



Indira Chakravarty College of Home Science

IC College of Home Science
Dean: Prof. Saroj S. Jeet Singh

B. Sc. (Hons.) Home Science, 4- Year Programme
Courses: Semester-wise

Course No.	Course Title	Credits
Semester I		
CHEM 100	Introductory Chemistry (For students from Arts stream)	4 (3+1)
ENG 100	English and Technical Writing	2 (1+1)
FN 101	Traditional Indian Foods	2 (0+2)
FRM 101	Management of Family Resources	3 (2+1)
HDFS 101	Human Physiology	2 (2+0)
HECM 101	Introduction to Home Science and Extension Education	2 (2+0)
TAD 101	Basics of Clothing Construction	3 (1+2)
ZOO 101	Elementary Zoology (For students from Arts and Math stream)	2 (1+1)
NCC/NSS	National Cadet Corps/National Service Scheme	2 (0+2)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Arts/Bio/Math stream)	22 (12+10)/ 16 (8+8)/ 18 (9+9)
Semester II		
BOT 101	Elementary Botany (For students from Arts and Math stream)	2 (1+1)
COMP 100	Basics of Computer Applications	2 (0+2)
FN 102	Introduction to Food Science	3 (2+1)
FRM 102	Family Finance Management	3 (2+1)
HDFS 102	Fundamentals of Human Development	2 (1+1)
HDFS 103	Prenatal Care and Infant Development	3 (2+1)
HECM 102	Communication Management	4 (2+2)
MATH 100	Elementary Mathematics (For students from Arts and Bio stream)	2 (2+0)
TAD 102	Fundamentals of Weaving and Knitting	3 (2+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Arts/Bio/Math stream)	25 (14+11)/ 23 (13+10)/ 23 (12+11)
Semester III		
BIOCHEM 100	Introductory Biochemistry	3 (2+1)
FN 201	Human Nutrition	3 (2+1)
FRM 201	Housing and Space Management	3 (2+1)
HDFS 201	Early and Late Childhood	3 (2+1)

HECM 201	Diffusion and Adoption of Homestead Technologies	3 (2+1)
HECM 202	Women in Agriculture	2 (2+0)
PHY 100	Introductory Physics (For students from Arts stream)	4 (3+1)
TAD 201	Textile Science and Care	3 (2+1)
NCC/NSS	National Cadet Corps/National Service Scheme	2 (0+2)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Arts/Bio and Math stream)	26 (17+9)/ 22 (14+8)
Semester IV		
AGRON 206	Crop Production	2 (1+1)
FN 202	Normal and Therapeutic Nutrition	4 (2+2)
FRM 202	Fundamentals of Interior Decoration	3 (2+1)
FRM 203	Consumer Education	2 (2+0)
HDFS 202	Adolescence and Adulthood	3 (2+1)
HECM 203	Extension Training Management	3 (2+1)
HORT 101/ VSC 101	Fruit and Vegetable Production (To be taught jointly by Horticulture and Vegetable Science)	2 (1+1)
STAT 100	Elementary Statistics	2 (1+1)
TAD 202	Principles of Dyeing and Printing	3 (1+2)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits	25 (14+11)
Semester V		
FN 301	Food Preservation and Storage	2 (1+1)
FN 302	Community Nutrition	3 (2+1)
FRM 301	Appropriate Technologies for Rural Households	3 (2+1)
HDFS 301	Marriage and Family Dynamics	3 (2+1)
HDFS 302	Children with Special Needs	3 (2+1)
HECM 301	Programme Development for Rural Families	3 (1+2)
MICRO 100	Introductory Microbiology	2 (1+1)
TAD 301	Apparel Designing and Construction	3 (1+2)
TAD 302	Traditional Textiles of India	2 (1+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits	25 (13+12)
Semester VI		
*Courses common for all students:		
AG ECON 303/ MGT 301	Marketing and Sales Management (To be taught jointly by Agricultural Economics and Business Management)	2 (1+1)

FOR 302	Environmental Science (To be taught jointly by Forestry, Entomology, Agricultural Economics, Agricultural Meteorology, Agronomy and Soil Science)	2 (1+1) NC
PL PATH 203/ ENT 202/ NEMA 201	Plant Protection (To be taught jointly by Entomology, Plant Pathology and Nematology-40: 40:20)	2 (0+2)
HDFS 303	Personality Development	2 (1+1)
SOC 100	Rural Sociology and Human Psychology	2 (2+0)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits* (Common for all students)	9 (4+5)
Students are required to opt any one package of professional courses out of the six packages I to VI:		
Package I. Bakery and Confectionery (Foods and Nutrition)		
FN 391	Bakery Science and Cereal Technology	5 (1+4)
FN 392	Confectionery	4 (0+4)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	21 (5+16)
Package II. Nutrition and Dietetics (Foods and Nutrition)		
FN 393	Clinical Nutrition	2 (2+0)
FN 394	Hospital Dietetics	4 (1+3)
FN 395	Dietetic Foods	3 (0+3)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	21 (7+14)
Package III. Interior Decoration and Event Management (Family Resource Management)		
FRM 391	Household Furniture and Furnishings	4 (2+2)
FRM 392	Functional Interiors for Special Needs	3 (2+1)
FRM 393	Floor and Wall Treatments	3 (2+1)
TAD 393	Computer Aided Designing	3 (0+3)
	Total Credits	22 (10+12)
Package IV. Organization and Management of Early Childhood Programmes (Human Development and Family Studies)		
HDFS 391	Child and Family Counseling	3 (2+1)
HDFS 392	Early Childhood Education	3 (2+1)
HDFS 393	Teaching Material for Young Children-I	4 (1+3)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	22 (9+13)
Package V. Information Technology and Communication Management (Extension Education and Communication Management)		
HECM 391	Introduction to Mass Communication and Photo Journalism	4 (2+2)
HECM 392	Designing Information Material-I	3 (0+3)
HECM 393	Entrepreneurship Development	3 (2+1)

TAD 393	Computer Aided Designing	3 (0+3)
	Total Credits	22 (8+14)
Package VI. Apparel Production Management (Textile and Apparel Designing)		
TAD 391	Fashion Illustrations	3 (1+2)
TAD 392	Apparel Manufacturing through Flat Pattern	3 (1+2)
TAD 393	Computer Aided Designing	3 (0+3)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	21 (6+15)
Semester VII		
*Tutorial (1+0) (NC) is common for all students. Students will continue the same professional package opted in Semester VI:		
Package I. Bakery and Confectionery (Foods and Nutrition)		
FN 401	Food Hygiene and Sanitation	2 (2+0)
FN 402	Food Standards and Quality Control	3 (3+0)
FN 403	Institutional Food Management	6 (2+4)
FN 404	Development of Entrepreneurial Skills in Bakery and Confectionery	4 (0+4)
FN 405	Practical Hands on Bakery and Confectionery	4 (0+4)
HECM 401	Communication Skills	3 (2+1)
	Total Credits	22 (9+13)
Package II. Nutrition and Dietetics (Foods and Nutrition)		
FN 401	Food Hygiene and Sanitation	2 (2+0)
FN 402	Food Standards and Quality Control	3 (3+0)
FN 403	Institutional Food Management	6 (2+4)
FN 406	Diet Counseling-I	4 (0+4)
FN 407	Diet Counseling-II	4 (0+4)
HECM 401	Communication Skills	3 (2+1)
	Total Credits	22 (9+13)
Package III. Interior Decoration and Event Management (Family Resource Management)		
FRM 401	Computer Aided Interior Designing	4 (0+4)
FRM 402	Event Management	3 (1+2)
FRM 403	Flower Arrangement and Landscaping	3 (2+1)
FRM 404	Table Setting and Service Management	3 (2+1)
FRM 405	Creative Art and Craft	5 (0+5)
TAD 405	Textile Designing	3 (1+2)
	Total Credits	21 (6+15)
Package IV. Organization and Management of Early Childhood Programmes (Human Development and Family Studies)		
HDFS 401	Developmental Assessment of Young Children	3 (0+3)
HDFS 402	Women and Child Welfare	3 (2+1)
HDFS 403	Teaching Material for Young Children-II	4 (1+3)
HDFS 404	Implementation of Early Childhood and Inclusive Education	4 (1+3)
HDFS 405	Management of Child Care Centres	4 (1+3)

FN 408	Food Management for Preschoolers	3 (1+2)
	Total Credits	21 (6+15)
Package V. Information Technology and Communication Management (Extension Education and Communication Management)		
HECM 401	Communication Skills	3 (2+1)
HECM 402	Designing Information Material-II	5 (0+5)
HECM 403	Electronic Journalism	5 (1+4)
HECM 404	Print Journalism	5 (2+3)
FRM 402	Event Management	3 (1+2)
	Total Credits	21 (6+15)
Package VI. Apparel Production Management (Textile and Apparel Designing)		
TAD 401	Traditional Costumes of India	3 (2+1)
TAD 402	Apparel Manufacturing through Draping	3 (0+3)
TAD 403	Computer Aided Fashion Designing	3 (1+2)
TAD 404	Fashion Merchandising	3 (2+1)
TAD 405	Textile Designing	3 (1+2)
TAD 406	Design Studio Practices and Project Work	4 (0+4)
HECM 401	Communication Skills	3 (2+1)
	Total Credits	22 (8+14)
Semester VIII		
IAHS 491	Internship/Industrial Attachment	20 (10 Credit and 10 Non Credit)
	Total Credits	20

B. Sc. (Hons.) Home Science, 6- Year Programme
Courses: Semester-wise

Course No.	Course Title	Credits
Semester I		
BIO 1	Biology-I (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)
CHEM 1	Principles of Chemistry-I	4 (3+1)
COMP 1	Computer Techniques-I	2 (0+2)
ENG 1	Composition and Elementary Grammar	3 (2+1)
MATH 1	Algebra and Trigonometry	3 (3+0)
PHY 1	Principles of Physics-I	4 (3+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Bio/ Math stream)	17 (10+7)/ 17 (11+6)
Semester II		
BIO 2	Biology-II (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)
CHEM 2	Principles of Chemistry-II	4 (3+1)

