

13. Courses of Study and Scheme of Assessment

BTECH FASHION TECHNOLOGY

(2015 REGULATIONS)
(Minimum credits to be earned: 185)

Code No.	Course	Hours / week				Maximum marks			
		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT
SEMESTER I									
15H101	Calculus and its Applications	3	2	0	4	50	50	100	BS
15H102	Physics	3	0	0	3	50	50	100	BS
15H103	Chemistry	3	0	0	3	50	50	100	BS
15H104	Problem Solving and C programming	2	2	0	3	50	50	100	ES
15H105	Textile Fibres	4	0	0	4	50	50	100	PC
15T104	English Language Proficiency	2	2	0	3	50	50	100	HS
15H110	Engineering Graphics	0	0	4	2	100	-	100	ES
15H111	Physics Laboratory I	0	0	2	1	100	-	100	BS
15H112	Chemistry Laboratory I	0	0	2	1	100	-	100	BS
15H214	Personality and Character Development	0	0	Refer sem 2 and footnote					MC
Total 31 hrs		17	6	8	24	600	300	900	
SEMESTER II									
15H201	Complex Variables and Transforms	3	2	0	4	50	50	100	BS
15H202	Yarn Technology	3	0	0	3	50	50	100	PC
15H203	Fabric Manufacturing and Design	4	0	0	4	50	50	100	PC
15H204	Properties of materials and measurements	3	0	0	3	50	50	100	BS
15H205	Applied Chemistry	3	0	0	3	50	50	100	BS
15T___	Language Elective	3	0	0	3	50	50	100	HS
15H210	Textile Manufacturing Laboratory	0	0	4	2	100	-	100	PC
15H211	Physics Laboratory II	0	0	2	1	100	-	100	BS
15H212	Chemistry Laboratory II	0	0	2	1	100	-	100	BS
15H213	Design Collection Laboratory	0	0	2	1	100	-	100	PC
15H214	Personality and Character Development	0	0	**	Grade	-	-	-	MC
Total 31 hrs		19	2	10	25	700	300	1000	

CAT-Category; BS – Basic Science; HS – Humanities & Social Sciences; ES – Engineering Sciences; PC – Professional Core; PE – Professional Elective; OE – Open Elective; EEC – Employability Enhancement Course, MC – Mandatory Course.

BTECH FASHION TECHNOLOGY**(2015 REGULATIONS)**

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		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT
SEMESTER II – Summer Term[€]									
15H215	Professional Skills	6	0	9	2	100	-	100	EEC
15H216	In-Plant Training and Technical Seminar	6	0	9	2	100	-	100	EEC
Total 30 hrs		12	0	18	4	200	-	200	

CA - Continuous Assessment

FE - Final Examination

** - Total 40 hrs in semesters I & II put together.

Grade: Completed / Not Completed.

€ - These courses will be conducted prior to the commencement of the third semester for a period of 4 weeks during summer term.

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Code No.	Course	Hours / week				Maximum marks				
		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT	
SEMESTER III										
15H301	Numerical Methods	2	2	0	3	50	50	100	BS	
15H302	Basics of Electrical and Electronics Engineering	3	0	0	3	50	50	100	ES	
15H303	Visual Dress Design	2	2	0	3	50	50	100	PC	
15H304	Knitting Technology I	2	2	0	3	50	50	100	PC	
15H305	Textile Chemical Processing Technology	3	0	0	3	50	50	100	PC	
15T070	Economics for Engineers	3	0	0	3	50	50	100	HS	
15H310	Fabric Analysis Laboratory	0	0	4	2	100	-	100	PC	
15H311	Knitting Laboratory	0	0	2	1	100	-	100	PC	
15H312	Textile Chemical Processing Laboratory	0	0	4	2	100	-	100	PC	
Total 31 hrs		15	6	10	23	600	300	900		

SEMESTER IV										
15H401	Probability and Statistics	2	2	0	3	50	50	100	BS	
15H402	Knitting Technology II	3	0	0	3	50	50	100	PC	
15H403	Mechanics of Machines	3	0	0	3	50	50	100	ES	
15H404	Garment Component Construction and Assembly	3	0	0	3	50	50	100	PC	
15H405	Pattern Engineering	2	2	0	3	50	50	100	PC	
15____	Open Elective I*	3	0	0	3	50	50	100	OE	
15H410	Fashion Designing Laboratory	0	0	2	1	100	-	100	PC	
15H411	Apparel Production Laboratory I	0	0	4	2	100	-	100	PC	
15H412	Apparel Machinery Laboratory	0	0	4	2	100	-	100	PC	
Total 30 hrs		16	4	10	23	600	300	900		

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 * – LTPE for open electives can be either 3 0 0 3 or 2 2 0 3.

