



Shri Guru Gobind Singhji Institute of Engineering & Technology, Nanded.
(An Autonomous Institute of Government of Maharashtra)

DEPARTMENT OF TEXTILE TECHNOLOGY

Odd Semester

Suggested Video lecture/ web study material for TY (Textile) students for Spun Yarn Technology- II course (PCC-TT301):

1. **TY (Textile)** students can listen **Drawframe** part from:
The video lecture of Prof. Ravi Chattopadhyay, IIT Delhi
Course Name: **Yarn manufacture I: Principle of Carding and Drawing**
Link: <https://nptel.ac.in/courses/116/102/116102048/>
2. Similarly, students can go through **Combing and Roving** part from: **The video lecture of Prof. Ravi Chattopadhyay, IIT Delhi**
Course Name: **Principles of Combing, Roving preparation & Ring spinning**
Link: <https://nptel.ac.in/courses/116/102/116102055/>
3. Students can also go through **Combing and Roving** part from:
The web content of Prof. R. Alagirusamy, IIT Delhi
Course Name: **Yarn manufacture- II**
Link: <https://nptel.ac.in/courses/116/102/116102038/>

Suggested Video lecture/ web study material for SY (Textile) students for: Textile Testing-I course (PCC-TT202):

1. **SY (Textile)** students can also go through Fibre length, Fibre fineness, Yarn Twist, Yarn count, Moisture and textiles, Evenness, Tensile testing topics:
The web content of Dr. Apurba Das, IIT Delhi
Course Name: **Textile Testing**
Link: <https://nptel.ac.in/courses/116/102/116102029/>

Even semester

Suggested Video lecture/ web study material for TY (Textile) students for Spun Yarn Technology- I course (PCC-TT205):

1. **TY (Textile)** students can listen **Carding** part from:
The video lecture of Prof. Ravi Chattopadhyay, IIT Delhi
Course Name: **Yarn manufacture I: Principle of Carding and Drawing**
Link: <https://nptel.ac.in/courses/116/102/116102048/>

Suggested Video lecture/ web study material for TY (Textile) students for Spun Yarn Technology- III course (PCC-TT304):

- Students can go through **Ring Spinning** part from:
The video lecture of Prof. Ravi Chattopadhyay, IIT Delhi
 Course Name: **Principles of Combing, Roving preparation & Ring spinning**
 Link: <https://nptel.ac.in/courses/116/102/116102055/>
- Similarly, students can also go through **New Spinning** systems part from: **The web content of Prof. R. Alagirusamy, IIT Delhi**
 Course Name: **Yarn manufacture- II**
 Link: <https://nptel.ac.in/courses/116/102/116102038/>

S.Y.Text	TWP-I	PCC-TT203	https://nptel.ac.in/courses/116/102/116102016/
DO	NFFFP	PC-TT204	https://nptel.ac.in/courses/116/102/116102026/
DO	TWP-II	PCC-TT208	https://nptel.ac.in/courses/116/102/116102052/
T.Y.Text.	PST	PC-TT305	https://nptel.ac.in/courses/116/102/116102053/
B.Tech.	Adv. In Finishing	TT-409B	https://nptel.ac.in/courses/116/102/116102054/

Sr.	SEM	CLASS	DEPT. COURSE	NPTEL WEB LINK
1	I	TY	PCC-TT302 Fabric forming technology- III	https://nptel.ac.in/courses/116/102/116102005/ https://nptel.ac.in/courses/116/102/116102005/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/ https://nptel.ac.in/courses/116/102/116102017/
2	I	Final	TT 403 Production Management	https://youtu.be/CYoMGVJk_2s https://nptel.ac.in/courses/110/106/110106045/ https://nptel.ac.in/courses/110/106/110106045/
3	II	TY	HMC 391 Costing & Financial Management	https://nptel.ac.in/courses/110/101/110101132/# https://nptel.ac.in/courses/110/101/110101131/# https://youtu.be/eUMwww5zDW0 https://nptel.ac.in/courses/110/101/110101004/
4	II	Final	TT 408D Indian	www.texmin.nic.in - Annual report 2019-20 www.citiindia.com - Annual report 2019-20