COMP 2	Computer Techniques-II	3 (0+3)
ENG 2	Applied Grammar and Comprehension	3 (2+1)
MATH 2	Coordinate Geometry, Calculus and Elementary Statistics	3 (3+0)
PHY 2	Principles of Physics-II	4 (3+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Bio/ Math stream)	18 (10+8)/ 18 (11+7)
Semester III		
BIO 21	Biology-III (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)
CHEM 21	Principles of Chemistry-III	4 (3+1)
COMP 21	Computer Techniques-III	2 (0+2)
ENG 21	English Composition and Comprehension	3 (2+1)
MATH 21	Matrices, Determinants, Differential Calculus and Probability	3 (3+0)
PHY 21	Principles of Physics-III	4 (3+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Bio/Math stream)	17 (10+7)/ 17 (11+6)
Semester IV		
BIO 22	Biology-IV (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)
CHEM 22	Principles of Chemistry-IV	4 (3+1)
COMP 22	Computer Techniques-IV	3 (0+3)
ENG 22	Functional English	3 (2+1)
MATH 22	Integral Calculus, Vectors and 3D Geometry	3 (3+0)
PHY 22	Principles of Physics-IV	4 (3+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Bio/Math stream)	18 (10+8)/ 18 (11+7)
Semester V		
ENG 100	English and Technical Writing	2 (1+1)
FN 101	Traditional Indian Foods	2 (0+2)
FRM 101	Management of Family Resources	3 (2+1)
HDFS 101	Human Physiology	2 (2+0)
HECM 101	Introduction to Home Science and Extension Education	2 (2+0)
TAD 101	Basics of Clothing Construction	3 (1+2)
ZOO 101	Elementary Zoology (For students from Math stream)	2 (1+1)
NCC/NSS	National Cadet Corps/National Service Scheme	2 (0+2)

TUT	Tutorial	1 (1+0) NC
	Total Credits (Bio/Math stream)	16 (8+8)/ 18 (9+9)
Semester VI		
BOT 101	Elementary Botany (For students from Math stream)	2 (1+1)
COMP 100	Basics of Computer Applications	2 (0+2)
FN 102	Introduction to Food Science	3 (2+1)
FRM 102	Family Finance Management	3 (2+1)
HDFS 102	Fundamentals of Human Development	2 (1+1)
HDFS 103	Prenatal Care and Infant Development	3 (2+1)
HECM 102	Communication Management	4 (2+2)
MATH 100	Elementary Mathematics (For students from Bio stream)	2 (2+0)
TAD 102	Fundamentals of Weaving and Knitting	3 (2+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits (Bio/Math stream)	23 (13+10)/ 23 (12+11)
Semester VII		
BIOCHEM 100	Introductory Biochemistry	3 (2+1)
FN 201	Human Nutrition	3 (2+1)
FRM 201	Housing and Space Management	3 (2+1)
HDFS 201	Early and Late Childhood	3 (2+1)
HECM 201	Diffusion and Adoption of Homestead Technologies	3 (2+1)
HECM 202	Women in Agriculture	2 (2+0)
TAD 201	Textile Science and Care	3 (2+1)
NCC/NSS	National Cadet Corps/National Service Scheme	2 (0+2)
TUT	Tutorial	1 (1+0) NC
	Total Credits	22 (14+8)
Semester VIII		
AGRON 206	Crop Production	2 (1+1)
FN 202	Normal and Therapeutic Nutrition	4 (2+2)
FRM 202	Fundamentals of Interior Decoration	3 (2+1)
FRM 203	Consumer Education	2 (2+0)
HDFS 202	Adolescence and Adulthood	3 (2+1)
HECM 203	Extension Training Management	3 (2+1)
HORT 101/ VSC 101	Fruit and Vegetable Production (To be taught jointly by Horticulture and Vegetable Science)	2 (1+1)
STAT 100	Elementary Statistics	2 (1+1)
TAD 202	Principles of Dyeing and Printing	3 (1+2)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits	25 (14+11)

Semester IX		
FN 301	Food Preservation and Storage	2 (1+1)
FN 302	Community Nutrition	3 (2+1)
FRM 301	Appropriate Technologies for Rural Households	3 (2+1)
HDFS 301	Marriage and Family Dynamics	3 (2+1)
HDFS 302	Children with Special Needs	3 (2+1)
HECM 301	Programme Development for Rural Families	3 (1+2)
MICRO 100	Introductory Microbiology	2 (1+1)
TAD 301	Apparel Designing and Construction	3 (1+2)
TAD 302	Traditional Textiles of India	2 (1+1)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits	25 (13+12)
Semester X		
*Courses common for all students:		
AG ECON 303/ MGT 301	Marketing and Sales Management (To be taught jointly by Agricultural Economics and Business Management)	2 (1+1)
FOR 302	Environmental Science (To be taught jointly by Forestry, Entomology, Agricultural Economics, Agricultural Meteorology, Agronomy and Soil Science)	2 (1+1) NC
PL PATH 203/ ENT 202/ NEMA 201	Plant Protection (To be taught jointly by Entomology, Plant Pathology and Nematology-40: 40:20)	2 (0+2)
HDFS 303	Personality Development	2 (1+1)
SOC 100	Rural Sociology and Human Psychology	2 (2+0)
CCA	Co-curricular Activity	1 (0+1)
TUT	Tutorial	1 (1+0) NC
	Total Credits* (Common for all students)	9 (4+5)
Students are required to opt any one package of professional courses out of the six packages I to VI:		
Package I. Bakery and Confectionery (Foods and Nutrition)		
FN 391	Bakery Science and Cereal Technology	5 (1+4)
FN 392	Confectionery	4 (0+4)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	21 (5+16)
Package II. Nutrition and Dietetics (Foods and Nutrition)		
FN 393	Clinical Nutrition	2 (2+0)
FN 394	Hospital Dietetics	4 (1+3)
FN 395	Dietetic Foods	3 (0+3)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	21 (7+14)

Package III. Interior Decoration and Event Management (Family Resource Management)		
FRM 391	Household Furniture and Furnishings	4 (2+2)
FRM 392	Functional Interiors for Special Needs	3 (2+1)
FRM 393	Floor and Wall Treatments	3 (2+1)
TAD 393	Computer Aided Designing	3 (0+3)
	Total Credits	22 (10+12)
Package IV. Organization and Management of Early Childhood Programmes (Human Development and Family Studies)		
HDFS 391	Child and Family Counseling	3 (2+1)
HDFS 392	Early Childhood Education	3 (2+1)
HDFS 393	Teaching Material for Young Children-I	4 (1+3)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	22 (9+13)
Package V. Information Technology and Communication Management (Extension Education and Communication Management)		
HECM 391	Introduction to Mass Communication and Photo Journalism	4 (2+2)
HECM 392	Designing Information Material-I	3 (0+3)
HECM 393	Entrepreneurship Development	3 (2+1)
TAD 393	Computer Aided Designing	3 (0+3)
	Total Credits	22 (8+14)
Package VI. Apparel Production Management (Textile and Apparel Designing)		
TAD 391	Fashion Illustrations	3 (1+2)
TAD 392	Apparel Manufacturing through Flat Pattern	3 (1+2)
TAD 393	Computer Aided Designing	3 (0+3)
HECM 392	Designing Information Material-I	3 (0+3)
	Total Credits	21 (6+15)
Semester XI		
*Tutorial (1+0) NC is common for all students. Students will continue the same professional package opted in Semester X:		
Package I. Bakery and Confectionery (Foods and Nutrition)		
FN 401	Food Hygiene and Sanitation	2 (2+0)
FN 402	Food Standards and Quality Control	3 (3+0)
FN 403	Institutional Food Management	6 (2+4)
FN 404	Development of Entrepreneurial Skills in Bakery and Confectionery	4 (0+4)
FN 405	Practical Hands on Bakery and Confectionery	4 (0+4)
HECM 401	Communication Skills	3 (2+1)
	Total Credits	22 (9+13)
Package II. Nutrition and Dietetics (Foods and Nutrition)		
FN 401	Food Hygiene and Sanitation	2 (2+0)

FN 402	Food Standards and Quality Control	3 (3+0)
FN 403	Institutional Food Management	6 (2+4)
FN 406	Diet Counseling-I	4 (0+4)
FN 407	Diet Counseling-II	4 (0+4)
HECM 401	Communication Skills	3 (2+1)
	Total Credits	22 (9+13)
Package III. Interior Decoration and Event Management (Family Resource Management)		
FRM 401	Computer Aided Interior Designing	4 (0+4)
FRM 402	Event Management	3 (1+2)
FRM 403	Flower Arrangement and Landscaping	3 (2+1)
FRM 404	Table Setting and Service Management	3 (2+1)
FRM 405	Creative Art and Craft	5 (0+5)
TAD 405	Textile Designing	3 (1+2)
	Total Credits	21 (6+15)
Package IV. Organization and Management of Early Childhood Programmes (Human Development and Family Studies)		
HDFS 401	Developmental Assessment of Young Children	3 (0+3)
HDFS 402	Women and Child Welfare	3 (2+1)
HDFS 403	Teaching Material for Young Children-II	4 (1+3)
HDFS 404	Implementation of Early Childhood and Inclusive Education	4 (1+3)
HDFS 405	Management of Child Care Centres	4 (1+3)
FN 408	Food Management for Preschoolers	3 (1+2)
	Total Credits	21 (6+15)
Package V. Information Technology and Communication Management (Extension Education and Communication Management)		
HECM 401	Communication Skills	3 (2+1)
HECM 402	Designing Information Material-II	5 (0+5)
HECM 403	Electronic Journalism	5 (1+4)
HECM 404	Print Journalism	5 (2+3)
FRM 402	Event Management	3 (1+2)
	Total Credits	21 (6+15)
Package VI. Apparel Production Management (Textile and Apparel Designing)		
TAD 401	Traditional Costumes of India	3 (2+1)
TAD 402	Apparel Manufacturing through Draping	3 (0+3)
TAD 403	Computer Aided Fashion Designing	3 (1+2)
TAD 404	Fashion Merchandising	3 (2+1)
TAD 405	Textile Designing	3 (1+2)
TAD 406	Design Studio Practices and Project Work	4 (0+4)
HECM 401	Communication Skills	3 (2+1)
	Total Credits	22 (8+14)
Semester XII		
IAHS 491	Internship/Industrial Attachment	20 (10 Credit and 10 Non Credit)
	Total Credits	20

