

Curriculum
of
Diploma Programme
in
Computer Aided Costume Design & Dress Making



State Board of Technical Education (SBTE)
Bihar

Semester – III Teaching & Learning Scheme

Board of Study	Course Codes	CourseTitles	Teaching & Learning Scheme (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
	2450301	Fashion Illustration	3	-	4	2	9	6
	2450302	Components of Clothing Construction	3	-	4	2	9	6
	2450303	Basics of Fashion	2	1	-	2	5	4
	2418305	Python Programming (CE, CSE, AIML, ME, ME (Auto)., ELX, ELX (R), MIE, FTS, CRE, CHE, TE, CACDDM, GT)	3	-	4	2	9	6
	2450306	Summer Internship – I (After 2 nd Sem) (Common for all programmes)	-	-	2	2	4	2
	2450307	Digital Tools for Costume Designing	-	-	4	2	6	3
	2450308	Design Details in Garment	-	-	4	2	6	3
Total			11	1	22	14	48	30

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

Semester - III Assessment Scheme

Board of Study	Course Codes	Course Titles	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
	2450301	Fashion Illustration	30	70	20	30	20	30	200
	2450302	Components of Clothing Construction	30	70	20	30	20	30	200
	2450303	Basics of Fashion	30	70	20	30	-	-	150
	2418305	Python Programming (CE, CSE, AIML, ME, ME (Auto)., ELX, ELX (R), MIE, FTS, CRE, CHE, TE, CACDDM, GT)	30	70	20	30	20	30	200
	2450306	Summer Internship – I (After 2 nd Sem) (Common for all programmes)	-	-	10	15	10	15	50
	2450307	Digital Tools for Costume Designing	-	-	20	30	20	30	100
	2450308	Design Details in Garment	-	-	20	30	20	30	100
Total			120	280	130	195	110	165	1000

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

- A) **Course Code** : **2418305(T2418305, P2418305,S2418305)**
- B) **Course Title** : Python Programming
(CE, CSE, AIML, ME, ME (Auto), ELX, ELX (R), MIE, FTS, CRE, CHE, TE, CACDDM, GT, RE)
- C) **Pre- requisite Course(s)** :
- D) **Rationale** :

Python programming has emerged as a popular programming language across wide range of application segments from Scientific to Machine Learning to mobile app development, and so on. Python is a high-level general-purpose programming language.

Because code is automatically compiled to byte code and executed, Python is suitable as a scripting language, Web application implementation language, etc.

In Python there are multiple levels of organizational structure: functions, classes, modules, and packages. These assist in organizing code. An excellent and large example is the Python standard library.

The Object-oriented Python provides a consistent way to use objects: in Python it is easy to implement new object types (called classes in object-oriented programming).

This introductory course to learn basic Python programming features which can be used as building blocks to develop different kind of applications using Python 3.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

- CO-1** Use various data types and operators in formation of expressions.
- CO-2** Write and execute programs using control statements.
- CO-3** Perform relevant operations on Sequence data types
- CO-4** Create functions in modules
- CO-5** Use numpy in writing python programs
- CO-6** Handle data files and exceptions.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	1	-	1	-	-	-	-		
CO-2	1	2	2	1	-	1	-		
CO-3	1	2	2	1	-	1	-		
CO-4	1	2	2	1	-	1	2		
CO-5	1	2	2	1	-	1	-		
CO-6	1	2	2	1	-	1	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
	2418305	Python programming	03	-	04	02	09	06

Note: Prefix will be added to Course Code if applicable (T for theory Paper, P for Practical Paper and S for Term work)

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

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C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
	2418305	Python programming	30	70	20	30	20	30	200

Note: Prefix will be added to Course Code if applicable (T for theory Paper, P for Practical Paper and S for Term work)

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2418305**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Differentiate between Procedure Oriented P and Object Oriented Programming approach with example.</p> <p><i>TSO 1b.</i> Use the concept of Lvalue and Rvalue</p> <p><i>TSO 1c.</i> Write python program using various data types and operators</p>	<p>Unit 1: Fundamentals of Python Programming Syntax</p> <p>1.1 Introduction to Python Character Set, Python Tokens, Variables, Lvalue and Rvalue Concepts, and the Use of Comments.</p> <p>1.2 Overview of Data Types:</p> <ul style="list-style-type: none"> • Number Types: Integer, Floating Point, Complex • Boolean Type • Sequence Types: String, List, Tuple • None Type • Mapping Type: Dictionary • Distinction between Mutable and Immutable Data Types <p>1.3 Understanding Operators:</p> <ul style="list-style-type: none"> • Arithmetic Operators • Relational Operators • Logical Operators • Assignment Operator • Augmented Assignment Operators • Expressions and Statements • Type Conversion and Input/Output Mechanisms • Precedence of Operators • Expression Evaluation 	CO-1
<p><i>TSO 2a.</i> Write Python program using decision making statements</p> <p><i>TSO 2b.</i> Write Python program using loop structure to solve iterative problems</p>	<p>Unit-2.0 Conditional and Iterative statements</p> <p>2.1 Conditional statements:</p> <ul style="list-style-type: none"> • simple if statement • if- else statemen • if-elif-else statement <p>2.2 Iterative statements:</p> <ul style="list-style-type: none"> • while loop • for loop • range function • break and continue statements • nested loops 	CO-2