			Textile & Clothing Industry	www.slideshare.com - Industrial laws
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Sr No	SGGS Course	NPTEL Course
1	PCC-TT201 Fabric Forming Technology – I (SY Textile)	Fabric Manufacture - I
2	PCC-TT206 Fabric Forming Technology – II (SY Textile)	Fabric Manufacture - I
3	TT405 Knitting & Nonwovens (Final year)	NPTEL Course 1 Knitting Technology & NPTEL Course 2: Nonwoven Technology
4	TT408A Process Control in Weaving (Final year)	

Sem	Class	Course at textile department, SGGSI&T, Nanded		Equivalent at NPTEL				
		Course code	Course name	Unit/Topics	Course name	Topic & sub topic	Web/Video link	
I	T.Y	PCC - TT303	Man made fibres	Unit 2 Fundamentals of melt spinning, Components, Melt spinning variables and their impact	Manufactured fibre technology	Melt spinning -Introduction to melt spinning line	https://nptel.ac.in/courses/116/102/116102010/	
				Unit 3 Synthesis of Polyethylene Terephthalate		Polymerisation of important fibre -Polyesters -Side reactions in melt polymerization		
				Nylon 6, Nylon 6, 6		Polymerisation of important fibre -What are polyamides -Polymerisation of Nylon 6 - Polymersiation of Nylon 6, 6 - Synthesis of Modified Polyamides (Nylon 6)		
				Acrylic fibers		-Fibre forming acrylonitrile polymer -Methods of radical polymerization		
				Unit 3 Properties of Polyethylene Terephthalate, Nylon & acrylic	Textile fibres	Textile fibres -Synthetic fibres -Polyester -Acrylic -Nylon		https://nptel.ac.in/courses/116/102/116102026/
				Unit 4 Brief overview about polyethylene	High Strength High Modulus Fibres	High Strength High Modulus Fibres -Gel spun pe fibres		https://nptel.ac.in/courses/116/102/116102006/
			Unit 4 Brief overview about synthesis	Manufactured fibre technology	Polymerisation of important fibre -Polyolefins	https://nptel.ac.in/courses/116/102/116102010/		

			of polypropylene			
			Unit 5 Properties of Viscose rayon	Textile fibres	Textile fibres -Regenerated fibres -Viscose -The polymer system -Lyocell -Applications	https://nptel.ac.in/courses/116/102/116102026/
			Unit 5 Brief overview of derivatives of viscose rayon	High performance fibres	Other performance fibres -Lyocell fibres	https://nptel.ac.in/courses/116/102/116102006/
			Unit 6 Brief overview about synthesis of Aramids, Carbon, Glass fibers, Properties and Applications.		High strength High modulus fibres -Aramids -Manufacturing of carbon fibres Inorganic fibres -Glass fibers	
			Unit 10 Developments in Manmade Fibers: Microfilaments, Bicomponent Fibers.		Smart/Functional Specialty Fibers -Bicomponent & other speciality fibres	
B. Tech	TT401	Technical Textiles-I	Unit I What are Technical textiles? Application areas, Fibres that are used for Technical textiles, Use of Technical textiles globally	Technical Textiles	Lecture # 1 Introduction to Technical Textiles mod01lec01 Lecture # 2 Introduction to Technical Textiles mod01lec02	https://www.youtube.com/watch?v=GLHt15zb-50&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=3&t=0s https://www.youtube.com/watch?v=hAXFihq1hGI&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=3
		Technical Textiles-I	Unit 7 Filter fabrics Unit 12 Filtration	Technical Textiles	Lecture # 13 Filter Fabrics mod05lec13 Lecture # 14 Filter Fabrics mod05lec14 Lecture # 15 Filter Fabrics mod05lec15	https://www.youtube.com/watch?v=QwUVYQA7MhU&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=14 https://www.youtube.com/watch?v=P_9udWcqFzQ&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=15
			Unit 8 Automotive textiles Unit 10 Air bags		Lecture # 34 Automotive textiles	https://www.youtube.com/watch?v=VV4LDYFn1rE&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=35
		Unit 14 Geotextiles	Lecture # 16 Geotextiles mod06lec16 Lecture # 17 Geotextiles (Contd...) mod06lec17		https://www.youtube.com/watch?v=YUYBjf6l7ms&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=17 https://www.youtube.com/watch?v=AN1fTGTre7g&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=18	