B. Sc (Hons.) Home Science, 6 Year Programme
Bridge Courses: Department-wise

Course No.	Course Title	Credits	Semester
Basic Sciences & Humanities			
Biology			
BIO 1	Biology-I (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)	I
BIO 2	Biology- II (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)	II
BIO 21	Biology-III (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)	III
BIO 22	Biology-IV (To be taught jointly by Botany & Plant Physiology and Zoology)	3 (2+1)	IV
	Total Credits	12 (8+4)	
Chemistry & Physics			
Chemistry			
CHEM 1	Principles of Chemistry-I	4 (3+1)	I
CHEM 2	Principles of Chemistry-II	4 (3+1)	II
CHEM 21	Principles of Chemistry-III	4 (3+1)	III
CHEM 22	Principles of Chemistry-IV	4 (3+1)	IV
	Total Credits	16 (12+4)	
Physics			
PHY 1	Principles of Physics-I	4 (3+1)	I
PHY 2	Principles of Physics-II	4 (3+1)	II
PHY 21	Principles of Physics-III	4 (3+1)	III
PHY 22	Principles of Physics-IV	4 (3+1)	IV
	Total Credits	16 (12+4)	
Computer			
COMP 1	Computer Techniques-I	2 (0+2)	I
COMP 2	Computer Techniques-II	3 (0+3)	II
COMP 21	Computer Techniques-III	2 (0+2)	III
COMP 22	Computer Techniques-IV	3 (0+3)	IV
	Total Credits	10(0+10)	
English (Languages & Haryanavi Culture)			
ENG 1	Composition and Elementary Grammar	3 (2+1)	I
ENG 2	Applied Grammar and Comprehension	3 (2+1)	II
ENG 21	English Composition and Comprehension	3 (2+1)	III
ENG 22	Functional English	3 (2+1)	IV
	Total Credits	12 (8+4)	
Mathematics (Mathematics & Statistics)			
MATH 1	Algebra and Trigonometry	3 (3+0)	I
MATH 2	Coordinate Geometry, Calculus and Elementary Statistics	3 (3+0)	II

MATH 21	Matrices, Determinants, Differential Calculus and Probability	3 (3+0)	III
MATH 22	Integral Calculus, Vectors and 3D Geometry	3 (3+0)	IV
	Total Credits	12 (12+0)	

**Core Courses of B. Sc. (Hons.) Home Science: Department-wise
4 Year Programme/6 Year Programme**

Course No.	Course Title	Credits	Semester
Home Science			
Foods and Nutrition			
FN 101	Traditional Indian Foods	2 (0+2)	I/V
FN 102	Introduction to Food Science	3 (2+1)	II/VI
FN 201	Human Nutrition	3 (2+1)	III/VII
FN 202	Normal and Therapeutic Nutrition	4 (2+2)	IV/VIII
FN 301	Food Preservation and Storage	2 (1+1)	V/IX
FN 302	Community Nutrition	3 (2+1)	V/IX
	Total Credits	17 (9+8)	
Family Resource Management			
FRM 101	Management of Family Resources	3 (2+1)	I/V
FRM 102	Family Finance Management	3 (2+1)	II/VI
FRM 201	Housing and Space Management	3 (2+1)	III/VII
FRM 202	Fundamentals of Interior Decoration	3 (2+1)	IV/VIII
FRM 203	Consumer Education	2 (2+0)	IV/VIII
FRM 301	Appropriate Technologies for Rural Households	3 (2+1)	V/IX
	Total Credits	17 (12+5)	
Human Development and Family Studies			
HDFS 101	Human Physiology	2 (2+0)	I/V
HDFS 102	Fundamentals of Human Development	2 (1+1)	II/VI
HDFS 103	Prenatal Care and Infant Development	3 (2+1)	II/VI
HDFS 201	Early and Late Childhood	3 (2+1)	III/VII
HDFS 202	Adolescence and Adulthood	3 (2+1)	IV/VIII
HDFS 301	Marriage and Family Dynamics	3 (2+1)	V/IX
HDFS 302	Children with Special Needs	3 (2+1)	V/IX
HDFS 303	Personality Development	2 (1+1)	VI/X
	Total Credits	21 (14+7)	
Extension Education and Communication Management			
HECM 101	Introduction to Home Science and Extension Education	2 (2+0)	I/V
HECM 102	Communication Management	4 (2+2)	II/VI
HECM 201	Diffusion and Adoption of Homestead Technologies	3 (2+1)	III/VII
HECM 202	Women in Agriculture	2 (2+0)	III/VII
HECM 203	Extension Training Management	3 (2+1)	IV/VIII

HECM 301	Programme Development for Rural Families	3 (1+2)	V/IX
	Total Credits	17 (11+6)	
Textile and Apparel Designing			
TAD 101	Basics of Clothing Construction	3 (1+2)	I/V
TAD 102	Fundamentals of Weaving and Knitting	3 (2+1)	II/VI
TAD 201	Textile Science and Care	3 (2+1)	III/VII
TAD 202	Principles of Dyeing and Printing	3 (1+2)	IV/VIII
TAD 301	Apparel Designing and Construction	3 (1+2)	V/IX
TAD 302	Traditional Textiles of India	2 (1+1)	V/IX
	Total Credits	17 (8+9)	
IAHS 491	Internship/Industrial Attachment	20 (10 Credit and 10 Non Credit)	VIII/XII
	Total Credits	20	
Agriculture			
Agriculture Economics/Business Management			
AG ECON 303/ MGT 301	Marketing and Sales Management (To be taught jointly by Agricultural Economics and Business Management)	2 (1+1)	VI/X
	Total Credits	2 (1+1)	
Agromony			
AGRON 206	Crop Production	2 (1+1)	IV/VIII
	Total Credits	2 (1+1)	
Forestry			
FOR 302	Environmental Science (To be taught jointly by Forestry, Entomology, Agricultural Economics, Agricultural Meteorology, Agronomy and Soil Science)	2 (1+1) NC	VI/X
	Total Credits	2 (1+1)	
Horticulture/Vegetable Science			
HORT 101/ VSC 101	Fruit and Vegetable Production (To be taught jointly by Horticulture and Vegetable Science)	2 (1+1)	IV/VIII
	Total Credits	2 (1+1)	
Plant Pathology/Entomology/Nematology			
PL PATH 203/ ENT 202/ NEMA 201	Plant Protection (To be taught jointly by Entomology, Plant Pathology and Nematology - 40: 40:20)	2 (0+2)	VI/X
	Total Credits	2 (0+2)	
Basic Sciences & Humanities			
Biochemistry			
BIOCHEM 100	Introductory Biochemistry	3 (2+1)	III/VII
	Total Credits	3 (2+1)	
Botany & Plant Physiology			
BOT 101	Elementary Botany (For students from Arts and Math stream)	2 (1+1)	II/VI
	Total Credits	2 (1+1)	

Chemistry & Physics			
Chemistry			
CHEM 100	Introductory Chemistry (For students from Arts stream)	4 (3+1)	I
	Total Credits	4 (3+1)	
Physics			
PHY 100	Introductory Physics (For students from Arts stream)	4 (3+1)	III
	Total Credits	4 (3+1)	
Computer			
COMP 100	Basics of Computer Applications	2 (0+2)	II/VI
	Total Credits	2 (0+2)	
English (Languages & Haryanvi Culture)			
ENG 100	English and Technical Writing	2 (1+1)	I/V
	Total Credits	2 (1+1)	
Mathematics & Statistics			
Mathematics			
MATH 100	Elementary Mathematics (For students from Arts and Bio stream)	2 (2+0)	II/VI
	Total Credits	2 (2+0)	
Statistics			
STAT 100	Elementary Statistics	2 (1+1)	VIII
	Total Credits	2 (1+1)	
Microbiology			
MICRO 100	Introductory Microbiology	2 (1+1)	V/IX
	Total Credits	2 (1+1)	
Sociology			
SOC 100	Rural Sociology and Human Psychology	2 (2+0)	VI/X
	Total Credits	2 (2+0)	
Zoology			
ZOO 101	Elementary Zoology (For students from Math stream)	2 (1+1)	I/V
	Total Credits	2 (1+1)	

Professional Courses (Experiential Learning): Department-wise Packages
All students are required to take any one Package out of the Packages I to VI

Course No.	Course Title	Credits	Semester 4 Yr/6 Yr
Package I. Bakery and Confectionery (Foods and Nutrition)			
FN 391	Bakery Science and Cereal Technology	5 (1+4)	VI/X
FN 392	Confectionery	4 (0+4)	VI/X
FN 401	Food Hygiene and Sanitation	2 (2+0)	VII/XI
FN 402	Food Standards and Quality Control	3 (3+0)	VII/XI
FN 403	Institutional Food Management	6 (2+4)	VII/XI
FN 404	Development of Entrepreneurial Skills in Bakery and Confectionery	4 (0+4)	VII/XI