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 3a.</i> Perform various operations on string using string operators and methods</p> <p><i>TSO 3b.</i> Perform various operations on List using list operators and methods</p> <p><i>TSO 3c.</i> Perform various operations on tuples using tuples operators and methods</p> <p><i>TSO 3d.</i> Perform various operations on set using set methods</p> <p><i>TSO 3e.</i> Perform various operations on dictionary using dictionary methods</p>	<p>Unit-3.0 String, List, Tuples, set and Dictionary</p> <p>3.1 String:</p> <ul style="list-style-type: none"> • Indexing • string operations (concatenation, repetition, membership & slicing) • traversing a string using loops • built-in functions. <p>3.2 Lists:</p> <ul style="list-style-type: none"> • Introduction • Indexing in list • list operations: concatenation, repetition, membership & slicing, traversing a list, built- in list functions, linear search on list of numbers and counting the frequency of elements in a list <p>3.3 Tuples: Creating, initializing, accessing elements, tuple assignment, performing operations on tuples, tuple methods and built-in functions, nested tuples</p> <p>3.4 Set: Creating set, traversing, adding, removing data in set, performing set operations like join, Union intersection, difference</p> <p>3.5 Dictionary: accessing items in a dictionary using keys, mutability of dictionary: adding a new item, modifying an existing item, built-in dictionary functions.</p>	<p>CO-3</p>
<p><i>TSO 4a.</i> Create and use user defined functions to implement modular programming approach</p> <p><i>TSO 4b.</i> Differentiate variable scope with example.</p> <p><i>TSO 4c.</i> Import and use Python modules, libraries</p>	<p>Unit-4.0 Python Functions, Modules and packages</p> <p>4.1 Functions: types of function (built- in functions, functions defined in module, user defined functions), creating user defined function, arguments and parameters, default parameters, positional parameters, Lambda functions, returning value, scope of a variable: global scope, local scope</p> <p>4.2 Modules and Packages: Importing module using 'import' Regular Expressions, Exception Handling, PyPI Python Package Index, Pip Python package manager, Importing Libraries and Functions</p>	<p>CO-4</p>
<p><i>TSO 5a.</i> Write simple Python programs using numpy</p> <p><i>TSO 5b.</i> Use Numpy array in python program</p> <p><i>TSO 5c.</i> Use Numpy to solve linear algebra problem.</p>	<p>Unit-5.0 Numpy</p> <p>5.1 Introduction to NumPy</p> <p>5.2 Installation of NumPy</p> <p>5.3 NumPy Arrays:</p> <ul style="list-style-type: none"> • Understanding the NumPy array 	<p>CO-5</p>

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
	<ul style="list-style-type: none"> • The fundamental data structure in NumPy. • Creation of arrays using different methods: np.array(), np.zeros(), np.ones(), etc. • Exploring array attributes like shape, size, and dimensions. <p>5.4 Array Indexing and Slicing:</p> <ul style="list-style-type: none"> • Accessing elements and subarrays in NumPy arrays using indexing and slicing. • Demonstration of the difference between one-dimensional and multi-dimensional array indexing. <p>5.5 Array Operations:</p> <ul style="list-style-type: none"> • Performing element-wise operations on NumPy arrays. • Exploring universal functions (ufuncs) for mathematical operations. <p>5.6 Linear Algebra with NumPy:</p> <ul style="list-style-type: none"> • Introduction to linear algebra operations using NumPy. • Matrix multiplication, determinant, inverse, and solving linear equations. <p>5.7 File input and output with Numpy</p> <p>5.8 Broadcasting in Numpy</p>	
<p><i>TSO 6a.</i> Explain different types of Exceptions in python</p> <p><i>TSO 6b.</i> Write Python programs for exception handling in Python</p> <p><i>TSO 6c.</i> Differentiate different modes of file opening.</p> <p><i>TSO 6d.</i> Perform read, Write, Append operations in files</p>	<p>Unit 6: Exception and File Handling in Python</p> <p>6.1 Exception Handling: syntax errors, exceptions, need of exception handling, user-defined exceptions, raising exceptions, handling exceptions, catching exceptions, Try - except - else clause, Try - finally clause, recovering and continuing with finally, built-in exception classes.</p> <p>6.2 File Handling: text file and binary file, file types, open and close files, reading and writing text files, reading and writing binary files, file access modes</p>	<p>CO-6</p>

Note: One major TSO may require more than one Theory session/Period.

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2418305

Practical/Lab Session Outcomes (LSOs)	S. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
<p><i>LSO 1.1.</i> Write, execute and debug simple Python program using Integrated Development and Learning Environment (IDLE)</p> <p><i>LSO 1.2.</i> Write and execute simple 'C' program using variables, arithmetic expressions.</p>	1.	<p>a) Download and Install IDLE.</p> <p>Write and execute Python program to-</p> <p>b) Calculate the Area of a Triangle where its three sides a, b, c are given. $s=(a+b+c)/2$, Area=square root of $s(s-a)(s-b)(s-c)$ (write program without using function)</p> <p>c) Swap Two Variables</p> <p>d) Solve quadratic equation for real numbers.</p>	CO-1
<p><i>LSO 2.1.</i> Write and execute python programs using conditional statements.</p> <p><i>LSO 2.2.</i> Write and execute python programs using various types of Loop statements</p>	2.	<p>Write and execute Python program to-</p> <p>a) Check if a Number is Positive, Negative or zero.</p> <p>b) Check whether the given year is a Leap Year.</p> <p>c) Print all Prime Numbers in an Interval.</p> <p>d) Display the multiplication Table based on the given input.</p> <p>e) Print the Fibonacci sequence.</p> <p>f) Find the Factorial of a Number.</p>	CO-2
<p><i>LSO 3.1.</i> Write and execute Python program to perform various operations on string using string operators and methods</p>	3.	<p>Write and execute Python program to-</p> <p>a) Check whether the string is Palindrome</p> <p>b) Reverse words in a given String in Python</p> <p>c) identify in a strings the name, position and counting of vowels.</p> <p>d) Count the Number of matching characters in a pair of string (set)</p> <p>e) Python program for removing i-th character from a string</p>	CO-2, CO-3
<p><i>LSO 4.1.</i> Write and execute Python program to perform various operations on List using List operators and methods</p>	4.	<p>Write and execute Python program to-</p> <p>a) find largest number in a given list without using max().</p> <p>b) find the common numbers from two lists.</p> <p>c) create a list of even numbers and another list of odd numbers from a given list.</p> <p>d) To find number of occurrences of given number without using built-in methods.</p>	CO-2, CO-3
<p><i>LSO 5.1.</i> Write and execute Python program to perform various operations on Tuple using Tuple operators and methods.</p>	5.	<p>Write and execute Python program to-</p> <p>a) find the index of an item of a tuple.</p> <p>b) find the length of a tuple.</p> <p>c) to reverse a tuple.</p> <p>d) Write a Python program to sort a list of tuple by its float element. Sample data: [('item1', '12.20'), ('item2', '15.10'), ('item3', '24.5')] Expected Output: [('item3', '24.5'), ('item2', '15.10'), ('item1', '12.20')]</p>	CO-2, CO-3

