b>54</b>

### Program Core

TXD801	Major Project Part-I (TXE)	0	0	12	6
TXD803	Major Project Part-II (TXE)	0	0	24	12
TXL721	Theory of Yarn Structure	3	0	0	3
TXL722	Mechanics of Spinning Processes	3	0	0	3
TXL725	Mechanics of Spinning Machines	3	0	0	3
TXL731	Theory of Fabric Structure	3	0	0	3
TXL732	Advanced Fabric Manufacturing Systems	3	0	0	3
TXL775	Technical Textiles	3	0	0	3
TXL783	Design of Experiments and Statistical Techniques	3	0	0	3
TXP725	Mechanics of Textile Machines Laboratory	0	0	2	1
TXP761	Evaluation of Textile Materials	0	0	4	2
<b>Total Credits</b>				<b>42</b>	

TXL734	Nonwoven Processes and Products	3	0	0	3
TXL740	Science & App. of Nanotechnology in Textiles	3	0	0	3
TXL750	Science of Clothing Comfort	3	0	0	3
TXL751	Apparel Engineering and Quality Control	2	0	2	3
TXL752	Design of Functional Clothing	3	0	0	3
TXL766	Design and Manuf. of Textile Structural Composites	3	0	0	3
TXL771	Electronics and Controls for Textile Industry	3	0	2	4
TXL772	Computational Methods for Textiles	2	0	2	3
TXL773	Medical Textiles	3	0	0	3
TXL774	Process Control in Yarn & Fabric Manufacturing	3	0	0	3
TXL777	Product Design and Development	3	0	0	3
TXL781	Project Appraisal and Finance	3	0	0	3
TXL782	Production and Operations Management in Textile Industry	3	0	0	3
TXL784	Supply Chain Management in Textile Industry	3	0	0	3
TXL807	Seminar (Textile Engineering)	0	2	0	2
TXS805	Independent Study (Textile Engineering)	0	3	0	3
TXV702	Management of Textile Business	1	0	0	1
TXV703	Special Module in Textile Technology	1	0	0	1
TXV704	Special Module in Yarn Manufacture	1	0	0	1
TXV705	Special Module in Fabric Manufacture	1	0	0	1

### Program Electives

TXD809	Mini Project (Textile Engineering)	0	0	8	4
TXL700	Modelling and Simulation in Fibrous Assemblies	2	0	2	3
TXL710	High Performance & Specialty. Fiber	3	0	0	3
TXL712	Polymer and Fibre Physics	3	0	0	3
TXL719	Functional & Smart Textiles	3	0	0	3
TXL724	Textured Yarn Technology	3	0	0	3

Sem.	Courses (Number, Abbreviated Title, L-T-P, Credits)						Lecture courses	Contact h/week				Credits
	L	T	P	Total	L	T		P	Total			
I	TXL721 Theory of Yarn Structure (3-0-0) 3	TXL722 Mechanics of Spinning Processes (3-0-0) 3	TXL731 Theory of Fabric Structure (3-0-0) 3	TXL732 Advanced Fabric Manufacturing Systems (3-0-0) 3		PE-1 (3-0-0) 3	5	15	0	0	15	15
II	TXL775 Technical Textiles (3-0-0) 3	TXL725 Mechanics of Spinning Machines (3-0-0) 3	TXL783 Design of Expt. and Stat. Tech. (3-0-0) 3	TXP761 Evaluation of Textile Materials (0-0-4) 2	TXP725 Mechanics of Spinning Machines Lab. (0-0-2) 1	PE-2 (3-0-0) 3	4	12	0	6	18	15
Summer												
III	TXD801 Major Project Part-I (TXE) (0-0-12) 6	PE-3 (3-0-0) 3	PE-4 (3-0-0) 3				2	6	0	12	18	12
IV	TXD803 Major Project Part-II (TXE) (0-0-24) 12						0	0	0	24	24	12

