Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

Name of Program: B.TECH (Textile Engineering)

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BBAI501	ODS	HUMAN VALUES AND PROFESSIONAL ETHICS	60	20	20	0	0	3	1	0	4

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

The objective of the course is to disseminate the theory and practice of moral code of conduct and familiarize the students with the concepts of "right" and "good" in individual, social and professional context

Course Outcomes (COs)

Student will be able

1. Help the learners to determine what action or life is best to do or live.
2. Right conduct and good life.
3. To equip students with understanding of the ethical philosophies, principles, models that directly and indirectly affect business.

Course Contents:

Unit I

Human Values: Values; Types, Features and Classification, Sources of Value System, Values across Cultures.

Unit II

Morality: Norms, Beliefs, Attitude, Moral Norms, Moral Values, Moral Standards

Unit III

Professional Ethics: Ethics; Nature, Characteristics and Needs, Ethics V/s Morals and Values, Ethico-Moral Action, Ethical Codes, Ethical Practices

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Unit IV

Nature and Dimensions of Attitude: Components of Attitude, Attitude Formation, Functions of Attitude, Changing Attitude

Unit V

Moral Values and Character Building: Character; Meaning, Important, Components of Character, Character Development

References:

1. Society and Politics in India - Andre Beteille
2. Values and Ethics for Organisations - Chakraborty, S. K.
3. Business Ethics - An Indian Perspective, Pearson - Fernando, A.C.
4. Engineering Ethics, Pearson Education/Prentice Hall, New Jersey - Charles D. Fleddermann,
5. Ethics and the Conduct of Business, Pearson Education, New Delhi - John R Boatright
6. Business ethics. latest ed. Oxford University Press Inc., NewYork - Crane, Andrew and Dirk Matten.
7. Murthy, C.S.V., Business Ethics – Text and Cases, Himalaya Publishing House Pvt. Ltd., Lst Ed.
8. Evaluation of a character education curriculum. In D., Campbell, V., & Bond, R. (1982).
9. Education for values. New York: Irvington Publishers , McClelland (ed.).
10. Organizational Behaviour, Pearson Education, 13th Ed., 2009 - Stephen P. Robbins, Timothy A Judge, SeemaSanghi
11. Organisational Behaviour,Lst Edition, Cengage Learning, India, Nelson.
12. Human Relations and Organizational Behavior: A Global perspective, Macmillan latest Ed. - R. S. Dwivedi

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			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX601	DCS	FABRIC MANUFACTURING - III	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit; ***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. The students will be able to describe the working of various mechanisms automatic loom.
2. To describe the working of Various Auxiliary Motion.
3. The students will be able to describe the working of multiple box looms.
4. The students will be able to describe the working of various mechanism of terry loom.

Course Outcomes (COs)

Student will be able

1. Demonstrate the knowledge of Let-off mechanism and Take-up mechanism and adjust the desired PPI.
2. Demonstrate the knowledge of working mechanism of auto loom and can prepare fabric of desired quality.
3. To use the knowledge of auxiliary motions and maintain the quality of fabric.
4. Use the knowledge of multiple box looms and can prepare fabric of desired weft pattern.
5. Demonstrate the knowledge of working mechanism of Terry loom and can prepare terry towel of desired quality.

Course Contents:

Unit I

Let-off and Take-Up motions: positive/controlled, warp tension control, working principles and features of Ruti, Bartlet and Saurer let-off motions. Continuous Positive type take-up motion, electronic let-off and take-up motions.

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Unit II

Automatic looms: different types of mechanical weft feelers e.g. side sweep and depth feelers, electrical & electronic weft feelers, shuttle protecting motion, pirn changing and shuttle changing mechanism, temple cutters and unifil loom winder.

Unit III

Warp stop motion: mechanical and electrical types; Weft stop motion**:** Side and center weft fork motion, Warp protecting motion: loose reed and fast reed warp protecting motion and Warp easing motion.