Practical/Lab Session Outcomes (LSOs)	S. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
<i>LSO 6.1.</i> Write and execute Python program to perform various operations on sets using set methods.	6.	Write and execute Python program to- a) create an intersection of sets. b) create a union of sets. c) create set difference. d) check if two given sets have no elements in common.	CO-2, CO-3
<i>LSO 7.1.</i> Write and execute Python program to perform various operations on Dictionary using Dictionary methods	7.	Write and execute Python program to- a) Write a Python script to concatenate two dictionaries to create a new one b) Write a Python script to merge two Python dictionaries. c) Write a Python program to combine two dictionary adding values for common keys. d1 = {'a': 100, 'b': 200, 'c':300} d2 = {'a': 300, 'b': 200, 'd':400} Sample output: d({'a': 400, 'b': 400, 'd': 400, 'c': 300})	CO-2, CO-3
<i>LSO 8.1.</i> Write and execute Python program to create user defined functions and call them.	8.	Write and execute Python program to- a) Write a Python function for reversing a string and call it. b) Write a Python function for calculating compound interest and call it. c) Write a Python function for calculating the factorial of a number and call it to calculate $n/(n-r)!$ where symbol "!" stands for factorial.	CO-2, CO-4
<i>LSO 9.1.</i> Write and execute Python program to define a numpy array. <i>LSO 9.2.</i> Develop and execute Python program Using various types of Numpy operation.	9.	a) Write a python program to create a Numpy array filled with all zeros b) Write a python program to check whether a Numpy array contains a specified row c) Write a python program to Remove rows in Numpy array that contains non-numeric values d) Write a python program to Find the number of occurrences of a sequence in a NumPy array e) Write a python program to Find the most frequent value in a NumPy array f) Write a python program to Combine a one and a two-dimensional NumPy Array g) Write a python program to Flatten a Matrix in Python using NumPy h) Write a python program to Interchange two axes of an array	CO-2, CO-5
<i>LSO 10.1.</i> Develop and execute Python program to handle various type of exceptions. <i>LSO 10.2.</i> Develop and execute Python program to perform file operations.	10.	a) Using exception handling feature such as try...except, try finally- write minimum three programs to handle following types of exceptions. i. Type Error ii. Name Error	CO-6, CO-1, CO-2,

Practical/Lab Session Outcomes (LSOs)	S. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
		iii. Index Error iv. Key Error v. Value Error vi. IO Error vii. Zero Division Error b) Write Python program to demonstrate file operations.	

Note: in addition to above listed practical, students are suggested to practice all the examples covered by the teacher during theory sessions.

L) **Suggested Term Work and Self Learning: S2418305** Some sample suggested assignments, micro project and other activities are mentioned here for reference.

a. **Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

b. Micro Projects:

1. Create a shop billing system
2. Create income tax calculation system.
3. Develop number guessing game (random integer will be selected by the system and the user has to guess that integer in the minimum number of guesses. Maximum 5 guess allowed.)
4. Assign numbers to alphabet a-z as (1-26). User will input a word. System will convert it to a number by adding all the individual alphabets of that word.
5. Design a basic calculator program that performs arithmetic operations like addition, subtraction, multiplication, and division based on user input.
6. Any other micro-projects suggested by subject faculty on similar line.

(Students may use file and sequence data types to develop above listed applications)

c. Other Activities:

1. Seminar Topics:
 - Tkinter widgets in python
 - Python date/time module and its applications
 - wxPython and its applications

M) Suggested Course Evaluation Matrix: The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	10%	10%	15%	16%	16%	10%	16%
CO-2	15%	15%	15%	16%	16%	15%	16%
CO-3	25%	25%	20%	18%	18%	25%	18%
CO-4	15%	15%	15%	16%	16%	15%	16%
CO-5	25%	25%	25%	18%	18%	25%	18%
CO-6	10%	10%	10%	16%	16%	10%	16%
Total Marks	30	70	20	20	10	20	30
			50				

Legend:

*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

** : Mentioned under point- (N)

: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

N) Suggested Specification Table for End Semester Theory Assessment: Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Basics of Python Programming syntax	4	CO-1	7	3	2	2
Unit-2.0 Conditional and Iterative statements	6	CO-2	10	3	3	4
Unit-3.0 3.0 String, List, Tuples, set and Dictionary	12	CO-3	18	5	3	10
Unit-4.0 Python Functions, Modules and packages	7	CO-4	10	3	3	4
Unit-5.0 Numpy	12	CO-5	18	4	5	9
Unit-6.0 Exception and File Handling in Python	7	CO-6	7	2	2	3
Total	48	-	70	20	18	32

Note: Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

O) Suggested Assessment Table for Laboratory (Practical):

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
1.	Write and execute Python program to- a) Calculate the Area of a Triangle where its three sides a,b,c are given. $s=(a+b+c)/2$, Area=square root of $s(s-a)(s-b)(s-c)$ (write program without using function) b) Swap Two Variables c) Solve quadratic equation for real numbers.	CO-1	40	50	10
2.	Write and execute Python program to- a) Check if a Number is Positive, Negative or zero. b) Check whether the given year is a Leap Year. c) Print all Prime Numbers in an Interval. d) Display the multiplication Table based on the given input. e) Print the Fibonacci sequence. f) Find the Factorial of a Number.	CO-2	40	50	10
3.	Write and execute Python program to- a) Check whether the string is Palindrome b) Reverse words in a given String in Python c) identify in a strings the name, position and counting of vowels. d) Count the Number of matching characters in a pair of string (set) e) Python program for removing i-th character from a string	CO-2, CO3	40	50	10
4.	Write and execute Python program to- a) find largest number in a given list without using max(). b) find the common numbers from two lists. c) create a list of even numbers and another list of odd numbers from a given list. d) To find number of occurrences of given number without using built-in methods.	CO-2, CO-3	40	50	10
5.	Write and execute Python program to- a) find the index of an item of a tuple. b) find the length of a tuple. c) to reverse a tuple. d) Write a Python program to sort a list of tuple by its float element. Sample data: [('item1', '12.20'), ('item2', '15.10'), ('item3', '24.5')] Expected Output: [('item3', '24.5'), ('item2', '15.10'), ('item1', '12.20')]	CO-2, CO-3	40	50	10
6.	Write and execute Python program to- a) create an intersection of sets. b) create a union of sets. c) create set difference. d) check if two given sets have no elements in common.	CO-2, CO-3	40	50	10
7.	Write and execute Python program to- a) Write a Python script to concatenate two dictionaries to create a new one	CO-2, CO-3	40	50	10