Code No.	Course	Hours / week				Maximum marks			
		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT
SEMESTER V									
15H501	Textile and Apparel Quality Evaluation	2	2	0	3	50	50	100	PC
15H502	Textile Finishing and Garment care	3	0	0	3	50	50	100	PC
15H503	Apparel Machinery and Equipments	3	0	0	3	50	50	100	PC
15H504	Apparel Marketing and Merchandising	3	0	0	3	50	50	100	PC
15H505	Industrial Engineering	2	2	0	3	50	50	100	PC
15____	Open Elective II*	3	0	0	3	50	50	100	OE
15H510	Computer Aided Designing Laboratory I	0	0	4	2	100	-	100	ES
15H511	Apparel Production Laboratory II	0	0	4	2	100	-	100	PC
15H512	Textile and Apparel Quality Evaluation Laboratory	0	0	4	2	100	-	100	PC
Total 32 hrs		16	4	12	24	600	300	900	

SEMESTER VI

15H601	Apparel Costing	2	2	0	3	50	50	100	PC
15H602	Apparel Production Planning and Control	2	2	0	3	50	50	100	PC
15H603	Ergonomics in Clothing Industry	3	0	0	3	50	50	100	ES
15H604	Computer Graphics and Virtual Reality	2	2	0	3	50	50	100	ES
15____	Open Elective III*	3	0	0	3	50	50	100	OE
15H____	Professional Elective I	3	0	0	3	50	50	100	PE
15H610	Accessories and Embellishment Laboratory	0	0	4	2	100	-	100	PC
15H611	Computer Aided Designing Laboratory II	0	0	4	2	100	-	100	ES
15H612	Innovation Practices	0	0	4	2	100	-	100	EEC
Total 33 hrs		15	6	12	24	600	300	900	

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Code No.	Course	Hours / week				Maximum marks			
		Lecture	Tutorial	Practical	Credits	CA	FE	Total	CAT
SEMESTER VII									
15H701	Environment Engineering and Sustainability	3	0	0	3	50	50	100	HS
15H702	Apparel Size and Fit Analysis	2	2	0	3	50	50	100	PC
15H703	Clothing Science	3	0	0	3	50	50	100	ES
15H__	Professional Elective II	3	0	0	3	50	50	100	PE
15H__	Professional Elective III	3	0	0	3	50	50	100	PE
15H__	Professional Elective IV	3	0	0	3	50	50	100	PE
15H710	Virtual Garmenting Laboratory	0	0	2	1	100	-	100	ES
15H711	Computer Aided Methods Engineering Laboratory	0	0	4	2	100	-	100	ES
15H712	In - Plant Training and Presentation	0	0	2	1	100	-	100	EEC
15H720	Project Work I	0	0	4	2	100	-	100	EEC
Total 31 hrs		17	2	12	24	700	300	1000	

SEMESTER VIII

15H__	Professional Elective V	3	0	0	3	50	50	100	PE
15H__	Professional Elective VI	3	0	0	3	50	50	100	PE
15H820	Project Work II	0	0	16	8	50	50	100	EEC
Total 22 hrs		6	0	16	14	150	150	300	

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LANGUAGE ELECTIVES

15T080	Communication Skills for Engineers
15T081	Basic German
15T082	Basic French
15T083	Basic Japanese

OPEN ELECTIVES

(Students can opt for all open electives from single stream or several streams)

MATHEMATICS

15OH01	Advanced Linear Algebra
15OH02	Algebraic Structures
15OH03	Calculus of Variations and Tensor Analysis
15OH04	Graph Theory and its Applications
15OH05	Mathematical Finance
15OH06	Mathematical Modeling and Simulation
15OH07	Number Theory for Computing
15OH08	Operations Research
15OH09	Reliability and Quality Control
15OH10	Soft Computing
15OH11	Stochastic Models
15OH12	Quantitative Techniques for Textile and Apparel Industry

PHYSICS

15OH20	Analytical Techniques for Materials Characterization
15OH21	Laser Technology
15OH22	Micro Electromechanical Systems
15OH23	Nanomaterials and Applications
15OH24	Physics for Solar PV Systems and Solid-State Lighting Systems
15OH25	Sensors for Engineering Applications
15OH26	Thin Film Technology
15OH27	Nonlinear Science and Engineering Applications
15OH28	Nonlinear Fiber Optics
15OH29	Chaotronics

CHEMISTRY

15OH34	Chemistry of Nanomaterials
15OH40	Polymer Chemistry and Technology

COMPUTER APPLICATIONS

15OH45	Garment Modeling and Designing using Software Tools
15OH47	Data and File Structures
15OH48	Database Management System
15OH51	Mobile Application Development
15OH53	Object Oriented Programming
15OH55	Responsive Web Design
15OH59	Geographic Information System
15OH60	Programming for Robotics

HUMANITIES

15OH61	An Introduction to Indian Constitution
15OH62	Entrepreneurship
15OH63	Human Resource Management
15OH64	Industrial Psychology
15OH65	Principles of Management
15OH66	Business Statistics
15OH67	Disaster Management
15OH68	Financial and Managerial Accounting
15OH69	Marketing Management
15OH70	Defence Practices and Disaster Management

ENGLISH

15OH75	English and Soft Skills for Employability
15OH76	English for Competitive Examinations
15OH77	German Language – International Level A1.1
15OH78	German Language – International Level A1.2