Unit IV

Multiple boxes– weft patterning and mixing, pick at will type multiple box loom, Cowburn & Peck (Eccles); preparation of card chain for 4x1 eccles box motion for different weft pattern, introduction to card saving device.

Unit V

Terry Loom: essential requirement of terry weaving, different terry mechanisms: cam driven 3-pik terry mechanism, dobby driven 3-pik terry mechanism, heading motion, fringing motion.

List of Practical (Expand it if needed):

1. To study the working of Ruti-B positive let-off motion.
2. To study the continuous positive Take-up motion.
3. To study the working of Weft Feeler and Shuttle Protector Mechanism.
4. To study the working of the pirn change mechanism in automatic looms.
5. To study the working of the Side Weft Fork mechanism.
6. To study the working of Loose Reed mechanism.
7. To study the working of Fast Reed mechanism.
8. To study the working of Mechanical warp stop motion.
9. To study the working of electrical warp stop motion.
10. To study the working of 4 x 1 Eccle's drop box motion.

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References:

1. Weaving Vol. II - Bannerjee N N
2. Fancy Weaving – Aswani K T
3. Principle of Weaving - Marks & Robinson
4. Preparation & Weaving Machinery - Ormerod A
5. Woven Fabric Production – II - NCUTE Publication (2002) – 1st Edition
6. Dobby, Jacquard; Drop Box & Terry loom
7. Weaving Machines, Mechanisms and Management - Talukdar M K Sriramulu P K
8. Mechanism of Weaving - Ajgaonkar D B , Fox
9. Loom shed –Silver Jubilee Monograph Series. - BTRA
10. Fabric Forming - Hasmukharai B
11. Electronic Controls for Textile Machines; NCUTE Pub.(2003) - Joshi Hiren and Joshi Gauri
12. Weaving Tech. & Operations - Ormerod Allan and Sondheln Walter S

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Name of Program: B.TECH (Textile Engineering)

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX602	DCS	TEXTILE TESTING - II	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. Students will have knowledge of tensile testing and its Principle and will be accurately assess the textile material as per the requirement.
2. Graduate will accurately assess and test the fabric properties (functional and aesthetic) according to their application & requirement.

Course Outcomes (COs)

Student will be able

1. Measure evenness and irregularity techniques of textile testing.
2. Describe tensile properties and its principle.
3. Demonstrate the methods to evaluate fabric properties
4. Asses the fabric properties and its importance in real life situations.

Course Contents:

Unit I

Evenness testing: Concepts of evenness, index of irregularity, nature and causes of irregularity, length–variance curve, methods of measuring and assessing irregularity, evaluation and interpretation of test results, spectrograph, analysis of spectrograph, like periodic fault, drafting wave, peaks, effects of irregularities.

Unit II

Tensile testing of yarn and fabric, terms and definition with their importance, concept and application of CRL, CRE and CRT principle, factors affecting the result of tensile experiments, load-elongation curve and its conversion to stress-strain curve.

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Unit III

Tensile properties-terms and definition and their units, experimental methods, effects of different variability on the tensile properties, different models to represent the tensile behavior of visco-elastic material, concept of mechanical setting of textile material.

Unit IV

Fabric testing: measurement of physical parameters e.g., length, width, weight/length, thickness, crimp, etc. Importance of measuring equipments of fabric properties e.g. drape, handle, stiffness, crease recovery, pilling, wear and abrasion.

Unit V

Bursting test, air permeability, water permeability, water-proofing, tearing strength, shrinkage, grab test, color fastness tests– washing, rubbing, sublimation, perspirations, dry cleaning, flammability test- assessment of aesthetic of fabrics by Kawabata.