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
	b) Write a Python script to merge two Python dictionaries. c) Write a Python program to combine two dictionary adding values for common keys. $d1 = \{ 'a': 100, 'b': 200, 'c': 300 \}$ $d2 = \{ 'a': 300, 'b': 200, 'd': 400 \}$ Sample output: $d(\{ 'a': 400, 'b': 400, 'd': 400, 'c': 300 \})$				
8.	Write and execute Python program to- a) Write a Python function for reversing a string and call it. b) Write a Python function for calculating compound interest and call it. c) Write a Python function for calculating the factorial of a number and call it to calculate $n/(!r)*!(n-r)$ where symbol "!" stands for factorial.	CO-2, CO-4	40	50	10
9.	a) Write a python program to create a Numpy array filled with all zeros b) Write a python program to check whether a Numpy array contains a specified row c) Write a python program to Remove rows in Numpy array that contains non-numeric values d) Write a python program to Find the number of occurrences of a sequence in a NumPy array e) Write a python program to Find the most frequent value in a NumPy array f) Write a python program to Combine a one and a two-dimensional NumPy Array g) Write a python program to Flatten a Matrix in Python using NumPy Write a python program to Interchange two axes of an array	CO-2, CO-5	40	50	10
h)	Using exception handling feature such as try...except, try finally-write minimum three programs to handle following types of exceptions. viii. TypeError ix. NameError x. IndexError xi. KeyError xii. ValueError xiii. IOError xiv. ZeroDivisionError	CO-2, CO-6	40	50	10
i)	Write and execute Python program to- a) Calculate the Area of a Triangle where its three sides a,b,c are given. $s=(a+b+c)/2$, Area=square root of $s(s-a)(s-b)(s-c)$ (write program without using function) b) Swap Two Variables c) Solve quadratic equation for real numbers.	CO-1	40	50	10

Legend:

PRA*: Process Assessment

PDA**: Product Assessment

Note: This table can be used for both end semester as well as progressive assessment of practical. Rubrics need to be prepared by the course teacher for each experiment/practical to assess the student performance.

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

Q) List of Major Laboratory Equipment, Tools and Software:

S. No.	Name of Equipment, Tools and Software	Broad Specifications	Relevant Experiment/Practical Number
1.	Computer system	Processor Intel Core i5, 4 GB RAM, 15 GB free disk space	All
2.	Integrated Development and Learning Environment (IDLE)	S/w to be downloaded for python 3.11.3 or higher	All

R) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Introduction to Computing and Problem-Solving using Python	E. Balagurusamy	McGraw Hill Education (India) Pvt. Ltd. 1 st Edition /2016
2.	Learning Python Programming	Jeffrey Elkner, Allan B. Downey, Chris Meyers	Samurai Media Limited. 2016
3.	Python Programming	Ashok Namdev Kamthane and Amit Ashok Kamthane	McGraw Hill Education (India) Pvt. Ltd. 2020, 2 nd Edition
4.	Programming in Python	Dr. Pooja Sharma	BPB Publications 2017

(b) Online Educational Resources:

- <https://docs.python.org/3/tutorial/>
- <https://www.w3schools.com/python/>
- <https://www.tutorialspoint.com/python/index.htm>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational resources before use by the students.

- A) **Course Code** : 2450301/T2450301/P2450301/S2450301)
 B) **Course Title** : Fashion Illustration
 C) **Pre-requisite Course(s)** :
 D) **Rationale** :

Diploma graduates in costume designing need to familiarize themselves with fashion capitals, fashion brands, fashion designers, and consumer segmentations in order to understand the nuance of fashion as a global phenomenon affecting lifestyle and commerce. This will help to keep themselves updated with knowledge and developments in the fashion world. This course on fashion illustration helps in developing skills to create illustrations of apparel and accessories for advertisements, catalogs, websites, and other media. This will help in developing the requisite skills to render fashion designs on paper to match the client's desired aesthetic.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to

- CO-1** Identify the fashion icons.
CO-2 Justify the use of chosen fashion brands.
CO-3 Recognize fashion capitals and fashion designers of the world.
CO-4 Comprehend the promotion strategy of fashion from designer to closet.
CO-5 Apply the knowledge of fashion research, ideation, and presentation board in various situations.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes(POs)							Program Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	2	2	1	2	2		
CO-2	3	2	2	2	1	2	2		
CO-3	3	2	2	2	1	2	2		
CO-4	3	2	2	-	1	-	2		
CO-5	3	2	2	2	1	2	2		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by the respective program coordinator at the institute level. As per the latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
CACDDM	2450301	Fashion Illustration	03	-	04	02	09	06

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning, etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field, or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities, etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources, etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
CACDDM	2450301	Fashion Illustration	30	70	20	30	20	30	200

Legend:

PTA: Progressive Theory Assessment in the classroom (includes class test, mid-term test, and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities, etc.

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignments, micro-projects, seminars, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria for internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare a checklist & rubrics for these activities.

- I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW), and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS), and others must be integrated appropriately.