FN 405	Practical Hands on Bakery and Confectionery	4 (0+4)	VII/XI
	Total Credits	28 (8+20)	
Package II. Nutrition and Dietetics (Foods and Nutrition)			
FN 393	Clinical Nutrition	2 (2+0)	VI/X
FN 394	Hospital Dietetics	4 (1+3)	VI/X
FN 395	Dietetic Foods	3 (0+3)	VI/X
FN 401	Food Hygiene and Sanitation	2 (2+0)	VII/XI
FN 402	Food Standards and Quality Control	3 (3+0)	VII/XI
FN 403	Institutional Food Management	6 (2+4)	VII/XI
FN 406	Diet Counseling-I	4 (0+4)	VII/XI
FN 407	Diet Counseling-II	4 (0+4)	VII/XI
	Total Credits	28 10+18)	
FN 408	Food Management for Preschoolers (Supporting course for students taking HDFS as professional)	3 (1+2)	VII/XI
Package III. Interior Decoration and Event Management (Family Resource Management)			
FRM 391	Household Furniture and Furnishings	4 (2+2)	VI/X
FRM 392	Functional Interiors for Special Needs	3 (2+1)	VI/X
FRM 393	Floor and Wall Treatments	3 (2+1)	VI/X
FRM 401	Computer Aided Interior Designing	4 (0+4)	VII/XI
FRM 402	Event Management	3 (1+2)	VII/XI
FRM 403	Flower Arrangement and Landscaping	3 (2+1)	VII/XI
FRM 404	Table Setting and Service Management	3 (2+1)	VII/XI
FRM 405	Creative Art and Craft	5 (0+5)	VII/XI
	Total Credits	28 (11+17)	
Package IV. Organization and Management of Early Childhood Programmes (Human Development and Family Studies)			
HDFS 391	Child and Family Counseling	3 (2+1)	VI/X
HDFS 392	Early Childhood Education	3 (2+1)	VI/X
HDFS 393	Teaching Material for Young Children - I	4 (1+3)	VI/X
HDFS 401	Developmental Assessment of Young Children	3 (0+3)	VII/XI
HDFS 402	Women and Child Welfare	3 (2+1)	VII/XI
HDFS 403	Teaching Material for Young Children - II	4 (1+3)	VII/XI
HDFS 404	Implementation of Early Childhood and Inclusive Education	4 (1+3)	VII/XI
HDFS 405	Management of Child Care Centres	4 (1+3)	VII/XI
	Total Credits	28 (10+18)	
Package V. Information Technology and Communication Management (Extension Education and Communication Management)			
HECM 391	Introduction to Mass Communication and Photo Journalism	4 (2+2)	VI/X
HECM 392	Designing Information Material-I	3 (0+3)	VI/X
HECM 393	Entrepreneurship Development	3 (2+1)	VI/X
HECM 401	Communication Skills	3 (2+1)	VII/XI
HECM 402	Designing Information Material-II	5 (0+5)	VII/XI

HECM 403	Electronic Journalism	5 (1+4)	VII/XI
HECM 404	Print Journalism	5 (2+3)	VII/XI
	Total Credits	28 (9+19)	
Package VI. Apparel Production Management (Textile and Apparel Designing)			
TAD 391	Fashion Illustrations	3 (1+2)	VI/X
TAD 392	Apparel Manufacturing through Flat Pattern	3 (1+2)	VI/X
TAD 393	Computer Aided Designing	3 (0+3)	VI/X
TAD 401	Traditional Costumes of India	3 (2+1)	VII/XI
TAD 402	Apparel Manufacturing through Draping	3 (0+3)	VII/XI
TAD 403	Computer Aided Fashion Designing	3 (1+2)	VII/XI
TAD 404	Fashion Merchandising	3 (2+1)	VII/XI
TAD 405	Textile Designing	3 (1+2)	VII/XI
TAD 406	Design Studio Practices and Project Work	4 (0+4)	VII/XI
	Total Credits	28 (8+20)	

**COURSE CONTENTS: DEPARTMENT-WISE
FOODS AND NUTRITION**

Course No.	Course Title	Credits	Semester 4 Yr/6 Yr
FN 101	Traditional Indian Foods	2 (0+2)	I/V
FN 102	Introduction to Food Science	3 (2+1)	II/VI
FN 201	Human Nutrition	3 (2+1)	III/VII
FN 202	Normal and Therapeutic Nutrition	4 (2+2)	IV/VIII
FN 301	Food Preservation and Storage	2 (1+1)	V/IX
FN 302	Community Nutrition	3 (2+1)	V/IX
	Total Credits	17 (9+8)	
Elective Courses/Experiential Learning			
FN 391	Bakery Science and Cereal Technology	5 (1+4)	VI/X
FN 392	Confectionery	4 (0+4)	VI/X
FN 393	Clinical Nutrition	2 (2+0)	VI/X
FN 394	Hospital Dietetics	4 (1+3)	VI/X
FN 395	Dietetic Foods	3 (0+3)	VI/X
FN 401	Food Hygiene and Sanitation	2 (2+0)	VII/XI
FN 402	Food Standards and Quality Control	3 (3+0)	VII/XI
FN 403	Institutional Food Management	6 (2+4)	VII/XI
FN 404	Development of Entrepreneurial Skills in Bakery and Confectionery	4 (0+4)	VII/XI
FN 405	Practical Hands on Bakery and Confectionery	4 (0+4)	VII/XI
FN 406	Diet Counseling-I	4 (0+4)	VII/XI
FN 407	Diet Counseling-II	4 (0+4)	VII/XI
FN 408	Food Management for Preschoolers (Supporting course for students taking HDFS as professional)	3 (1+2)	VII/XI
	Total Credits	48 (12+36)	

FN 101 TRADITIONAL INDIAN FOODS SEM I/V
2 (0+2)

Practical

Preparation of basic recipes; exploring and enlisting traditional recipes of different states of the country; preparation of common recipes of North, East, South, West and Central zone of country; value addition of traditional recipes and meals.

FN 102 INTRODUCTION TO FOOD SCIENCE SEM II/VI
3 (2+1)

Theory

Functions of food: energy giving, body building, protective and regulatory; cooking methods: types, merits and demerits; cereals and millets: structure, basic composition, processing techniques, effect of heat and acid, functions of starch in cookery; legumes: basic composition and processing, effect of heat, acid and alkali; basic composition of nuts and oil; fruits and vegetables: types, basic composition, pigments, changes caused by heat, acid and alkali; egg: structure, basic composition, grading, function and changes during

cooking; meat, poultry and fish: basic composition and changes during cooking; sugars: types, basic composition, functions in cookery; fats and oils: kinds and composition, effect of heat, functions in cookery, rancidity of fats; brief overview of beverages; condiments and spices: importance in daily life; processed and convenience foods.

Practical

Market survey for availability and cost of raw/processed common foods; weighing and measuring of raw food items: flours, cereals, pulses, sugars and oils; cereal cookery: preparations showing dextrinization and gelatinization, gluten formation and factors affecting; vegetable cookery: effect of heat and alkali on pigment, preparation of soups, salads and beverages; use of milk and milk products in various preparation; preparations using egg; cooking and processing methods including germination, frying, fermentation and steaming.

FN 201

HUMAN NUTRITION

SEM III/VII
3 (2+1)

Theory

Historical development and relation of nutrition to health, growth and human welfare; concept of recommended dietary allowances; concept of balanced diet; basic food groups: characteristics and their contribution to the diet; energy: units, sources and requirements, fuel value of foods, methods of measuring energy value of food, factors affecting energy requirement of body; BMR: methods of measurements, factors affecting BMR; digestion and absorption of carbohydrates, fats and proteins; types, functions, sources, requirement, deficiency and excess of carbohydrates, lipids, proteins, vitamins A, D, E and K, thiamine, riboflavin, niacin, pyridoxine, cyanocobalamin and folic acid and minerals-calcium, phosphorus, iodine, fluorine, iron, sodium, potassium, chloride, copper and zinc ; protein quality evaluation PER, NPU and BV; electrolyte balance; water: functions, distribution in body and water balance.

Practical

Standardization of common dishes for serving size and number of servings; planning and preparing nutrient rich dishes: protein, calcium, iron, vitamin A, thiamin, riboflavin, ascorbic acid; calculation of calorie and cost of dishes prepared for above nutrients.

FN 202

NORMAL AND THERAPEUTIC
NUTRITION

SEM IV/VIII
4 (2+2)

Theory

Importance of meal planning and factors to be considered while planning meals; use of food groups and exchange list in planning meals for a normal adult; maternal nutrition: physiological changes and nutritional requirement during pregnancy and lactation; infancy: nutritional requirement, importance of breast feeding, weaning and supplementary foods; pre-school, school age and adolescent: food habits and nutritional requirement; old age: changes during old age and nutritional requirement; importance of therapeutic diets; modification of normal diet for different conditions; diet therapy; principles and objectives; scope of dietetics; role of dietitians; methods of feeding; causes, symptoms and dietary management in disorders: acute and chronic fevers, gastrointestinal disorders-diarrhea, constipation; liver diseases- hepatitis, hepatic coma; cardiovascular diseases, atherosclerosis and hypertension, diabetes; problems of weight control: underweight, overweight and obesity; food allergy; diet in burns; dietary factors related to cancer.

Practical

Planning and preparation of balanced diets according to sex and age; planning and preparation of diets for special conditions: pregnancy and lactation; planning and preparation of therapeutic diets: typhoid, diarrhea, constipation, hepatitis, hypertension, diabetes, underweight, overweight and obesity.

FN 301 **FOOD PRESERVATION AND STORAGE** **SEM V/IX**
2 (1+1)

Theory

Importance and scope of food preservation and storage; classification of foods on the basis of shelf life; food spoilage: causes and effects; selection and purchase of fruits and vegetables for preservation; principles and methods of food preservation: drying and dehydration, use of high temperature, low temperature, chemicals, radiation, combination of above methods; food additives, preservatives, anti-oxidants; storage of common perishable, semi-perishable and non-perishable foods; storage and spoilage of preserved foods; effect of processing, preservation and storage on various nutrients; food standards.

Practical

Preparation of preserved products: jam, jelly, marmalade, candy, murabba, pickle, sauce, chutney, squash, and syrup and their sensory evaluation; demonstration on canning and bottling of fruits and vegetables; demonstration on storage of food stuffs; visit to food processing and preservation unit.

FN 302 **COMMUNITY NUTRITION** **SEM V/IX**
3 (2+1)

Theory

Basic concept in community nutrition; role of nutritionist in improving nutrition in community; food habits and influencing factors; food taboos; mortality and morbidity pattern of vulnerable groups and their causes; nutritional needs of normal infants, pre-lacteal feeding, breast feeding of new born, full term and premature infants, small-for-date babies, bottle feeding and supplementary foods; malnutrition: definition and causes; assessment of nutritional status; major nutritional problems in community; national programmes and role of national and international agencies in improving nutritional status of the community; food adulteration: definition, type of adulterants and health hazards, detection methods, preventive measures; nutrition education: methods, channels and its role in control of malnutrition in community.