						<p>Lecture # 18 Geotextiles (Contd...) mod06lec18</p> <p>Lecture # 19 Geotextiles (Contd...) mod06lec19</p>	<p>https://www.youtube.com/watch?v=ee8EZzjlxWQ&list=PLp6ek2hDcoNB0s6FY-qTUyNJC3zsFV3AM&index=19</p> <p>https://www.youtube.com/watch?v=w03noT-c4qQ&list=PLp6ek2hDcoNB0s6FY-qTUyNJC3zsFV3AM&index=20</p>
II	S. Y	PCC - TT2 07	Textile Testing-II	Unit I Fabric testing	Evaluation of Textile materials	<p>Lecture # 38 Evaluation of bursting & tear strength of fabrics mod12lec37</p> <p>Lecture # 39 Evaluation of pilling and abrasion properties of fabrics mod12lec38</p> <p>Lecture # 40 Evaluation of low stress mechanical properties of textile materials mod12lec39</p> <p>Lecture # 41 Evaluation of low stress mechanical properties of textile materials (Contd...) mod12lec40</p> <p>Lecture # 4 Testing of Transmission Characteristics of Textile Fabrics mod02lec04</p> <p>Lecture # 5 Testing of Transmission Characteristics of Textile Fabrics (contd...) mod02lec05</p> <p>Lecture # 6 Testing of Transmission Characteristics of Textile Fabrics (contd...) mod02lec06</p>	<p>https://www.youtube.com/watch?v=GV-bpzYUyxs&list=PLp6ek2hDcoNB-GLehYlo1QI5LqVubhRzR&index=38</p> <p>https://www.youtube.com/watch?v=bFB_KHxBOEI&list=PLp6ek2hDcoNB-GLehYlo1QI5LqVubhRzR&index=39</p> <p>https://www.youtube.com/watch?v=cts9HNOi7i4&list=PLp6ek2hDcoNB-GLehYlo1QI5LqVubhRzR&index=40</p> <p>https://www.youtube.com/watch?v=wQComd1Wpma&list=PLp6ek2hDcoNB-GLehYlo1QI5LqVubhRzR&index=41</p> <p>https://www.youtube.com/watch?v=x04Kgf5IYUw&list=PLp6ek2hDcoNAh7Z2KLuiLmTQv3uBEy3Qj&index=25</p> <p>https://www.youtube.com/watch?v=v_SJlrV7wBc&list=PLp6ek2hDcoNAh7Z2KLuiLmTQv3uBEy3Qj&index=3</p> <p>https://www.youtube.com/watch?v=G117N09AmUU&list=PLp6ek2hDcoNAh7Z2KLuiLmTQv3uBEy3Qj&index=4</p>
				Unit II & Unit III	Evaluation of Textile materials	<p>Lecture # 15 Evaluation of Cotton Fibre Properties: (HVI & AFIS) mod05lec15</p>	<p>https://www.youtube.com/watch?v=H9PXj3oNFjE&list=PLp6ek2hDcoNB-GLehYlo1QI5LqVubhRzR&index=17&t=2s</p>
				Unit IV & Unit V	Testing of Functional & Technical Textiles	<p>Lecture # 1 Testing of low stress mechanical properties of textile fabrics mod01lec01</p> <p>Lecture # 2 Testing of low stress mechanical properties of textile fabrics (Contd...) mod01lec02</p> <p>Lecture # 3 Testing of low stress mechanical properties of textile fabrics (Contd...) mod01lec03</p>	<p>https://www.youtube.com/watch?v=ktY7tNZ7z8A&t=2360s</p> <p>https://www.youtube.com/watch?v=ZgvMexFax00&list=PLp6ek2hDcoNAh7Z2KLuiLmTQv3uBEy3Qj&index=15</p>