J) Theory Session Outcomes (TSOs) and Units: T2450301

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Define fashion icon.</p> <p><i>TSO 1b.</i> Find various historic and contemporary personalities from various fields.</p> <p><i>TSO 1c.</i> Appreciate the unique styles of various personalities that made them popular and had a lasting effect on fashion.</p>	<p>Unit-1.0- Fashion Icons</p> <p>Study of various personalities (historic and contemporary) associated with fashion, music, art, film, television, politics, etc. who had a unique style that made them popular and had a lasting effect on fashion.</p>	CO1
<p><i>TSO 2a.</i> Define Brand.</p> <p><i>TSO 2b.</i> Identify various national and international fashion brands.</p> <p><i>TSO 2c.</i> Observe the signature look and values that the brand promotes.</p> <p><i>TSO 2d.</i> Explain about kind of consumer segmentation that the brand identifies with and the promotional activities of the brands.</p> <p><i>TSO 2e.</i> Explain the reflection of advertisements on the aspirations of the brand.</p>	<p>Unit-2.0- Fashion Brands</p> <p>2.1 Introduction to various national and international fashion brands</p> <p>2.2 Observing the signature look and values that the brand promotes</p> <p>2.3 The kind of consumer segmentation that the brand identifies with, the promotional activities of the brands and how do these advertisements reflect the aspirations of the brand?</p>	CO2
<p><i>TSO 3a.</i> Define fashion capital.</p> <p><i>TSO 3b.</i> Identify various fashion capitals of the world.</p> <p><i>TSO 3c.</i> Explain about cultural and fashion climate of the fashion capital.</p> <p><i>TSO 3d.</i> Explain the details of Street fashion.</p> <p><i>TSO 3e.</i> Explain the importance of fashion weeks and trade shows.</p>	<p>Unit-3.0- Fashion Capitals of the World</p> <p>3.1.1 Introduction</p> <p>3.1.2 Cultural and fashion climate</p> <p>3.1.3 Street Fashion Observed</p> <p>3.1.4 Fashion weeks and trade shows</p>	CO3
<p><i>TSO 4a.</i> Identify prominent designers in India and their signature style, evolution, and current collections.</p> <p><i>TSO 4b.</i> Identify prominent international designers and their signature style, evolution, and current collections.</p>	<p>Unit-4.0- Fashion Designers</p> <p>4.1 Prominent designers in India and their signature style, evolution, and current collections</p> <p>4.2 Prominent international designers and their signature style, evolution, and current collections</p>	CO3
<p><i>TSO 5a.</i> Describe about creator and sources of fashion inspiration.</p> <p><i>TSO 5b.</i> Promote fashion from designer to closet.</p>	<p>Unit-5.0 Sources and Creator of Fashion</p> <p>5.1 Creator and sources of fashion inspiration</p> <p>5.2 Promotion of fashion from designer to closet</p>	CO4
<p><i>TSO 6a.</i> Analyze a given design.</p> <p><i>TSO 6b.</i> Analyze keywords and mind mapping.</p> <p><i>TSO 6c.</i> Explain the given consumer research boards.</p> <p><i>TSO 6d.</i> Explain the given Concept boards.</p> <p><i>TSO 6e.</i> Explain Brand research boards.</p>	<p>Unit-6.0 Fashion Research</p> <p>6.1 Design Brief Analysis</p> <p>6.2 Keyword Analysis and Mind Mapping</p> <p>6.3 Consumer research and boards (psychographic and demographic)</p> <p>6.4 Concept boards</p> <p>6.5 Brand research boards</p>	CO5

Note: One major TSO may require more than one Theory session/Period.

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2450301

Practical/Lab Session Outcomes (LSOs)	Sr. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
<p>LSO 1.1. Identify fashion icons.</p> <p>LSO 1.2. Illustrate the fashion garments used by fashion icons.</p> <p>LSO 1.3. Illustrate the fashion garments</p>	1	Take reference images of any one fashion icon and make five illustrations based on its characteristics. (5 illustrations on an A-3 size sheet using any medium)	CO1
<p>LSO2.1 Identify different national and international brands of apparel.</p> <p>LSO2.2 Create a logo and visiting card for the enterprise.</p>	2	Compile a visual bank incorporating visual specimens of different brands of apparel. (Minimum 10-15 brands must be compiled for further referencing) and Create a sample logo and visiting card for an enterprise.	CO2
<p>LSO3.1 Illustrate the work of prominent fashion designers.</p> <p>LSO3.2 Use various mediums and techniques of illustrations.</p>	3	Compile a visual bank incorporating visual specimens of prominent fashion designers' work. (Minimum 10-15 Fashion designers' works must be compiled for further referencing) and Select well-known designers' work and imitate it with the same mediums and techniques used by the designer. (Minimum 5 artworks on A-3 size sheet.)	CO3
<p>LSO4.1 Create a Colour direction board</p> <p>LSO4.2 Create a Silhouette /style direction board</p> <p>LSO4.3 Create Surface embellishments and material direction board</p> <p>LSO4.4 Create a concept board.</p>	4	Prepare the following: 4.1 Colour direction board based on the consumer/user preferences, season, overall trend, and cost limitations 4.2 Silhouette /style direction board based on the consumer/ user preferences, season, overall trend, and cost limitations 4.3 Surface embellishments (if any) and material direction board based on the consumer/user preferences, season, overall trend, and cost limitations 4.4 Develop an overall concept that suites the above-mentioned characteristics and constraints	CO5

L) Suggested Term Work and Self-Learning: S2450301 Some sample suggested assignments, micro-projects, and other activities are mentioned here for reference.

a. Assignments: Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

1. Make a list of national /international fashion icons from various fields.
2. Collect logos of national and international brands.
3. Prepare a list of trade shows and fashion shows organized in the world's various fashion capitals.
4. Prepare a report on any historically important fashion designers.
5. Identify and list sources of fashion for any five movies.
6. Do a brief analysis of any design.

b. Micro Projects:

1. Prepare a chart/poster/catalog of national /international fashion icons with brief details.
2. Make a report showing an analysis of the nature of products that fashion brands sell.
3. Prepare a PowerPoint presentation/poster on any one fashion capital in detail.
4. Prepare a chart/poster/catalog depicting national /international fashion designers with brief details.
5. Make a chart on the promotion of fashion from designer to closet.
6. Create a sample chart/poster for mind mapping.

c. Other Activities:

1. Seminar Topics:

- National /international fashion icons.
- National/international fashion brands.
- National/international fashion capitals.
- National/international fashion designers.

2. Visits: Visit nearby boutiques/malls/exhibitions/craft mela /handicraft emporium/ handloom houses/ course content-related websites etc. Do an analysis of different designs.

3. Self-learning topics:

- National /international fashion icons.
- National/international fashion brands.
- National/international fashion capitals.
- National/international fashion designers
- Sources of fashion.

M) Suggested Course Evaluation Matrix: The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	15%	15%	10%	25%	15%	14%	25%
CO-2	15%	15%	10%	25%	15%	14%	25%
CO-3	40%	40%	30%	25%	30%	40%	25%
CO-4	10%	10%	30%		30%	-	
CO-5	20%	20%	20%	25%	20%	32%	25%
Total Marks	30	70	20	20	10	20	30
			50				

Legend:

- *: Other Activities include self-learning, seminars, visits, surveys, product development, software development, etc.
 **: Mentioned under point- (N)
 #: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises questions related to achievement of each COs.

N) Suggested Specification Table for End Semester Theory Assessment: Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Fashion Icons	08	CO1	10	3	3	4
Unit-2.0 Fashion Brands	08	CO2	10	3	2	5
Unit-3.0 Fashion Capitals of the World	06	CO3	8	3	3	2
Unit-4.0 Fashion Designers	10	CO3	20	5	6	9
Unit-5.0 Sources and Creator of Fashion	04	CO4	08	3	4	1
Unit-6.0 Fashion Research	06	CO5	14	3	5	6
Total	42	-	70	20	23	27

Note: A similar table can also be used to design class/mid-term/ internal question papers for progressive assessment.