List of Practical (Expand it if needed):

1. Determination of Fabric tensile strength (strip) & elongation
2. Determination of Fabric strength (Grab method)
3. Determination of Fabric tearing strength
4. Determination of Bursting strength of fabric
5. Determination of Fabric crease recovery
6. Determination of Fabric stiffness
7. Determination of Water repellency of fabrics
8. Determination of Pilling resistance of fabrics
9. Determination of Abrasion resistance of fabrics
10. Determination of Single yarn strength, Lea strength

References:

1. Principle of Textile Testing - Booth J.E.
2. Handbook of Textile Testing & Quality Control - Grover B E and Hamby D S
3. Progress in Textiles Science and Technology–Vol.1, Testing & Quality Management - Kothari V K
4. Physical properties of Textile Fiber- Morton &Hearle
5. Textile Testing - Angappan P, R. Gopalakrishnan.
6. Management of Quality in the Apparel industry - Mehta Pradip V & Bhardwaj Satish K;

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Name of Program: B.TECH (Textile Engineering)

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX603	DCS	TEXTILE CHEMICAL PROCESSING - I	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
*__Teacher Assessment__ shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. Students will be able to use effectively principles and mechanisms of pre-treatment processes on textile goods.
2. Students will be able to dye different types of fabric accurately according to requirement.

Course Outcomes (COs)

Student will be able

1. Apply various principles and mechanisms of pre-treatment processes in textile wet processing.
2. Differentiate the various chemicals used in the preparatory and Dyeing processes and utilize them according to end use

Course Contents:

Unit I

Sequence of chemical processing of textiles, natural and added impurities in textiles, introduction to various preparatory processes e.g. singeing, scouring and bleaching for different natural and synthetic materials and blends.

Unit II

Mercerizing of cotton, Optical whitening agents and their use, heat setting of synthetic fibre fabrics,

Unit III

Classification of different classes of dyes according to their chemical composition and application, Brief introduction to dyeing of natural and synthetic fibre with various dye classes e.g. Direct, Basic, Acid, Sulphur, Vat, Solubulised vat, Azoic, Reactive and Disperse.

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Unit IV

Brief introduction to dyeing of yarns and fabrics with various dye classes e.g. Direct, Basic, Acid, Sulphur, Vat, Solubilised vat, Azoic, Reactive and Disperse.

Unit V

Different machines involved in the dyeing processes. Dyeing of blends. Colour fastness of dyed textiles, Shade percentage and its measurment.

List of Practical (Expand it if needed):

1. Chemical identification of textile fibres.
2. Scouring of cotton, bleaching of cotton with hypochlorite, sodium chlorite and Hydrogen peroxide.
3. Application of direct, Vat, sulpher, reactive and napthol dyes on cotton and necessary after treatments.
4. Scouring of cotton hank and fabric.
5. Bleaching of cotton hank and fabric.
6. Mercerization of cotton fabric.
7. Dyeing of cotton by reactive dyes.
8. Dyeing of cotton by sulphur dyes.
9. Dyeing of cotton by vat dyes.
10. Dyeing of cotton by azo dyes.

References:

1. Scoring And Bleaching - Shennai
2. Dyeing - Shennai
3. Textile Scoring & Bleaching - Tiotman
4. Cellulosic Dyeing - John Shore

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Name of Program: B.TECH (Textile Engineering)
BTTX604 ELECTIVE II

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX614	DCS	GARMENT MANUFACTURING TECHNOLOGY	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. Students will be able to explain the garment process line and manufacturing machinery
2. Students will be able to analyse garment patterns, garment seams & Stitches according to requirement

Course Outcomes (COs)

Student will be able

1. Understand and describe the garment manufacturing process with pre production-production and post production process.
2. Create various patterns of garment
3. Asses designing and caring of garment
4. list various sewing machines with specification, details, and applications
5. List and compare various types of seams and stitches.