APPLIED MATHEMATICS AND COMPUTATIONAL SCIENCES

15OH81	Data Structures and Algorithms
15OH82	Optimization Techniques
15OH83	Data Science
15OH84	Data Visualization
15OH85	Artificial Intelligence
15OH86	Pervasive Computing
15OH87	Parallel and Distributed Computing
15OH88	Cyber Security
15OH89	Randomized Algorithms
15OH90	Approximation Algorithms
15OH91	Network Science
15OH92	Applied Stochastic Processes
15OH93	Modelling and Simulation
15OH94	Graph Algorithms

OPEN ELECTIVES OFFERED BY ENGINEERING DEPARTMENTS

15ZH01	Multimedia Systems and Applications	(Department of Computer Science and Engineering)
15MH03	Industrial engineering and management	(Department of Mechanical Engineering)
15MH05	Six Sigma Project Methodology	(Department of Mechanical Engineering)
15RH02	Introduction to Robotics & Automation	(Department of Robotics and Automation Engineering)
15BH03	Water Resource Management	(Department of Biotechnology)
15IH03	Graphics and Multimedia	(Department of Information Technology)
15TH01	Characterization of Fibers and Polymers	(Department of Textile Technology)
15TH03	Technical Textiles in Engineering Applications	(Department of Textile Technology)
15TH04	Electro Active Textiles	(Department of Textile Technology)
15TH06	Industrial Textiles	(Department of Textile Technology)
15EH01	Sustainable Energy Systems	(Department of Electrical and Electronics Engineering)

PROFESSIONAL ELECTIVES

TECHNOLOGY ELECTIVES

15H001	Functional Apparels and Clothing
15H002	Home Textiles
15H003	Lean Manufacturing of Apparels
15H004	Apparel Work Study
15H005	Leather Apparel Technology
15H006	Operations Research for Apparel Industry
15H007	Specialty Fabrics and Technology
15H008	Denim Garment Manufacturing
15H009	Apparel Merchandising
15H010	Traditional Indian Textiles and Costume

FASHION ELECTIVES

15H018	Fashion Photography
15H019	Garment Trims and Accessories
15H020	Interior Designing
15H021	Intimate Apparels
15H022	Design of Sports Wear
15H023	Fashion Portfolio Development
15H024	Visual Merchandising

15H025	Fashion Evolution
15H026	Design and Development of Apparels
15H027	Industrial Pattern Drafting and Draping
15H028	Colour and Fashion
15H029	High Fashion Sewing Techniques
15H030	High Fashion Designing

APPAREL MANAGEMENT ELECTIVES

15H031	Apparel Logistics and Supply Chain Management
15H032	Total Quality Management
15H033	Brand Management and Advertising
15H034	Global Trade Management
15H035	Apparel Entrepreneurship
15H036	Digital Fashion Marketing
15H037	Fashion Retail Management
15H038	Enterprise Resource Planning in Apparel Industry
15H039	Luxury Brand Management
15H040	Fashion Forecasting

ONE CREDIT COURSES

OFFERED BY THE DEPARTMENT

15HF01	Effluent Treatment in Textile Processing
15HF02	Computerized Machine Embroidery
15HF03	Fashion Rendering
15HF04	Digital Fashion Designing & E - Portfolio Development
15HF05	Fashion Show Production
15HF06	Seamless Garments
15HF07	Fashion Illustration
15HF08	Plant Layout and Facility Planning
15HF09	Sourcing for Apparel Manufacturing
15HF10	Tech Pack Development and Interpretation
15HF11	Computer Aided Designing for Home Textiles

OFFERED BY HUMANITIES

15OF01	Export – Import Management
15OF02	Insurance & Risk Management
15OF03	Values and Ethics at Work Place
15OF04	Development of Industrialisation
15OF05	Creativity and Social Enterprise
15OF06	Social and Psychological Well Being
15OF13	Security Analysis and Portfolio Management
15OF14	Implementation of Quality Management System
15OF15	Financial Management
15OF16	Personality Development Through Transactional Analysis

OFFERED BY THE DEPARTMENT OF ENGLISH

15OF10	Corporate Communication
15OF11	Interpersonal and Organizational Communication
15OF12	Human Values Through Literature

OFFERED BY THE DEPARTMENT OF MATHEMATICS

15OF21	Principles of Business Analytics
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SUMMARY OF CREDIT DISTRIBUTION

B.TECH. FASHION TECHNOLOGY												
S. No	Course Work subject Area	Credits Per Semester								Total Credit	Credit Range	
		I	II	III	IV	V	VI	VII	VIII		Min	Max
1	HS	3	3	3	0	0	0	3	0	12	9	18
2	BS	12	12	3	3	0	0	0	0	30	27	36
3	ES	5	0	3	3	2	8	6	0	27	27	36
4	PC	4	10	14	14	19	8	3	0	72	54	72
5	PE	0	0	0	0	0	3	9	6	18	18	27
6	OE	0	0	0	3	3	3	0	0	9	9	18
7	EEC	0	0 + 4*	0	0	0	2	3	8	13+4*	18	27
	Total	24	25+4*	23	23	24	24	24	14	181+4*	162	234

* Summer Term