O) Suggested Assessment Table for Laboratory (Practical):

Sr. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
1.	Take reference images of any one fashion icon and make five illustrations based on its characteristics. (5 illustrations on an A-3 size sheet using any medium)	CO1	30	60	10
2.	Compile a visual bank incorporating visual specimens of different brands of apparel. (Minimum 10-15 brands must be compiled for further referencing) and Create a logo and visiting card for an enterprise.	CO2	40	50	10
3.	Compile a visual bank incorporating visual specimens of prominent fashion designers' work. (Minimum 10-15 Fashion designer's works must be compiled for further referencing) and select a well-known illustrator's work and imitate it with the same mediums and techniques used by the illustrator. (Minimum 5 artworks on A-3 size sheet.)	CO3	30	60	10
4.	Prepare the following: 4.1 Colour direction board based on the consumer/ user preferences, season, overall trend, and cost limitations 4.2 Silhouette /style direction board based on the consumer/ user preferences, season, overall trend, and cost limitations	CO5	30	60	10

Sr. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
	4.3 Surface embellishments (if any) and material direction board based on the consumer/user preferences, season, overall trend, and cost limitations 4.4 Develop an overall concept that suites the above-mentioned characteristics and constraints				

Legend:

PRA*: Process Assessment

PDA**: Product Assessment

Note: This table can be used for both end semester as well as progressive assessment of practicals. Rubrics need to be prepared by the course teacher for each experiment/practical to assess the student's performance.

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lectures, Tutorial, Case Methods, Group Discussions, Industrial visits, Industrial Training, Field Trips, Portfolios, Learning, Role Play, Live Demonstrations in Classrooms, Labs, Field Information, and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

Q) List of Major Laboratory Equipment, Tools and Software:

S. No.	Name of Equipment, Tools and Software	Broad Specifications	Relevant Experiment/Practical Number
1.	Drawing tools such as pencils of different shades, ruler, eraser, micro-tip pens	----	All
2.	Drawing sheets	A-3 size thick drawing sheets	All
3.	Drawing colours- pencil, charcoal, staedtlers colours,	----	All

R) Suggested Learning Resources:**(a) Books:**

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Fashion Cultures: Theories, Explorations and Analysis	Stella Buzzi	Routledge -2013 ISBN 13-9780415680066
2.	Fashion and Modernity	By Christopher Breward	Berg publication-2005 ISBN 13-9781845200282
3.	Fashion-ology: An Introduction to Fashion Studies (Dress, Body Culture)	By Yuniya Kawamura	Berg publication-2005 ISBN 13 -9781859738146
4.	Fashion Design Essentials:100 Principles of Fashion Design	Jay Calderin	Rockport publication-2012 ISBN 13 -9781592538270
5.	Fashion and Its Social Agendas: Class, Gender, and Identity in Clothing	Diana Crane	The University of Chicago press-2001 ISBN 13 -9780226117997
6.	The Culture of Fashion. A New History of Fashionable Dress (Studies in Design) Paperback	By Christopher Breward	Manchester University press-1995 ISBN 13- 9780719041259

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
7.	Fashion from Concept to Consumer	Gini Stephens Pearson	Prentice Hall- 2007 ISBN-13-9780131590335
8.	The Dynamics of Fashion	Elaine Stone	Fairchild Publication-2008 ISBN-13 2901563676863
9.	Fashion Source Book	Kathryn McKelvey	Blackwell Publishing New Delhi-1996 ISBN-13- 978-0632039937
10.	Elements of Fashion and Apparel Design	Sumathi, G.J.	New Age International Publishers, New Delhi-2002 ISBN-13 - 978-8122413717
11.	Individuality in clothing,	Kafgen Mary	Houghton Mifflin Company-1971 ISBN-13 -978-0023621901

(b) Online Educational Resources:

1. <http://www.rituberi.com/>
2. <http://www.manishmalhotra.in/>
3. <http://www.rohitbal.com/>
4. <http://www.benetton.com/>
5. <http://www.leecooper.com/>

Note: Teachers are requested to check the Creative Commons license status/ financial implications of the suggested, online educational resources before use by the students.

(c) Others:

1. Lab Manuals on Fashion illustration

- A) **Course Code** : 2450307(P2450307/S2450307)
 B) **Course Title** : Digital Tools for Costume Designing
 C) **Pre-requisite Course(s)** :
 D) **Rationale** :

This course will give knowledge & practice of software viz. CorelDraw, and AutoCAD that is used for designing purposes and real-life application in various fields of textile & garment design. A course is designed to provide the students with a fundamental understanding of a range of computer graphics software applications. The main focus would be knowledge & practice of the software that is used for designing purposes and caters to the application of various fields of textile & garment design. Software applications would provide Graphic based platform as per the demands & standards of the fashion industry.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in the classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

- CO-1** Develop proportionate human figures using AutoCAD software.
CO-2 Create weaves pattern using AutoCAD software.
CO-3 Create motifs with special effects using various tools of Corel Draw software.
CO-4 Design flat drawings of garments using various tools of Corel Draw software.
CO-5 Design garments with special effects using various tools of Corel Draw software.

F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes(POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	2	2	2	2	3		
CO-2	3	2	2	2	2	2	3		
CO-3	3	2	2	2	2	2	3		
CO-4	3	2	2	2	2	2	3		
CO-5	3	2	2	2	2	2	3		

Legend: High (3), Medium (2), Low (1), and No mapping (-)

* PSOs will be developed by the respective program coordinator at the institute level. As per the latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
CACDDM	2450307	Digital Tools for Costume Designing	-	-	04	02	06	03

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning, etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field, or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities, etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources, etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment(LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
CACDDM	2450307	Digital Tools for Costume Designing	-	-	20	30	20	30	100

Legend:

PTA: Progressive Theory Assessment in the classroom (includes class test, mid-term test, and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities, etc.

