

**13. Courses of Study and Scheme of Assessment  
M TECH TEXTILE TECHNOLOGY (FT)**

(2015 REGULATIONS)  
(Minimum No. of credits to be earned: 75\*)

Course Code	Course Title	Hours/Week			Credits	Maximum Marks			CAT
		Lecture	Tutorial	Practical		CA	FE	Total	
<b>I SEMESTER</b>									
15TT01	Quantitative Techniques in Textile Engineering	3	-	-	3	50	50	100	FC
15TT02	Polymer and Fibre Physics	3	-	-	3	50	50	100	FC
15TT03	Theory of Yarn and Fabric Manufacture	3	-	2	4	50	50	100	PC
15TT04	Colouration and Finishing Technology	4	-	-	4	50	50	100	PC
15TT05	Quality Analysis of Textiles & Clothing	3	-	-	3	50	50	100	PC
15TT51	Fabric Property Development and Characterization Lab	-	-	4	2	100	-	100	PC
15TT61	Industry Visit & Technical Seminar	-	-	4	2	100	-	100	PC
<b>Total 26 Hrs</b>		<b>16</b>	<b>-</b>	<b>10</b>	<b>21</b>	<b>450</b>	<b>250</b>	<b>700</b>	
<b>II SEMESTER</b>									
15TT06	Statistics and Quality Control for Textile Industry	4	-	-	4	50	50	100	PC
15TT07	Industrial Textiles	3	-	-	3	50	50	100	PC
15TT08	Principles of Colour Measurement	2	-	2	3	50	50	100	PC
15TT09	Clothing Comfort	3	-	-	3	50	50	100	PC
15TT10	Functional Textiles	3	-	-	3	50	50	100	PC
15TT__	Professional Elective 1	3	-	2	4	50	50	100	PE
15TT52	Industrial Textiles Product Development and Quality Evaluation Lab	-	-	2	1	100	-	100	PC
<b>Total 24 Hrs</b>		<b>18</b>	<b>-</b>	<b>6</b>	<b>21</b>	<b>400</b>	<b>300</b>	<b>700</b>	
<b>III SEMESTER</b>									
15TT__	Professional Elective 2	3	-	-	3	50	50	100	PE
15TT__	Professional Elective 3	3	-	-	3	50	50	100	PE
15TT__	Professional Elective 4	3	-	-	3	50	50	100	PE
15TT__	Professional Elective 5	3	-	-	3	50	50	100	PE
15TT__	Professional Elective 6	3	-	-	3	50	50	100	PE
15TT53	Statistical Analysis and Optimization Lab	-	-	2	1	100	-	100	PC
15TT71	Project work I	-	-	6	3	100	-	100	EEC
<b>Total 23 Hrs</b>		<b>15</b>	<b>-</b>	<b>8</b>	<b>19</b>	<b>450</b>	<b>250</b>	<b>700</b>	
<b>IV SEMESTER</b>									
15TT72	Project work II	-	-	28	14	100	-	100	EEC
<b>ELECTIVE THEORY COURSES(Six to be opted)</b>									
<b>FIBRE TECHNOLOGY</b>									
15TT21	Characterization of Textile Polymers	3	-	2	4	50	50	100	PE
15TT22	Nanotechnology in Textiles	3	-	-	3	50	50	100	PE
15TT23	High Performance and Specialty Fibres	3	-	-	3	50	50	100	PE
<b>YARN TECHNOLOGY</b>									
15TT24	Alternate Spinning Systems	3	-	-	3	50	50	100	PE
15TT25	Process and Quality Control in Spinning and Weaving†	3	-	2	4	50	50	100	PE
15TT26	Theory of Yarn and Fabric Structures	3	-	-	3	50	50	100	PE
<b>FABRIC TECHNOLOGY</b>									
15TT27	Specialty Textiles†	3	-	2	4	50	50	100	PE
15TT28	Nonwovens	3	-	-	3	50	50	100	PE
<b>CHEMICAL PROCESSING</b>									
15TT29	Surface Modification of Textiles	3	-	-	3	50	50	100	PE
15TT30	Green Processing of Textiles	3	-	-	3	50	50	100	PE
15TT31	Theory of Colouration	3	-	-	3	50	50	100	PE
15TT32	Functional Finishes†	3	-	2	4	50	50	100	PE
15TT33	Chemical Processing of Synthetic Textiles	3	-	-	3	50	50	100	PE
15TT34	Printing Technology	3	-	-	3	50	50	100	PE
15TT35	Textile Effluent Treatments	3	-	-	3	50	50	100	PE
<b>APPAREL TECHNOLOGY</b>									
15TT36	Fashion Design	3	-	2	4	50	50	100	PE

15TT37	Textile Marketing and Merchandising	3	-	-	3	50	50	100	PE
15TT38	Home Textiles	3	-	-	3	50	50	100	PE
<b>TECHNICAL TEXTILES</b>									
15TT39	Textile Composites	3	-	-	3	50	50	100	PE
15TT40	Filters and Filtration Textiles	3	-	-	3	50	50	100	PE
15TT41	Biomechanical Engineering of Functional Textiles	3	-	-	3	50	50	100	PE
15TT42	Coated Textiles	3	-	-	3	50	50	100	PE
<b>TEXTILE MANAGEMENT</b>									
15TT43	Financial Management	2	2	-	3	50	50	100	PE
15TT44	Industrial Engineering	2	2	-	3	50	50	100	PE
15TT45	Project Formulation and Appraisal	3	-	-	3	50	50	100	PE
<b>GENERAL</b>									
15TT46	Electro-Active Textiles	3	-	-	3	50	50	100	PE
15TT47	Research Methodology	3	-	-	3	50	50	100	PE
15TT48	Recycling in Textiles	3	-	-	3	50	50	100	PE
15TT49	Control Systems and Automation in Textile Engineering	3	-	-	3	50	50	100	PE
15TT50	Medical Textiles	3	-	-	3	50	50	100	PE
15TT81	Acoustic and Porous Sound Absorption Materials	3	-	-	3	50	50	100	PE
15TT82	Smart Materials for Intelligent Textiles	3	-	-	3	50	50	100	PE

\* Indicated is the minimum number of credits to be earned by a student.

† Electives to be opted under Professional Elective 1

**CAT – Category; FC – Foundation Course; PC – Professional Core; PE - Professional Elective; EEC – Employability**

**Enhancement Course**

### ONE CREDIT COURSES

15TK01	Geosynthetics
15TK02	Fibre reinforced concrete
15TK03	IE techniques
15TK04	Textile and apparel costing
15TK05	Lean manufacturing for textile and apparel industry
15TK06	Business acumen

### SCIENCE ELECTIVES

15ID01	Micro Electro Mechanical Systems (MEMS)
15ID02	Sensors for Engineering Applications
15ID03	Laser Processing of Materials
15ID04	Plasma Technology
15ID05	Nanosensor and its Applications
15ID06	Nano Magnetism and Spintronics
15ID07	Corrosion Science and Engineering
15ID08	Instrumental Methods of Chemical Analysis
15ID09	Polymer Science and Technology
15ID10	Nanomaterials and Nanotechnology
15ID11	Thin Film Technology

### HUMANITIES AND LANGUAGES ONE CREDIT COURSES

15OK01	Research Writing in Engineering Sciences
15OK02	Indian Ethos and Human Values
15OK03	Personality Development
15OK04	Financial Accounting and Cost Accounting