Practical

Assessment of nutritional status of an individual/community using anthropometry and dietary survey; visit to local health centers to identify clinical signs and symptoms of nutritional problems; identification of adulterants in common foods; visit to anganwadi centres; development of audio visual aids; planning, implementation and evaluation of nutrition education for a target group.

FN 391 **BAKERY SCIENCE AND CEREAL** **SEM VI/X**
TECHNOLOGY 5 (1+4)

Theory

Composition, structure, and quality of cereal grains; processing of wheat and other cereals

for bakery products; characterization and functional properties of cereal and their relationship with bakery product; grades of flour and evaluation of gluten content; physico-chemical properties of various bakery and confectionery ingredients-flours, leavening agent, sugar, fat and moistening agent; faults observed during preparation of bakery products and their remedies; prospects and problems of bakery industries.

Practical

Study of various types of baking equipments; type of baking ingredients, flour, yeast, salt and their uses; balancing the formulae for bakery products; preparation and cost calculation of different types of bakery products: straight dough, sponge dough, fermented doughnuts, various breads- french bread, raisin bread, milk bread, whole meal bread, brown bread, buns- basic bun dough, hot cross buns, fruit buns, chelseas bun, breakfast roll, danish pastry, bread sticks; packaging and sale of products; visit to bakery unit.

FN 392

CONFECTIONERY

**SEM VI/X
4 (0+4)**

Practical

Uses of various confectionery ingredients: flour, baking powder, fat sugar; preparation, sensory evaluation and cost calculation of confectionery products: cakes, pastries, muffins, creamroll, swissroll, sweet paste, biscuits, eclairs, madeleins, patties, pies; remedies for common faults in cakes and biscuits; sale of products.

FN 393

CLINICAL NUTRITION

**SEM VI/X
2 (2+0)**

Theory

Methods for estimating requirements and recommended allowances of energy, protein, minerals and vitamins for different age groups and disease conditions; etiology, metabolic changes, clinical manifestations, complications and dietary management of gastrointestinal, liver, cardiovascular and renal disorders, diabetes mellitus, underweight, overweight and obesity.

FN 394

HOSPITAL DIETETICS

**SEM VI/X
4 (1+3)**

Theory

Importance of dietetics; principles of hospital dietetics; dietician as a part of medical team and outreach service; dietetics department: structure, administration and function; food service in hospital; clinical information of patients: personel profile, medical history, dietary assessment; therapeutic adaptation of normal diet: consistency, nutrients and amount; modes of feeding: enteral and parenteral feeding, composition of tube feeding; aesthetic attributes of diet.

Practical

Lay out of a dietetics department; modification and preparation of diets for therapeutic purposes in terms of consistency, nutrients and quantity; planning, preparation and serving of diets: low/high in energy, fibre, protein, lipids, sodium, potassium, vitamin A and iron in reference to common diseases; planning and preparation of diets for patients suffering from various diseases; visit to dietary department of a hospital; observation of clinical signs and diet served/consumed by patient.

FN 395

DIETETIC FOODS

**SEM VI/X
3 (0+3)**

Practical

Market survey for dietetic and convenience foods; planning, preparation and nutrient calculation of dietetic foods with preference to locally available food stuffs: high/low energy, high/low protein, high/low fibre and other combinations including low sodium, low cholesterol, low GI, low calorie and low sodium, low protein and low fluid, high fibre and low fat with consideration to acceptability of patients; preparation of convenience foods.

FN 401

FOOD HYGIENE AND SANITATION

**SEM VII/XI
2 (2+0)**

Theory

Concept and significance of hygiene and sanitation in relation to food industry; principles of food hygiene; personal hygiene and food handling habits of personnel; sanitation in and outside food handling plant for controlling contamination through food handler, rodents, insects, soil, water, air, sewage, food supply, equipments, utensils, floors, walls and ceilings; food and water borne infections, prevention and control; regulatory laws.

FN 402

**FOOD STANDARDS AND QUALITY
CONTROL**

**SEM VII/XI
3 (3+0)**

Theory

Importance of quality control and assurance; food laws and regulations: Prevention of Food Adulteration Act, Fruit Product Order, Agmark, Essential Commodity Act, Consumer Protection Act, Bureau of Indian Standards, Codex Standards; Hazard Analysis and Critical Control Point; specifications for raw materials, food products, additives, preservatives, coloring matters, anti-oxidants, emulsifying and stabilizing agents; various methods for the assessment of quality of different foods; selection of sensory panel and sensory evaluation of food products; grading and marketing standards, specifications of finished products; assessment and prevention of food adulteration: packaging and packaging material.

FN 403

INSTITUTIONAL FOOD MANAGEMENT

**SEM VII/XI
6 (2+4)**

Theory

Management: principles, functions and tools, organization chart of various food establishments; management of resources; organization of spaces of kitchen, storage and service areas: planning, designing and layout; equipment: classification, selection, operation and maintenance; food management: characteristics of food, purchasing methods, receiving and storage of foods; menu: principles involved in planning, types of menu; sequence of courses: Indian, Western, Chinese and Continental; techniques of writing menu; principles of large scale cooking; meal service style; table setting and service; table etiquette; financial management: definition, scope, cost concepts, cost control, pricing, book keeping and accounting; personnel management: recruitment, selection and induction; micro planning of project for running a food service institution.

FN 408

**FOOD MANAGEMENT FOR
PRESCHOOLERS**

SEM VII/XI

3 (1+2)

(Supporting for B.Sc. (Hons.) Home Science students taking HDFS as professional)

Theory

Importance and factors affecting meal planning; sources, functions and deficiencies of protein, energy, calcium, iron, vitamin A and vitamin C; balanced diet and food habits of preschoolers; supplementary foods: concept and significance; importance of packed lunch for preschoolers; common health problems: food allergy, influenza, fever, diarrhea and dental problem; dietary management of nutrition and health problems of preschoolers; significance of hygiene and sanitation in relation to food services.

Practical

Survey of existing packed lunch of preschool children in observation lab; market survey of foods; weighing and measuring of food items; portions size; standardization of nutrient-rich recipes; planning & preparation of lunch for preschoolers; planning, preparation of diet for special occasion; counselling of parents regarding importance of nutritious foods.

FAMILY RESOURCE MANAGEMENT

Course No.	Course Title	Credits	Semester 4 Yr/6Yr
FRM 101	Management of Family Resources	3 (2+1)	I/V
FRM 102	Family Finance Management	3 (2+1)	II/VI
FRM 201	Housing and Space Management	3 (2+1)	III/VII
FRM 202	Fundamentals of Interior Decoration	3 (2+1)	IV/VIII
FRM 203	Consumer Education	2 (2+0)	IV/VIII
FRM 301	Appropriate Technologies for Rural Households	3 (2+1)	V/IX
	Total Credits	17 (12+5)	
Elective Courses/Experiential Learning			
FRM 391	Household Furniture and Furnishings	4 (2+2)	VI/X
FRM 392	Functional Interiors for Special Needs	3 (2+1)	VI/X
FRM 393	Floor and Wall Treatments	3 (2+1)	VI/X
FRM 401	Computer Aided Interior Designing	4 (0+4)	VII/XI
FRM 402	Event Management	3 (1+2)	VII/XI
FRM 403	Flower Arrangement and Landscaping	3 (2+1)	VII/XI
FRM 404	Table Setting and Service Management	3 (2+1)	VII/XI
FRM 405	Creative Art and Craft	5 (0+5)	VII/XI
	Total Credits	28 (11+17)	

FRM 101 MANAGEMENT OF FAMILY RESOURCES SEM I/V
3 (2+1)

Theory

Family resource management: importance and scope; family: types, composition and stages of family life cycle; systems approach to resource management; concepts of management: values, goals, standards, resources, communication; decision making: types of decision, steps in decision making, factors affecting decision-making, methods of resolving conflicts; management process: planning, controlling and evaluation; time management: need, types and steps; energy management: energy demands, type of efforts used, energy requirements; fatigue: types and measures to relieve fatigue; body mechanics: meaning and principles; ergonomics: meaning and importance; work simplification: need and techniques; storage: principles and guidelines, Mundel's classes of change.

Practical

Identification of type and composition of family; personal and family values, goals and standards; standard of living versus level of living; identification of personal and family resources; problem solving and decision making; time and activity plans for different situations; time and motion studies: pathway chart, process chart and operation chart; normal and maximum reach.

FRM 102 FAMILY FINANCE MANAGEMENT SEM II/VI
3 (2+1)

Theory

Family finance management: meaning, need and scope; financial demands at various stages of family life cycle; family income: definition, characteristics, types; factors

affecting family income and expenditure pattern; Engel's laws of consumption; budget: definition, advantages, limitations and steps; account keeping: advantages and methods; credit: need, types, legal credit instruments, credit institutions; planning for family's financial security; savings: need, type, saving institutions and schemes; investments: need, basis and types; insurance: need and type; taxation: need, type, methods and cannons; will: terminology, considerations and formalities required in making a will.

Practical

Identification of stages of family life cycle and their financial demands; analysis of family income and expenditure; planning personal and family budgets for various income groups; record keeping; visit to bank and post office; opening small saving account in a bank/post office; use of ATM, e-banking, credit card; calculation of income tax.

**FRM 201 HOUSING AND SPACE MANAGEMENT SEM III/VII
3 (2+1)**

Theory

Housing: meaning, importance and need at different stages of family life cycle; types of residential buildings: advantages and disadvantages; ownership versus rentership; selection of site; factors affecting planning of house and rooms; building bye laws; material used for house construction; types of kitchen and its planning; functional designing of storage space.

Practical

Architectural symbols used in making of a floor plan; making of floor plans for different rooms; making house plans for different income groups; planning of kitchen and storage areas for various rooms and closets; collection of building materials; implementation of home improvement ideas.

**FRM 202 FUNDAMENTALS OF INTERIOR SEM IV/VIII
DECORATION 3 (2+1)**

Theory

Elements of art and principles of design: application in rural and urban homes; colour: meaning, properties, characteristics and importance in interior decoration; colour schemes; selection, care and maintenance of furniture and furnishings; wall, floor and window treatments; home lighting: uses, types and safety; flower selection and arrangement; indoor plants and accessories; optical illusion; table setting.