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignments, micro-projects, seminars, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria for internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare a checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW), and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS), and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units:**

Major Theory Session Outcomes (TSOs)	Units	Relevant Cos Number(s)
<p><i>TSO 1a.</i> Draw drawing editor of AutoCAD software.</p> <p><i>TSO 1b.</i> Select and Zoom objects in AutoCAD software.</p> <p><i>TSO 1c.</i> Use the command line and Pull-down menu in AutoCAD software.</p> <p><i>TSO 1d.</i> Create and save AutoCAD drawings.</p> <p><i>TSO 1e.</i> Explain the Property bar in AutoCAD software.</p> <p><i>TSO 1f.</i> Modify entity property in AutoCAD software.</p>	<p>Unit-1.0- Introduction to AutoCAD</p> <p>1.1- Introduction to AutoCAD Meaning and its Use. 1.2 Object selection method. 1.3 Setting and modifying entity property. 1.4 Launching AutoCAD. 1.5 Drawing Editor. 1.6 Pull-down menu. 1.7 Command line. 1.8 Property bar. 1.9 Zoom and pan the drawing in AutoCAD. 1.10 Creating a new drawing in AutoCAD. 1.11 Opening an existing drawing in AutoCAD 1.12 Saving AutoCAD drawing in AutoCAD</p>	<p>CO1 CO2</p>
<p><i>TSO 2a.</i> Create proportionate figures using AutoCAD drawing Entities.</p> <p><i>TSO 2b.</i> Create basic weaves using AutoCAD drawing Entities.</p> <p><i>TSO 2c.</i> Edit drawing using AutoCAD Modifying Entities.</p> <p><i>TSO 2d.</i> Insert appropriate Text using AutoCAD software.</p> <p><i>TSO 2e.</i> Create and Edit blocks in AutoCAD software.</p> <p><i>TSO 2f.</i> Use AutoCAD Libraries.</p>	<p>Unit-2.0 AutoCAD Tools and Commands</p> <p>2.1 Drawing Entities</p> <p>2.1.1 Line 2.1.2 Circle 2.1.3 Arc 2.1.4 Ellipse 2.1.5 Rectangular 2.1.6 Polygons 2.1.7 Polyline 2.1.8 SP line 2.1.9 Hatch 2.1.10 Fill 2.1.11 Point</p> <p>2.2 Modifying Entities</p> <p>2.2.1 Offset 2.2.2 Copy 2.2.3 Paste 2.2.4 Erase 2.2.5 Trim 2.2.6 Break 2.2.7 Mirror 2.2.8 Array 2.2.9 Move 2.2.10 Rotate 2.2.11 Stretch 2.2.12 Lengthen 2.2.13 Trim 2.2.14 Extend 2.2.15 Break at point 2.2.16 Chamfer 2.2.17 Fillet</p>	<p>CO1 CO2</p>

Major Theory Session Outcomes (TSOs)	Units	Relevant Cos Number(s)
	<p>2.3 Create and manage Layers.</p> <p>2.4 Working with block 2.4.1 Make Block 2.4.2 Insert block 2.4.3 Edit block</p> <p>2.5 Working with Text 2.5.1 Single-line text 2.5.2 Multi-line Text 2.5.3 Formatting text style 2.5.4 Editing text</p> <p>2.6 Applying components from AutoCAD Libraries (Design Centre) to drawing</p>	
<p><i>TSO 3a.</i> Draw drawing editor of Corel Draw software.</p> <p><i>TSO 3b.</i> Select the object of Corel Draw software.</p> <p><i>TSO 3c.</i> Use the pull-down menu of Corel Draw software.</p> <p><i>TSO 3d.</i> Create and save drawings in Corel Draw software.</p> <p><i>TSO 3e.</i> Explain the Property bar of Corel Draw software.</p> <p><i>TSO 3f.</i> Modify entity property of Corel Draw software.</p>	<p>Unit-3.0 Introduction to Corel Draw</p> <p>3.1 Introduction to Corel Draw Meaning and its Use. 3.2 Selecting objects. 3.3 Setting and modifying entity property. 3.4 Launching Corel Draw. 3.5 Drawing Editor. 3.6 Pull-down menus. 3.7 Property bar 3.8 Zoom and pan the drawing in Corel Draw 3.9 Create a new drawing in Corel Draw 3.10 Open an existing drawing in Corel Draw 3.11 Save Corel Draw drawing in Corel Draw</p>	<p>CO3 CO4 CO5</p>
<p><i>TSO 4a.</i> Explain Corel draw toolbar</p> <p><i>TSO 4b.</i> Create and manipulate objects in Corel Draw software.</p> <p><i>TSO 4c.</i> Use appropriate tools and commands in Corel Draw software.</p> <p><i>TSO 4d.</i> Create Text with special effects using Corel Draw software.</p> <p><i>TSO 4e.</i> Create a flat drawing of the Garments using Corel Draw software.</p> <p><i>TSO 4f.</i> Create motifs for fabric using Corel Draw software.</p> <p><i>TSO 4g.</i> Draw different types of skirts using Corel Draw software.</p>	<p>Unit-4.0 Corel Draw Tools and Commands</p> <p>4.1 Drawing and Shaping tools for flat drawing 4.1.1 Using the Freehand Tool 4.1.2 Drawing Lines and Polylines 4.1.3 Drawing Freehand Polygons 4.1.4 Drawing Perfect Shapes 4.1.5 Reshaping Lines and Poly Lines 4.1.6 Drawing Curves 4.1.7 Reshaping Curves 4.1.8 Drawing Rectangles 4.1.9 Drawing Ellipses and Circles</p> <p>4.2 Editing tools 4.2.1 Selecting and Deselecting Objects 4.2.2 Moving Objects 4.2.3 Copying and Deleting Objects</p> <p>4.3 Transforming Objects 4.3.1 Mirroring Objects 4.3.2 Rotating Objects 4.3.3 Skewing Objects 4.3.4 Sizing Objects 4.3.5 Scaling Objects</p> <p>4.4 Outlining Objects 4.4.1 Setting Outline 4.4.2 Choosing Outline Thickness 4.4.3 Choosing Outline Colors</p>	<p>CO3 CO4 CO5</p>

Major Theory Session Outcomes (TSOs)	Units	Relevant Cos Number(s)
	<p>4.5 Filling Objects 4.5.1 Eyedropper Tools 4.5.2 Paint Bucket Tools 4.5.3 Using Fill Tool 4.5.4 Uniform Fill, Fountain Fill, Pattern Fill 4.5.5 Interactive Mesh Fill</p> <p>4.6 Arranging Objects 4.6.1 Power clip 4.6.2 Grouping and Ungrouping 4.6.3 Aligning 4.6.4 Arranging 4.6.5 Combining and Breaking 4.6.6 Welding 4.6.7 Intersection Trim</p> <p>4.7 The Text Tool 4.7.1 Creating Artistic Text 4.7.2 Editing Text 4.7.3 Formatting Text 4.7.4 Setting Text Options 4.7.5 Creating Paragraph Text</p>	

Note: One major TSO may require more than one Theory session/Period.