Course Contents:

Unit I

Marker Planning, marker utilization, Manual Marker Planning, Planning and layout of pattern pieces. Carbon duplicating, Spirit duplicating or hectograph, carbon duplicating, Diazo photoelectric method, Computerized Marker Planning; Introduction to grading; Definition, sizes of surveys, Basic size chart, Factors affecting grading, standard checklist before grading, Grading methodology- Naste grading, Track grading. Sleeve variation: Cap sleeve, regular shirt sleeve, Bishop-sleeve, Lego's mutton sleeve, Puff sleeve; Cuffs and Sleeve opening; Sleeves for loose fit garments with special reference to gents shirts. Collars - Set in collar and collar variation. Band collar, Peter pan collar, Sailor collar, Gent's shirt collar - one piece and two piece collar, Convertible collar Drafting of men's shirt block

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Unit II

Spreading, requirements of spreading process, shade sorting of cloth pieces, correct ply direction and adequate lay stability, Alignment of piles, ply tension, fabric faults elimination, Elimination of static electricity, Methods of spreading - Manual, Machine spreading.

Unit III

Objectives of Cutting, Methods of cutting, Manual cutting, straight knife, round knife, bent knife, notches, drills, computer controlled cutting knives, Die cutting, Laser cutting, Plasma cutting, water jet cutting, ultrasonic cutting, Sewing seams, seam types, superimposed seam, Lapped seam, Bound seam, Flat and fell seam, French seam, Bias seam, Hong Kong, Overcoat/serging, decorative stitching, edge neatening; Stitch types, Lock stitches, Chain stitches, hand stitches, Multithread chain stitches, over edge chain stitches, covering chain stitches. Sewing Machinery different types, Basic sewing machine, Simple automatics Feed mechanism, Drop feed system, Differential feed system, Adjustable top feed, Needle feed, Puller feed. Sewing machine, needles; sewing threads, quality characteristic of threads, finishes, thread packages, seam strengths, elasticity, sewing problems. Problems of stitch formation, Seam pucker, Fabric damages, Mechanical damages, Needle heating, Sewability and Tailorability.

Unit IV

Button hole machines, button sew machines, Bar tack machines, Label sewers. Components for the construction of garments, label, motifs, lining, interlinings, laces braids, elastic hook and loop fastening, Seam binding, Shoulder pads, Eyelets, zip fasteners, Button, Tack buttons, snap fasteners, Rivets.

Unit V

Fusing requirements, fusion process, types of fusible resins, Polyethylene, Polypropylene, Polyamides, Polyesters, Polyvinyl chloride; Means of fusing, Temperature, Pressure, Time; Fusing equipment, specialized fusing process, Flat bed fusing process, continuous fusing systems, High frequency fusing, Hand iron, steam press; Methods of fusing, reverse fusing, sandwich fusing, double fusing, shirt collar fusing, fusing of tailored jackets fronts, welding, adhesives, molding. Garment finishing process - Pressing, categories of pressing, Means of pressing, Pressing equipments and methods, Iron, Steam Press, Tunnel, Pleating, Permanent Press. Packing Methods of folding garments, Mechanical method, and Flannel method. Procedure for folding different garment in different sizes and packing materials used for packing garments, plastics, pins, card sheets, plastic butterfly clips, brass pins, collar stands tags; Packaging instructions for tags, labels and packets.

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List of Practical (Expand it if needed):

1. To discuss the garment process line
2. To study pattern making, marker planning with grading
3. To study sewing machine with machine specification
4. To study lock stitch with fabric cutter machine
5. To study interlock machine
6. To study overlock machine
7. To study button sewing machine and button holing machine.
8. To study feed off arm machine
9. To study barteck machine
10. To discuss quality characteristics of garment (men's shirt, trouser etc.)

References:

1. Garment Technology for fashion Design - Gerry Cooklin
2. Introduction to clothing manufacture - Gerry Cooklin.
3. Technology of Clothing manufacture - Carr.
4. Technical Textiles - Shaleco E, Bradlock and Marce O-Hall cony
5. Introduction to clothing production management - Chuter A.J.
6. Clothing Technology - R.L. Friend
7. Pattern Making - Martin Shoben
8. Dress Fitting - Natalie Bray
9. Pattern Making - Armstrong, Helen Joseph

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Shri Vaishnav Vidyapeeth Vishwavidyalaya, Indore

Name of Program: B.TECH (Textile Engineering)
BTTX604 ELECTIVE II

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX624	DCS	TECHNICAL TEXTILES - II	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. Student will demonstrate the require properties and manufacturing process of conveyor belts.
2. Student will investigate the physical and mechanical properties of tire glass fibre.
3. Student will define the importance of medical & Geo textiles.