**Total = 54**

# Master of Technology in Textile Chemical Processing

Department of Textile and Fibre Engineering

## The overall credits structure

Category	PC	PE	OE	Total
<b>Credits</b>	<b>42</b>	<b>12</b>	<b>0</b>	<b>54</b>

### Program Core

TXD805	Major project part-I (TxC)	0	0	12	6
TXD806	Major project part-II (TxC)	0	0	24	12
TXL712	Polymer and Fibre Physics	3	0	0	3
TXL747	Colour Science	3	0	0	3
TXL748	Advances in Finishing of Textiles	3	0	0	3
TXL749	Theory and Practice of Dyeing	3	0	0	3
TXL753	Advanced Textile Printing Technology	2	0	0	2
TXL754	Sustainable Chemical Processing of Textiles	2	0	0	2
TXL783	Design of Experiments and Statistical Techniques	3	0	0	3
TXP748	Textile Preparation and Finishing Lab	0	0	2	1
TXP749	Textile Coloration Lab	0	0	2	1
TXP751	Characterization and Evaluation of dyed and finished textiles Lab	0	0	2	1
TXS751	Research Seminar	0	0	2	1
TXR752	Professional Practices	0	0	2	1
TXT800	Industrial Summer Training	Non credit			
<b>Total Credits</b>				<b>42</b>	

TXL715	Technology of Solution Spun Fibres	3	0	0	3
TXL719	Functional and Smart Textiles	3	0	0	3
TXL724	Textured Yarn Technology	3	0	0	3
TXL740	Science and Application of Nanotechnology in Textiles	3	0	0	3
TXL750	Science of Clothing Comfort	3	0	0	3
TXL751	Apparel Engineering and Quality Control	2	0	2	3
TXL752	Design of Functional Clothing	3	0	0	3
TXL755	Textile Wet Processing Machines: Automation and Control*	3	0	0	3
TXL756	Textile Auxiliaries*	3	0	0	3
TXL766	Design and Manuf. of Textile Structural Composites	3	0	0	3
TXL773	Medical Textiles	3	0	0	3
TXL775	Technical Textiles	3	0	0	3
TXL777	Product Design and Development	3	0	0	3
TXL781	Project Appraisal and Finance	2	1	0	3
TXL782	Production and Operations Management in Textile Industry	3	0	0	3
TXL784	Supply Chain Mgmt. in Textile Industry	3	0	0	3
TXP711	Polymer and Fibre Chemistry Laboratory	0	2	0	1
TXP712	Polymer and Fibre Physics Laboratory	0	0	2	1
TXP716	Fibre Production and Post Spinning Operation Laboratory	0	0	4	2
TXP761	Evaluation of Textile Materials	0	0	4	2
TXS811	Independent Study	0	3	0	3
TXV707	Special Module-Textile Chemical Processing-1	1	0	0	1

\* TCP PE Basket

### Program Electives

MSL760	Marketing Management	2	0	2	3
MSL802	Management of Intellectual Property Rights	3	0	0	3
MSL816	Total Quality Management	2	0	2	3
TXD812	Mini Projects (TCP)	0	0	6	3
TXL711	Polymer and Fibre Chemistry	3	0	0	3
TXL713	Technology of Melt Spun Fibres	3	1	0	4
TXL714	Advanced Materials Characterization Techniques	1	0	0	1

Sem.	Courses (Number, Abbreviated Title, L-T-P, credits)							Lecture courses	Contact h/week				Credits
	L	T	P	Total									
I	TXL712 Polymer & Fibre Physics (3-0-0) 3	TXL747 Colour Science (3-0-0) 3	TXL749 Theory and Practice of Dyeing (3-0-0) 3	TXL753 Advanced Textile Printing Technology (2-0-0) 2	TXP749 Textile Coloration Lab (0-0-2) 1	TXP751 Characterization of Chemicals and Finished Textiles Lab (0-0-2) 1	TXR752 Professional Practices (0-0-2) 1	4	11	0	6	17	14
II	TXL748 Advances in Finishing of Textiles (3-0-0) 3	TXL754 Sustainable Chemical Processing of Textiles (2-0-0) 2	TXL783 Design of Experiments and Statistical Techniques (3-0-0) 3	TXP748 Textile Preparation and Finishing Lab (0-0-2) 1	PE-1 (3-0-0) 3	PE-2 (3-0-3) 3		5	14	0	2	16	15
Summer	<b>TXT800 Industrial Summer Training</b>												
III	TXD805 Major Project Part-I (TCP) (0-0-12) 6			TXS751 Research Seminar (0-0-2) 1	PE-3* (3-0-0) 3	PE-4 (3-0-0) 3		2	6	0	14	18	13
IV	TXD806 Major Project Part-II (TCP) (0-0-24) 12							0	0	0	24	24	12