Practical

Development of motives and designs; colour: tints and shades; drawing of colour wheel and colour schemes for different rooms; care and arrangement of furniture for different purposes and rooms; window treatments; types and placement of accessories for interior enrichment; flower arrangement; floor decoration; setting the table.

**FRM 203 CONSUMER EDUCATION SEM IV/VIII
2 (2+0)**

Theory

Consumer education: need, objectives, scope, and terminology; consumer problems in rural and urban areas; consumers' rights and responsibilities; market: institutions, elements, activities and types; demand, supply and price relationship for consumer products; consumers' choice: types and factors affecting choice; unfair trade practices;

allowances/ requirements and special provisions in different rooms/areas.

Practical

Simulating interior environments for specific purposes and needs; making master plans through drawings of interior representations; planning furniture, fitment and fixtures for special needs and specific purposes; planning, programming, designing and evaluating interiors for elderly and special needs; visit to various related centers; presentation and term paper of any functional master plan.

FRM 393 **FLOOR AND WALL TREATMENTS** **SEM VI/X**
3 (2+1)

Theory

Floor treatments: concept, importance and types; hard floor materials: brick, concrete, stone, tile, terrazzo and wood; resilient floor materials: asphalt tiles, linoleum, cork, rubber and vinyl; soft floor coverings: carpets and rugs; care and maintenance of floor and floor treatments; use and importance of floor coverings in interior decoration; floor decoration; exterior and interior wall materials; finishes and surfacing: wall paper, paints, wood paneling, laminator, ceramic tiles, linoleum, fabrics and their care; types and styles of wall elements: windows, doors, ventilators and fire places; windows types and treatments.

Practical

Market survey for wall and floor coverings and materials; cost for installation; project work on low cost floor and wall materials; latest floor and wall treatments and methods of use; planning window dressings for different types of windows; assignment on problem windows and treatment; market survey for curtain materials, hanging systems and cost; floor decoration.

FRM 401 **COMPUTER AIDED INTERIOR DESIGNING** **SEM VII/XI**
4 (0+4)

Practical

Preparation of house plans, room layouts and home lighting arrangements with the help of software packages; making of colour schemes for various rooms including placements of furniture, fixtures, wall hangings and accessories; designing for furniture, draperies, walls and flooring.

FRM 402 **EVENT MANAGEMENT** **SEM VII/XI**
3 (1+2)

Theory

Event Management: concept, need, emergence and growth; event goals and objectives; role of event manager: planning, assigning roles and responsibilities to team members, coordinating team and suppliers, contingency planning and decision making; obtaining event insurance; managing health and safety; importance of eco-friendly events.

Practical

Event: identification of its goals and objectives; preparing proposal and managing event schedules; SWOT analysis of the event; planning for invitation, decoration, appropriate food and beverage menus; budget planning and control; marketing the event; execution of events: special themed events/ festivals/ family/ religious/ institutional/ social events; event evaluation and reporting.

FRM 403

**FLOWER ARRANGEMENT AND
LANDSCAPING**

**SEM VII/XI
3 (2+1)**

Theory

Ornamental plants: annuals, shrubs, hedges, climbers, bulbous plants, ornamental trees, seasonal flowers; storage of seeds and bulbs; flower arrangements: types, use of basic tools and equipment, techniques and styles of flower arrangements: Ikebana, moribana, free style; selection of container and accessories; value addition to flowers in making floral products and decorations; landscaping: principles and components; lawns and their maintenance; roof garden; indoor plants: identification, selection, growing and maintenance; bonsai: styles, selection of plant and container, growing and care; dry flowers: identification and selection of flowers and plant parts, procurement, preservation and storage; techniques for preservation of plant material.

Practical

Visit to different types of gardens, nurseries and parks; identification and selection of ornamental plants; seasonal flowers: selection, use and arrangement in relation to height, colour; styles of flower arrangements: Ikebana, moribana, free style; designing of landscape for different situations and application of CAD; making bouquets, flower baskets, floral wreaths, pot pouri, garlands; dry flower arrangements: selection, procurement, preservation and storage of flowers and plant parts; designing and arrangement of dry material for different purposes; bonsai making.

FRM 404

**TABLE SETTING AND SERVICE
MANAGEMENT**

**SEM VII/XI
3 (2+1)**

Theory

Table setting: importance and scope; table appointments: cover, flat ware, hollow ware, dinner ware and beverage ware; material of table appointments; placement of linens; table decoration; types and styles of table setting: European service, country style, English service, buffet service, blue plate service, tray service, self service; table setting for breakfast, lunch, dinner, tea, buffet, different parties and occasions; table etiquette.

Practical

Setting the table: placement of linens, flatware, dinner ware, beverage ware, serving dishes; service at table: left hand and right hand service; table decoration; napkin foldings; steps in table setting/meal service; cleaning the table; practice in setting the table and serving for different service styles and meals at different occasions: breakfast, lunch, dinner, tea, buffet, outdoor meal, arranging birthday party and kitty party.

FRM 405

CREATIVE ART AND CRAFT

**SEM VII/XI
5 (0+5)**

Practical

Design: structural and decorative- naturalistic, stylized, geometrical and abstract; painting: oil, fabric, acrylic, poster, water, nib, glass and coffee painting; handling of paints and colors for different materials; tie and dye, block printing and batik; floor decoration: alpana and rangoli using different materials; preparation of utility and decorative articles: pottery decoration with different methods and materials, collage, papier machie, macramé, candle making and decoration, flower making, calligraphy, decoupage, rakhi making, greeting cards, decorative envelopes and bags and gift wrapping.

HUMAN DEVELOPMENT AND FAMILY STUDIES

Course No.	Course Title	Credits	Semester 4 Yr/6Yr
HDFS 101	Human Physiology	2 (2+0)	I/V
HDFS 102	Fundamentals of Human Development	2 (1+1)	II/VI
HDFS 103	Prenatal Care and Infant Development	3 (2+1)	II/VI
HDFS 201	Early and Late Childhood	3 (2+1)	III/VII
HDFS 202	Adolescence and Adulthood	3 (2+1)	IV/VIII
HDFS 301	Marriage and Family Dynamics	3 (2+1)	V/IX
HDFS 302	Children with Special Needs	3 (2+1)	V/IX
HDFS 303	Personality Development	2 (1+1)	VI/X
	Total Credits	21 (14+7)	
Elective Courses/Experiential Learning			
HDFS 391	Child and Family Counseling	3 (2+1)	VI/X
HDFS 392	Early Childhood Education	3 (2+1)	VI/X
HDFS 393	Teaching Material for Young Children- I	4 (1+3)	VI/X
HDFS 401	Developmental Assessment of Young Children	3 (0+3)	VII/XI
HDFS 402	Women and Child Welfare	3 (2+1)	VII/XI
HDFS 403	Teaching Material for Young Children-II	4 (1+3)	VII/XI
HDFS 404	Implementation of Early Childhood and Inclusive Education	4 (1+3)	VII/XI
HDFS 405	Management of Child Care Centres	4 (1+3)	VII/XI
	Total Credits	28 (10+18)	

HDFS 101

HUMAN PHYSIOLOGY

SEM I/V
2 (2+0)

Theory

Cell: structure, functions and multiplication; tissue: types, structure and their functions; the circulatory system: anatomy and functions; blood: composition and function, blood clotting, blood grouping, heart rate, blood pressure and factors affecting it; respiratory system: anatomy, functions, mechanism, external and internal respiration; digestive system: anatomy, functions of alimentary tract and accessory organs, digestion of food, absorption of digested food; urinary system: anatomy and functions; reproductive system: male reproductive system- anatomy and functions, female reproductive system- anatomy and functions, menstrual cycle; endocrine system: important ductless glands of the body and their functions.

HDFS 102

**FUNDAMENTALS OF HUMAN
DEVELOPMENT**

SEM II/VI
2 (1+1)

Theory

Human development: concepts, principles, need and scope, stages; developmental tasks; genetic and environmental factors: role of heredity, environment, maturation and learning; importance of early stimulation; common behavioral problems of childhood; disciplinary techniques.

Practical

Development of checklist to identify different behavioral problems; survey to identify behavioral problems and report writing.

HDFS 103**PRENATAL CARE AND INFANT DEVELOPMENT****SEM II/VI
3 (2+1)****Theory**

Importance of fertilization and conception; prenatal counseling: pre-conceptual preparation, genetic and chromosomal abnormalities, environmental influences on prenatal development, alternate forms of conception, prenatal diagnosis; prenatal care of mother: signs and symptoms of pregnancy, prenatal hazards, warning signals and remedial measures; stages of prenatal development; child birth: process, complications and types; post natal care: care of mother, care of normal, premature and low birth weight infants, common ailments of infancy; infant development: physical, motor, social, emotional, cognitive and language; methods of child study.

Practical

Visit to maternity wards; observation of normal and premature babies using Apgar scale; demonstration of feeding, bathing, dressing and bed making of infants; study of common ailments among infants; visit to child care centres; infant assessment: physical, motor, social, emotional, cognitive and language development; identification of delayed developments; preparation of developmental stimulation kit.

HDFS 201**EARLY AND LATE CHILDHOOD****SEM III/VII
3 (2+1)****Theory**

Early and late childhood: meaning, characteristics, significance and developmental tasks; physical, motor, social, emotional, cognitive, language, personality and moral development; hazards and factors affecting developments; role of family, peers and society in development of children during early and late childhood; pubertal changes, its physical and psychological implications.

Practical

Assessment of physical, motor and mental development using Nancy Bayley's Scale; assessment of language development using Reynell Scales; assessment of socio-emotional development by Vineland Social Maturity Scale; report writing; preparation of educational material for parents on issues related developmental delays.

HDFS 202**ADOLESCENCE AND ADULTHOOD****SEM IV/VIII
3 (2+1)****Theory**

Adolescence: meaning, characteristics, developmental tasks; physical, motor, social, emotional, cognitive, language, personality and moral development; hazards and factors affecting developments; interests and problems of adolescents; counseling and guidance during adolescence; role of family, peers and society in development of adolescents; adulthood: early and late adulthood- physical changes, intellectual and cognitive functioning, personal, economic and psycho-social adjustments; midlife crisis.