						https://www.youtube.com/watch?v=mpxKRXkqwgw&list=PLp6ek2hDcoNAh7Z2KLuiLmTQv3uBEy3Qj&index=25&t=31s
T. Y	PEC - TT3 07	Fibers for composites	Unit 1 Composites	Technical Textiles	Lecture # 3 Textile Reinforced Composites mod02lec03	https://www.youtube.com/watch?v=3CY1wN9YJq8&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=4
			Unit 2 Fibers & Unit 3 Matrix materials Unit 5 Mechanics		Lecture # 4 Textile Reinforced Composites (Contd...) mod02lec04	https://www.youtube.com/watch?v=mfESDjvaCu0&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=5
					Lecture # 5 Textile Reinforced Composites (Contd...) mod02lec05	https://www.youtube.com/watch?v=NC3LUTBvsB0&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=7&t=902s
			Unit IV Fabrication	Processing of polymers and polymer composites	Lecture - 17 Hand lay-up Lecture -25 Pultrusion process Lecture -13 Blow moulding Lecture-19 Compression moulding Lecture – 24 Filament winding Lecture-23 Resin transfer moulding	https://www.youtube.com/watch?v=kC5VRV8vWkM&list=PLSGws_74K01_G67ptndBraskY3jCW7FLQ&index=17 https://www.youtube.com/watch?v=gu0Fn0hJ8oU&list=PLSGws_74K01_G67ptndBraskY3jCW7FLQ&index=25 https://www.youtube.com/watch?v=LHquzUSOX0E&list=PLSGws_74K01_G67ptndBraskY3jCW7FLQ&index=13 https://www.youtube.com/watch?v=is4hg6OfgS4&list=PLSGws_74K01_G67ptndBraskY3jCW7FLQ&index=19 https://www.youtube.com/watch?v=CX3WBhS7t1L&list=PLSGws_74K01_G67ptndBraskY3jCW7FLQ&index=24 https://www.youtube.com/watch?v=wijp-eMVNV4&list=PLSGws_74K01_G67ptndBraskY3jCW7FLQ&index=23
B. Tech	TT4 08B	Technical Textiles -II	Unit 1 Heat and flame protection	Textile finishing	Lecture # 19 Fire retardant finishing mod08lec19 Lecture # 20 Fire retardant finishing mod08lec20 Lecture # 21 Fire retardant finishing mod09lec21	https://www.youtube.com/watch?v=Yz8x_3blQYs&list=PLp6ek2hDcoNBzVRAKU71CeCKZvdcRErKa&index=16 https://www.youtube.com/watch?v=GV8e8RKN_tA https://www.youtube.com/watch?v=0-MJAsyUeOY&list=PLp6ek2hDcoNBzVRAKU71CeCK

						ZvdcRErKa&index=19&t=0s
		Technical Textiles -II	Unit 3 Mechanical protective clothing -Bullet proof principles, mechanism of ballistic impact, textile materials for ballistic impact, textile materials for ballistic protection, design of ballistic vests and helmets, ballistic testing & evaluation	Technical Textiles	Lecture # 30 Ballistic protective textiles	https://www.youtube.com/watch?v=pStOOR5iHwE&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=31
			Unit 5 Textiles in Sports		Lecture # 24 Sports textiles mod09lec24 Lecture # 25 Sports textiles (Contd...) mod09lec25 Lecture # 26 Sports textiles (Contd...) mod09lec26	https://www.youtube.com/watch?v=OqxDok989_s&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=25 https://www.youtube.com/watch?v=cBAA3SUqVB8&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=26 https://www.youtube.com/watch?v=mjagIgL5-wg&list=PLp6ek2hDcoNBOs6FY-qTUyNJC3zsFV3AM&index=27