Course Outcomes (COs)

Student will be able

1. Explain the essential requirements of Geo textile and medical textiles.
2. Solve the problems occurred during manufacturing of glass fibres.
3. Develop the different structure of tire conveyor & Hose fabrics.
4. Analyze the physical and mechanical behavior of Geo textiles.
5. Explain the principle & manufacturing process of medical textiles.

Course Contents:

Unit I

Technical Fabric Structure: Triaxial Weaves, Warp Knitting, Different laying methods of nonwoven, different bonding methods of nonwoven.

Unit II

Composites: Composite materials, Textile reinforcement, Basic mechanics of composite reinforcement, Woven fabric-reinforced composites, braided reinforcement, Knitted reinforcement.

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Unit III

Geotextiles: Geotextile functions raw material - woven, non-woven and knitted geo textile. Application of geo textiles for drainage application, separation application, soil reinforcement and filtration and erosion control.

Unit IV

Medical Textiles: Surgical Textiles, Suture Threads. Cardio Vascular Textiles - Knitted cardiac biological valves. Dialysis Textiles - Hollow fibers as dialysis membrane. Hospital Textiles - operation and post operating clothing - disposable drapes. Sanitary applications.

Unit V

Application of Technical Textiles: Fire protection , thermal and electrical insulation, Waterproof breathable materials, Moisture retaining soil mats soil sealing systems, Conveyor belts - power transmission belts, HOSE: Construction and applications.

List of Practical (Expand it if needed):

1. To study and analysis of triaxial fabrics used as Geotextiles materials.
2. To study and analysis of spacer fabrics and its application.
3. To study the properties of various functional Fabrics.
4. To Study the various properties of woven Geotextiles.
5. To Study the various properties of non - woven Geotextiles.
6. To Study the various properties of knitted Geotextiles.
7. To Study the various properties of suture threads.
8. To Study the various properties of various Medical Textiles products.
9. To Study the various properties of Waterproof breathable materials.
10. To Study the various properties of Conveyor belts.

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References:

1. Technical Textiles - NCUTE Programme Report 2002 - Prof. P.A.Khatwani, S.S.Yardi
2. Guide to Geotextiles Testing - Mandal J.N., Divshikar D.G.
3. Coated and Laminated Textiles - Walter Fung
4. Advances in Fibre Science - Mukhopadhyay S. K.
5. Composite Technologies - Stuart M. Lee
6. Handbook of Fibre Rope Technology - H.A. Mckenna et.al. Textile Inst. Pub.
7. Smart Fibres fabrics and clothing - Xiaoming Tao
8. Fibre and Whisker Reinforce Ceramics for Structural Applications - David Belitskus
9. Mechanics of Textile & Laminated Composites - A.E.Bogdanovich & C.M.Pastore
10. Hand book of nonwovens - S. J. Russell, Woodhead 2007
11. Geosynthetics in civil engineering - R. W. Sarsby, Woodhead 2007
12. Handbook of Technical Textiles - Anand S C

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Name of Program: B.TECH (Textile Engineering)
BTTX604 ELECTIVE II

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX634	DCS	HOME TEXTILE	60	20	20	30	20	3	1	2	5

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. Correctly demonstrate the principle and manufacturing process of home textile products.
2. Understand the requirement, importance and application area of home textiles.

Course Outcomes (COs)

Student will be able

1. Design the product as per customer requirement.
2. Solve technical problems related to manufacturing of home textiles.
3. Develop the more technical property oriented products.

Course Contents:

Unit I

Textile for seating – Upholstery fabrics for domestic applications scope, fixed upholstery, non-stretch loose covers, stretch covers. Upholstery fabrics for contract use general, automotive applications, Commercial applications.

Unit II

Window Textiles – Sun filters (Sheers and nets), Semi-sheers, Reflective textiles, curtain fabrics & drapes, Blinds.