\* From TCP PE Basket

**Total = 54**

# Master of Technology in Fibre Science and Technology

Department of Textile and Fibre Engineering

## The overall credits structure

Category	PC	PE	OE	Total
<b>Credits</b>	<b>42</b>	<b>12</b>	<b>0</b>	<b>54</b>

### Program Core

TXD802	Major Project Part-I		0	0	12	6
TXD804	Major Project Part-II		0	0	24	12
TXL711	Polymer and Fibre Chemistry		3	0	0	3
TXL712	Polymer and Fibre Physics		3	0	0	3
TXL713	Technology of Melt Spun Fibres		3	1	0	4
TXL714	Advanced Materials Characterization Techniques		1	0	0	1
TXL715	Technology of Solution Spun Fibres		3	0	0	3
TXL748	Advances in Finishing of Textiles		3	0	0	3
TXL749	Theory and Practice of Dyeing		3	0	0	3
TXP711	Polymer and Fibre Chemistry Laboratory		0	0	2	1
TXP712	Polymer and Fibre Physics Laboratory		0	0	2	1
TXP716	Fibre Production and Post Spinning Operation Laboratory		0	0	4	2
<b>Total Credits</b>						<b>42</b>

### Program Electives

TXL700	Modelling and Simulation in Fibrous Assemblies	2	0	2	3
TXL710	High Performance & Specialty. Fiber	3	0	0	3
TXL719	Functional & Smart Textiles	3	0	0	3
TXL724	Textured Yarn Technology	3	0	0	3

TXL734	Nonwoven Processes and Products	3	0	0	3
TXL740	Science & App. of Nanotechnology in Textiles	3	0	0	3
TXL741	Env. Manag. in Textile and Allied Industries	3	0	0	3
TXL747	Colour Science	3	0	0	3
TXL750	Science of Clothing Comfort	3	0	0	3
TXL752	Design of Functional Clothing	3	0	0	3
TXL754	Sustainable Chemical Processing of Textiles	2	0	0	2
TXL772	Computational Methods for Textiles	2	0	2	3
TXL773	Medical Textiles	3	0	0	3
TXL775	Technical Textiles	3	0	0	3
TXL777	Product Design and Development	3	0	0	3
TXL781	Project Appraisal and Finance	3	0	0	3
TXL782	Production and Operations Management in Textile Industry	3	0	0	3
TXL783	Design of Experiments and Statistical Techniques	3	0	0	3
TXL784	Supply Chain Management in Textile Industry	3	0	0	3
TXS806	Independent Study (TTF)	0	3	0	3
TXV701	Process Cont. and Econ. in Manmade Fibre Prod.	1	0	0	1
TXV702	Management of Textile Business	1	0	0	1
TXV706	Special Module in Fibre Science	1	0	0	1
TXV707	Special Module in Textile Chemical Processing	1	0	0	1

Sem.	Courses (Number, Abbreviated Title, L-T-P, Credits)							Lecture courses	Contact h/week				Credits
	L	T	P	Total									
I	TXL711 Polymer & Chemistry (3-0-0) 3	TXP711 Polymer & Fibre Chemistry Lab (0-0-2) 1	TXL712 Polymer & Fibre Physics (3-0-0) 3	TXP712 Polymer & Fibre Physics Lab (0-0-2) 1	TXL713 Technology of Melt Spun Fibres (3-1-0) 4	TXL749 Theory and Practice of Dyeing (3-0-0) 3		4	12	1	4	17	15
II	TXL715 Technology of Soln Spun Fibres (3-0-0) 3	TXP716 Fibre Production & Post Spinning Operation Lab (0-0-4) 2	TXL748 Advances in Finishing of Textiles (3-0-0) 3	TXL714 Characterization of advanced materials (1-0-0) 1		PE-2 (3-0-0) 3	PE-1 (3-0-0) 3	5	12	0	6	18	15
Summer													
III	TXD802 Maj. Proj. Part-I (TTF) (0-0-12) 6				PE-3 (3-0-0) 3	PE-4 (3-0-0) 3		2	6	0	12	18	12
IV	TXD804 Maj. Proj. Part-II (TTF) (0-0-24) 12							0	0	0	24	24	12

**Total = 54**