Practical

Assessment of cognitive and social abilities, emotions, moral values, sex-role development and aspirations of adolescents; study of prejudices, self concept, interests, problems and values of adolescents and influence of media; study of psycho-social adjustment and crisis during adulthood; report writing and presentation; preparation of educational material on current issues related to adolescence and adulthood.

HDFS 301 MARRIAGE AND FAMILY DYNAMICS SEM V/IX
3 (2+1)

Theory

Marriage: meaning, purpose, motives, functions and types; marriage in different Indian societies; readiness for marriage; premarital counseling; marital harmony and personal compatibility in marriage; kinship: terminology, principles, patterns and types of kin groups; family: origin, evolution, meaning, structure and forms of families across different countries; changing trends in family system; multiple roles of women: role change and conflict; laws related to marriage and family; stages of family life cycle; technological advancement and family; family disorganization: causes and consequences; marriage and family counseling; crises in family life; demographic profile of women and child.

Practical

Organizing campaigns and panel discussions related to marriage and family; survey of families with different background for understanding changing scenario of families; cultural diversification and marriage traditions in India; report writing and presentation.

HDFS 302 CHILDREN WITH SPECIAL NEEDS SEM V/IX
3 (2+1)

Theory

Children with special needs: meaning, importance and types- etiology, characteristics, identification, educational provisions; multiple disabilities: definition, characteristics and problems; children with emotional disturbances and juvenile delinquents; rehabilitation: concept, programmes, role of family and community.

Practical

Visit to local educational and rehabilitation institutions for children with special needs; case studies of special children: mentally retarded, gifted, visually impaired, children with learning disabilities, speech impaired, orthopaedically handicapped; report writing and presentation of case studies.

HDFS 303 PERSONALITY DEVELOPMENT SEM VI/IX
2 (1+1)

Theory

Personality: meaning, definition, concept and nature; approaches to personality: biosocial, psychoanalytical, psychosocial and social learning; personality patterns, molding the personality patterns, persistence and change; personality determinants: physical, intellectual, emotional, social, educational and family; aspirations and achievements; personality adjustment.

Practical

Assessment of characteristics and types of personality; impact assessment of family and other factors on personality.

HDFS 391 **CHILD AND FAMILY COUNSELING** **SEM VI/X**
3 (2+1)

Theory

Guidance: concept, nature, scope, need, principles and types - educational, vocational and personal; benefits, limitations and organization of guidance services at school level; counseling: concept, need, objectives, principles, types, approaches and process; counseling in special groups: families, children and delinquents; qualities of a counselor; psychological testing; psychotherapy: concept, process and techniques.

Practical

Visits to the guidance and counseling centres for observing the counseling sessions; identifying families with problems and conducting case studies; developing, implementing and evaluating intervention programmes; report writing and presentation.

HDFS 392 **EARLY CHILDHOOD EDUCATION** **SEM VI/X**
3 (2+1)

Theory

Meaning, need, importance, scope and objectives of ECE; history of early childhood education, contribution of Western and Indian educators: Friedrich Frobel, Maria Montessori, Jean Piaget, M.K.Gandhi, R.N.Tagore, Zakir Husain, Krishnamurati, Tara Bai Modak; preschool education during five year plans; recommendations and suggestions of various committees/reports; early childhood programmes in India.

Practical

Formulation and implementation of curriculum models based on Jean Piaget, Maria Montessori, Frobel and Developmentally Appropriate Programmes.

HDFS 393 **TEACHING MATERIAL FOR YOUNG** **SEM VI/X**
CHILDREN – I **4 (1+3)**

Theory

Stimulation: meaning, objectives and significance; creativity: concept, meaning, role of creative expression in overall development of children, role of teacher in fostering creative expression through variety of media- painting, printing, modeling, paper cutting and pasting, puppetry, music movements and drama; play: types, significance and theories; play as teaching strategy; literature for young children: need, importance, types and principles of developing children's literature, criteria for development and selection of literature.

Practical

Visit to literature designing centers and book fare; appraisal of available children literature in the market; preparing resource book and teaching material for promoting language development; preparing creativity file on different art activities: painting, printing, paper cutting, folding and pasting, modeling; developing story book, picture book and computer aided teaching material.

HECM 102

COMMUNICATION MANAGEMENT

SEM II/VI

4 (2+2)

Theory

Communication: concept, importance, functions, models, elements and barriers ; uses, importance and limitations of communication methods: lecture, demonstration, discussion, meeting, field trip, camp/campaign, exhibition and printed material; audio visual aids: meaning, classification and functions; selection, use, advantages and limitations: graphic communication aids- charts, posters, leaflet, booklet, projected media- slide projector, OHP, public address system, LCD, electronic media- radio, TV and video, three dimensional aids- specimens, objects, models; psychological concepts in teaching and learning; evaluation of teaching and learning; concept and need of communication management.

Practical

Selection, planning, preparation and use of different audio-visual methods and aids; preparation of audio visual aids with the use of computer.

HECM 201

**DIFFUSION AND ADOPTION OF
HOMESTEAD TECHNOLOGIES**

SEM III/VII

3 (2+1)

Theory

Concept and elements of diffusion with special reference to appropriate homestead technologies; innovation: concept, characteristics and consequences; adoption process; innovation decision process; innovativeness and adopter categories; rate of adoption and factors affecting adoption; technology transfer process, social change, change agents and opinion leaders.

Practical

Survey for identification and use of appropriate homestead technologies by rural and urban families; calculation of adoption index of selected technologies; demonstration of improved technologies supplemented with communication media for teaching rural women/ girls.

HECM 202

WOMEN IN AGRICULTURE

SEM III/VII

2 (2+0)

Theory

Status of rural women: demographic, sex ratio, nutrition, health, education and work; meaning and concept of rural development; issues and challenges of women in agriculture; gender issues in agriculture; role, responsibilities, access and control over productive resources; programmes for women in agriculture; extension needs and preferences of women in agriculture; women friendly agricultural technologies; agro-enterprises in agriculture for sustainable development.

HECM 203

EXTENSION TRAINING MANAGEMENT

SEM IV/VIII

3 (2+1)

Theory

Extension training: concept, definitions, objectives, importance, nature, types, phases and principles; training need: meaning, importance, types and techniques of need

leaflet, poster, chart, booklet, pamphlet, slides, invitation and greeting card; field testing of selected developed aids.

HECM 393 ENTREPRENEURSHIP DEVELOPMENT SEM VI/X
3 (2+1)

Theory

Entrepreneurship: concept, need and importance; process of initiating enterprise; types of enterprises, their merits and demerits; government policies and schemes for entrepreneurship development for women; entrepreneurial motivation; competencies of women entrepreneurs: management of financial resources, launching and organizing an enterprise, marketing management; legal aspect of small business/enterprise: elementary knowledge of income and sale tax.

Practical

Exercises for entrepreneurial motivation; visit to a small scale and cottage industry; market assessment/survey and study of one enterprise in detail; preparing a project proposal for submitting to a funding agency; case study of successful women entrepreneurs.

HECM 401 COMMUNICATION SKILLS SEM VII/XI
3 (2+1)

Theory

Meaning, importance and type of communication skills; intra personal communication; oral communication skills: public speaking, oral presentation, group discussion, facing interview, telephonic communication; written communication: resume, official letters; non verbal communication; listening skills; reading skills; soft skills; giving and receiving feedback; managing interpersonal relationship.

Practical

Practical exercises in oral, written, listening and reading skills.

HECM 402 DESIGNING INFORMATION MATERIAL - II SEM VII/XI
5 (0+5)

Practical

Application of soft wares for desktop publishing and multimedia production; designing and production of logo, card, banner, poster, chart, book and magazine cover, advertisement, folder; flex designing; photo editing: refining the damaged photo, editing the background; editing of video; field testing of selected developed aids.

HECM 403 ELECTRONIC JOURNALISM SEM VII/XI
5 (1+4)

Theory

Electronic journalism: concept, terminology, classification, ethics, and career; organizational set up of radio station; AM, FM and community radio station; writing for radio news, interview, feature, chunks, promos and talk; steps in radio programme production; video: planning production and evaluation of TV/video programme – educational video, interview, news, documentary, social and commercial advertisement.

Practical

Critical evaluation of radio programmes; visit to radio station to study its organization and management pattern; planning, writing, production and editing of radio chunks, promos, talk/ farm broadcast, news and interview; evaluation of produced radio programme; critical evaluation of TV programmes; visit to local TV channel; news compilation and presentation; planning, production and editing of educational video/documentary/social advertisement.

HECM 404

PRINT JOURNALISM

SEM VII/XI

5 (2+3)

Theory

Print journalism: meaning, definition, important terminology, function, ethics, libel and careers; news: meaning, types, news value determinants; news sources: national and international news agencies, PR department, covering interview, function, press conference; news writing: headline, lead and body; feature and article writing; reporting: meaning ,types; types of reporter; editing: concept, principles, steps; proof reading; newspaper: meaning and content analysis; functions and departments of newspaper organization; make up of a newspaper; printing techniques; advertising: concept, types, principles and techniques; planning advertisements for print.

Practical

Operation and use of page maker software; practical exercises on writing and editing news, feature, article and advertisement; designing and layout of tabloid newspaper; visit to press and report presentation; working on a lab journal.

IAHS 491

**INTERNSHIP/INDUSTRIAL
ATTACHMENT**

SEM VIII/XII

(To be conducted jointly by FN, FRM, HDFS,
EECM and TAD)

20 (10 Credit and
10 Non Credit)

Orientation and basic training (1week): introduction, objectives and modus operandi of RHWE; briefing about general Home Science messages and developing questionnaire for need assessment and evaluation of RHWE program; rural home experience through placement with families (4 weeks): rapport building among farm women and interns, conducting survey on village, family and personal profile through PRA technique, need assessment, organizing skill trainings and demonstrations on income generating activities/ appropriate technology related to Foods and Nutrition, Textile & Apparel Designing, Human Development & Family Studies, Family Resource Management and Extension Education & Communication Management and its implication at mass level; organizing village fair, exhibition and competitions; Industrial Attachment (3 months): placement of interns with industry- observing and getting understanding of industry/enterprise; selecting department/area of work according to one's interest and capabilities; getting training and expertise on the selected area; project report preparation (one week): preparation of report on rural experience gained, industrial training attained, major constraints in rural area and industry, suggestions for improvement, presentation and evaluation of report on the basis of the punctuality, enthusiasm, conduct, leadership qualities, sincerity and devotion displayed by the interns.