Unit III

Bed Textiles – Sheets & Pillow Cases, Quilted Textile, Blankets & Rugs - Jacquard blankets, Printed blankets, Fire proof blankets, Baby blankets. Bed Spreads, Mattress covers, (Ticking)

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Unit IV

Bathroom Textiles - General shower curtains, Terry Toweling.

Unit V

Table Textiles – Table cloths – Colour – Woven & Printed type, jacquard types, embroidered types, non-woven types. Table mats – Colour, woven, Printed jacquard, embroidered.

List of Practical (Expand it if needed):

1. Testing of various home textile materials
2. Study of structures of various home textile product
3. Study of various designs used in home textile products
4. Study of performance of various home textile products

References:

1. Textile Floor coverings - G.H. Crawshaw
2. Textile Progress - Vol.9, No.2, TheTextile Inst. Publisher.
3. Interior Furnishings - Textile Progress, Vol.11, No.1, By Mortimer O.Shea, TheTextile Inst. Publication
4. Performance of Home Textiles - Subrata Das, Woodhead Publications India PvtLtd.

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Name of Program: B.TECH (Textile Engineering)

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX605	DCS	APPAREL QUALITY CONTROL	0	0	0	30	20	0	0	2	1

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;
***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. Students will have knowledge of process of quality control and its Principle and will be accurately assess the textile material as per the requirement.
2. Graduate will accurately check and access the fabric properties (functional and aesthetic) according to their application & requirement.

Course Outcomes (COs)

Student will be able
1. To flow accurate process of quality control.
2. To assess the various defects in the garment.
3. To assess the effect of thread tension on the seam strength.
4. To solve problem occur during garment inspection.
5. To improve the quality of the fabric.

List of Practical (Expand it if needed):

1. To understand the process of apparel quality control.
2. To study the tensile properties of given fabric.
3. To study the sewability and calculate seam efficiency of given fabric.
4. To test the zippers and fastners, sewing threads.
5. To study inspection system
6. To inspect the zipper, buttons, sewing threads and interlinings.
7. To study the different checking points of garment manufacturing.

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8. To study the various types of garment defects.
9. To discuss the assessment of apparel quality
10. To study the latest garment measurement system - KABAWATA etc.

References:

1. Managing Quality in the Apparel Industry - Pradip V. Mehta, S. K. Bharadwaj
2. Progress in Textiles Science and Technology Vol.I Testing and QM; V. K. Kothari
3. Knitted Clothing Technology - Terry Brackenbury
4. Sewing for fashion Design, Relis, Nuris and Strauss Gail, PHI 1997
5. Innovation and technology of woman's intimate apparel, Yu W Fan J & Harlock S C, Woodhead.

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Name of Program: B.TECH (Textile Engineering)

SUBJECT CODE	CATEGORY	SUBJECT NAME	TEACHING & EVALUATION SCHEME								
			THEORY			PRACTICAL		L	T	P	CREDITS
			END SEM University Exam	Two Term Exam	Teachers Assessment*	END SEM University Exam	Teachers Assessment*				
BTTX606	DCS	SEMINAR /GROUP DISCUSSION	0	0	0	0	50	0	1	0	1

Legends: **L** - Lecture; **T** - Tutorial/Teacher Guided Student Activity; **P** – Practical; **C** - Credit;

***Teacher Assessment** shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.

Course Educational Objectives (CEOs):

1. To improve the verbal communications and presentations skill of students.
2. To provide the extra knowledge on the topics beyond the syllabus.

Course Outcomes (COs)

Student will be able to

1. Communication verbally with proper presentation skills
2. Develop the interaction skills.
3. Design the power point presentation of various topics.

Course Contents:

Each student is required to deliver at least four presentations throughout the semester. The duration of presentation is maximum 10 minutes and 5 minutes for question answer. Assessment will be done based on their presentation skill, communications skill and knowledge on the topics.

References:

1. Various websites, journals and magazines, reference books etc.

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