TEXTILE AND APPAREL DESIGNING

Course No.	Course Title	Credits	Semester 4 Yr/6Yr
TAD 101	Basics of Clothing Construction	3 (1+2)	I/V
TAD 102	Fundamentals of Weaving and Knitting	3 (2+1)	II/VI
TAD 201	Textile Science and Care	3 (2+1)	III/VII
TAD 202	Principles of Dyeing and Printing	3 (1+2)	IV/VIII
TAD 301	Apparel Designing and Construction	3 (1+2)	V/IX
TAD 302	Traditional Textiles of India	2 (1+1)	V/IX
Total Credits		17 (8+9)	
Elective Courses/Experiential Learning			
TAD 391	Fashion Illustrations	3 (1+2)	VI/X
TAD 392	Apparel Manufacturing through Flat Pattern	3 (1+2)	VI/X
TAD 393	Computer Aided Designing	3 (0+3)	VI/X
TAD 401	Traditional Costumes of India	3 (2+1)	VII/XI
TAD 402	Apparel Manufacturing through Draping	3 (0+3)	VII/XI
TAD 403	Computer Aided Fashion Designing	3 (1+2)	VII/XI
TAD 404	Fashion Merchandising	3 (2+1)	VII/XI
TAD 405	Textile Designing	3 (1+2)	VII/XI
TAD 406	Design Studio Practices and Project Work	4 (0+4)	VII/XI
Total Credits		28 (8+20)	

TAD 101 BASICS OF CLOTHING CONSTRUCTION SEM I/V
3 (1+2)

Theory

Clothing construction: importance, scope, terminology; sewing equipments; body measurements: importance, tools required and general rules for taking body measurements; preparation of fabrics for garment construction; invention and evolution of clothes; biological, sociological and psychological functions of clothes; clothing requirements for infants, toddlers, pre schoolers and elementary school children.

Practical

Use of sewing equipments; working, care and repair of sewing machine; preparation of samples of basic hand stitches, seams, seam finishes, disposal of fullness, finishing of necklines, plackets, fasteners and mending; taking body measurements; preparation and layout of different fabrics; drafting, cutting and stitching of baby layette, jhabla and frock.

TAD 102 FUNDAMENTALS OF WEAVING AND SEM II/VI
KNITTING 3 (2+1)

Theory

Weaving: origin, utility, technical terminology; handloom: kinds, principal parts, functions; important motions of the handloom; shed and its utility; weaving accessories; preparation of yarn for weaving; basic processes of weaving; basic weaves: plain, twill, satin-their variations and uses; standard sizes of woven household articles; knitting: terminology, principles and classification; knitting needles; stitches used in knitting; knitting machines: nomenclature and uses; types of knits: warp and weft knits, characteristics and uses.

Practical

Parts of loom; weaving accessories; preparation of yarn for weaving: preparing and setting warp on the loom; preparing weft; drafting and lifting plan; preparation of samples of basic weaves: plain, basket, rib, twill, satin and sateen; study of knitting yarns and accessories; use of knitting abbreviations; preparation of basic samples of hand knitting: casting on, casting off, increasing, decreasing, necklines and armholes; setting of knitting machine: parts, setting needle position; visit to weaving and hosiery centers/mills; project work on weaving and knitting.

TAD 201

TEXTILE SCIENCE AND CARE

SEM III/VII

3 (2+1)

Theory

Textile: concept, classification, terminology; fibres: manufacturing, properties and use of cotton, silk, wool, jute, linen, viscose rayon, nylon, polyester and acrylic; yarn classification; textile finishes: introduction, classification and common finishes used in textiles; labels and tags used in textiles; use and care of laundry equipments; principles and methods of washing and finishing; cleansing agents: water, soap and detergent; special laundry treatments: stain removal and bleaches; laundry reagents: acidic and alkaline; laundry additives: stiffening agents and blues; principles of dry cleaning; disinfection and storage of clothes.

Practical

Identification of textile fibres: visual, microscopic, burning and chemical test; study of yarns: type and size; study of fabric: weight, thickness, count, bow and skewness; study of common fabrics available in the market; removal of common stains from different fabrics; demonstration of laundry equipments; washing, finishing and storage of textile articles: cotton, silk, wool, synthetics and other special articles – zari, embroidered and laced fabrics.

TAD 202

PRINCIPLES OF DYEING AND PRINTING

SEM IV/VIII

3 (1+2)

Theory

Dyeing and printing: concept and terminology; classification of dyes: indigenous and synthetic; synthetic dyes: application and properties - direct, acid, basic, vat, naphthol, disperse, fibre reactive, pigment; selection of suitable dyes; dyeing methods: fibre, yarn and fabric; printing styles: direct, mordant, resist and discharge; printing methods: hand block, stencil, screen, roller, transfer, flock, duplex and resist dyeing – tie and dye and batik; common dyeing and printing defects, causes and preventive measures.

Practical

Design development for apparel and utility articles with suitability to different printing techniques; preparation of yarn and fabric for dyeing; dyeing cotton with different classes of dyes; preparation of samples: block, screen, and stencil printing, tie and dye and batik; preparation of articles using tie and dye or batik and combination of printing; working out the cost of prepared articles with profit margin; exhibition, stage show and sale of prepared articles.

TAD 301

**APPAREL DESIGNING AND
CONSTRUCTION**

**SEM V/IX
3 (1+2)**

Theory

Apparel designing: importance, elements and principles of design applied to clothing; factors affecting clothing requirements; clothing requirements of adolescents, adults and senior citizens; clothing requirements of special groups: expectant and lactating mothers, physically disabled persons-polio myelitis and crawler; role of apparel designing in personality development; clothing budget; wardrobe planning.

Practical

Survey of different fabrics available in market; construction of adult bodice block and sleeve; drafting, cutting and stitching of kameez, salwar, churidar pyjama, blouse, petticoat, nighty, gown, boy's kurta and pyjama, one garment for special group.

TAD 302

TRADITIONAL TEXTILES OF INDIA

**SEM V/IX
2 (1+1)**

Theory

Study of traditional woven textiles of India: Dacca muslin, brocades, sarees - Jamdani, Baluchari, Pochampalli, Patola, Ikat, Kanchipuram, Chanderi, Maheshwari and Vichitrapuri; woven shawls of Kashmir, Himachal Pradesh and North Eastern states; carpets of India: Kashmir, Uttar Pradesh, Warangal and Amritsar; traditional embroideries of India: Kashida of Kashmir, Chamba rumal of Himachal Pradesh, Phulkari and chope of Punjab, Kasuti of Karnataka, chikankari and zari work of Uttar Pradesh, Kantha of Bengal, Manipuri embroidery, appliqué and patch work of Bihar, Kutch and Kathiawar embroideries of Gujarat.

Practical

Preparation of samples of eight traditional embroideries in trend; preparation of two articles using different embroideries; documentation of Indian textiles and embroideries.

TAD 391

FASHION ILLUSTRATIONS

**SEM VI/X
3 (1+2)**

Theory

Fashion illustration: concept, importance, scope and terminology; sketching media: types and uses; study of human figure; real figure and fashion figures; proportion theories; sources of inspiration of designing; level of designing: haute couture, free lancer, brand; rendering the idea: fashion drawing vs. fashion illustrations, templates, working drawing; figure illustration and visualization; portfolio: concept and importance; techniques of layout and presentation; fashion illustration and advertising; role of fashion illustrator and career opportunities.

Practical

Human body: drawing of basic human skeleton, fleshing out the figure; eight and ten head figure; difference between male and female figure forms; comparative drawing of real and fashion figures; figure proportion of children and adolescent; drawing of body parts: head, arms, hands, legs and feet, sketching of facial features; free hand sketching; sketching of garments and designing features: basic garment shapes, flat drawing of garments;

TAD 402 **APPAREL MANUFACTURING THROUGH DRAPING** **SEM VII/XI**
3 (0+3)

Practical

Draping: terminology, equipments, principles; basic silhouettes; preparation of muslin for draping; preparation of foundation block for upper and lower garments; dart location and manipulation; designing of garments using gathers, pleats, necklines, yokes, collars and sleeves; designing and construction of five garments using different constructional and decorative features and one functional garment; exhibition of prepared garments; visit to fashion institutes.

TAD 403 **COMPUTER AIDED FASHION DESIGNING** **SEM VII/XI**
3 (1+2)

Theory

Importance and use of CAD in apparel and textile industry; selection of hardware and software for computer aided designing; basics of various textile and apparel designing softwares; status of CAD technology.

Practical

Developing design catalogue of different dresses and articles using different softwares; developing patterns of selected garments and articles using pattern making software; grading patterns; marker making by manual and automatic methods; projection of work.

TAD 404 **FASHION MERCHANDISING** **SEM VII/XI**
3 (2+1)

Theory

Fashion: concept, terminology, fashion cycle and theories; factors affecting fashion diffusion; components of fashion; fashion analysis; retailing and merchandising: terminology, concepts and principles; types of retailing: store retailing - departmental, chain, discount, niche stores and boutiques, non-store retailing – direct selling, catalogue retailing, TV home shopping and internet shopping; role and responsibilities of a merchandiser; trends in retailing and merchandising; importance of fashion forecasting in product planning, retailing and merchandising for buying and export houses; fashion advertising and promotion; visual merchandising: importance, types of displays - exterior, interior and window displays; export and import procedure in fashion merchandising; role of merchandising organization for export promotion.

Practical

Market analysis through visits to retail and wholesale textile market, show rooms, chain stores, factory outlets, niche stores, boutiques and report writing; developing display techniques for visual merchandising for apparel and textiles presentation.

TAD 405 **TEXTILE DESIGNING** **SEM VII/XI**
3 (1+2)

Theory

Textile designing: importance, terminology and tools used; sources of inspiration for basic designing; textile design: woven and decorative; traditional Indian motifs/designs in