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2450307

Practical/Lab Session Outcomes (LSOs)	Sr. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
LSO 1.1. Use drawing and edit tools of AutoCAD software to draw the proportionate figure (8 ½ head) of female.	1.	Draw a proportionate figure (8 ½ head) of a female using AutoCAD software	CO1
LSO 1.2. Use drawing and edit tools of AutoCAD software to draw the proportionate figure (10 ½ head) of female.	2	Draw a proportionate figure (10 ½ head) of a female using AutoCAD software	CO1
LSO 1.3. Use drawing and edit tools of AutoCAD software to draw the proportionate figure (12 ½ head) of female.	3	Draw a proportionate figure (12 ½ head) of a female using AutoCAD software.	CO1
LSO 1.4. Create basic weaves using AutoCAD drawing Entities.	4	Draw Basic Weaves (Plain, Rib, Basket, Twill, Satin, and Sateen) using AutoCAD software.	CO2
LSO 1.5. Create different types of motifs using drawing and edit tools of Corel Draw software.	5	Create different types of Motifs using Corel Draw software. (Any Four)	CO3
LSO 1.6. Create a flat drawing of the Garments using Corel Draw software.	6	Design Flat garments using Corel Draw software. <ul style="list-style-type: none"> • T-shirt and Capri • T-shirt and Short • Shirt and Trousers • Top and Skirt 	CO4

Practical/Lab Session Outcomes (LSOs)	Sr. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
		<ul style="list-style-type: none"> Traditional garment for male Traditional garment for female 	
LSO 1.7. Design garments using Corel Draw software.	7	Create different types of garments with special effects as shown below using Corel Draw software. For e.g. - Skirt (Any Five) <ul style="list-style-type: none"> Box or Inverted box pleat skirt Trumpet skirt Tiered skirt Double wrapper skirt Handkerchief skirt Knife pleat skirt Half or Full Umbrella skirt 	CO5

L) **Suggested Term Work and Self-Learning: S2450307** Some sample suggested assignments, micro-projects, and other activities are mentioned here for reference.

a. **Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

1. Draw a proportionate figure (8 ½ head) of a male using AutoCAD software
2. Create any five designs/weave patterns using AutoCAD software.
3. Create any five designs using Corel Draw software. Apply this design to your garment.
4. Create any one digital design with special effects for any apparel category.

b. **Micro Projects:**

1. Draw a proportionate figure of a child using AutoCAD software
2. Create fancy weaves using AutoCAD software.
3. Draw different motifs and change their orientations.
4. Draw digital designs for any apparel categories using AutoCAD or Corel Draw software.
5. Draw digital designs of garments with special effects for any age group.

c. **Other Activities:**

1. Seminar Topics:
 - Importance of Digital illustration
 - CorelDraw software in garment designing
 - Different software used for garment designing.
2. Visits: A visit to nearby garment industries or any such units where garment designing-related software is used.
3. Self-learning topics:
 - Search proportionate figures of different heads for male, female, and child from relevant websites/books
 - Search various motifs from relevant websites/books
 - Search various weaves design from relevant websites/books
 - Search various garment designs from relevant websites/books
4. Expert lecture on digital illustration.

- M) Suggested Course Evaluation Matrix:** The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate CO attainment.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	-	-	15%	20%	15%	15%	15%
CO-2	-	-	15%	20%	15%	15%	15%
CO-3	-	-	30%	20%	30%	30%	30%
CO-4	-	-	15%	20%	15%	15%	15%
CO-5	-	-	25%	20%	25%	25%	25%
Total Marks	-	-	20	20	10	20	30
			50				

Legend:

*: Other Activities include self-learning, seminar, visits, surveys, product development, software development, etc.

** : Mentioned under point- (N)

: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In the case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided among all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises questions related to the achievement of each COs.

- N) Suggested Specification Table for End Semester Theory Assessment: (Not Applicable)**

- O) Suggested Assessment Table for Laboratory (Practical):**

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
1.	Draw a proportionate figure (8 ½ head) of a female using AutoCAD software	CO1	40	50	10
2.	Draw a proportionate figure (10 ½ head) of a female using AutoCAD software	CO1	40	50	10
3.	Draw a proportionate figure (12 ½ head) of females using AutoCAD software.	CO1	40	50	10
4.	Draw Basic Weaves (Plain, Rib, Basket, Twill, Satin, and Sateen) using AutoCAD software.	CO2	40	50	10
5.	Create different types of Motifs using Corel Draw software. (Any Four)	CO3	40	50	10
6.	Design Flat drawings of garments using Corel Draw software. <ul style="list-style-type: none"> • T-shirt and Capri • T-shirt and Short • Shirt and Trousers • Top and Skirt • Traditional garment for male • Traditional garment for female 	CO4	40	50	10

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva- Voce (%)
			PRA* (%)	PDA** (%)	
7.	Create different types of skirts using Corel Draw software. (Any Five) <ul style="list-style-type: none"> • Box or Inverted box pleat skirt • Trumpet skirt • Tiered skirt • Double wrapper skirt • Handkerchief skirt • Knife pleat skirt • Half or Full Umbrella skirt 	CO5	40	50	10

Legend:

PRA*: Process Assessment

PDA**: Product Assessment

Note: This table can be used for both the end semester as well as progressive assessment of practicals. Rubrics need to be prepared by the course teacher for each experiment/practical to assess the student's performance.

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lectures, Tutorial, Case Methods, Group Discussions, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Labs, Field Information, and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs, etc.

Q) List of Major Laboratory Equipment, Tools, and Software:

Sr. No.	Name of Equipment, Tools, and Software	Broad Specifications	Relevant Experiment/Practical Number
1.	Computer		All
2	AutoCAD	Latest version	Practical No.1,2,3,4
3	Corel Draw	Latest version	Practical No. 5,6,7

R) Suggested Learning Resources:**(a) Books:**

Sr. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	AutoCAD 2020 Beginning and Intermediate	Munir Hamad	Mercury Learning & Information (April 19, 2019) ISBN-13: 978-1683923916
2.	AutoCAD 2020 For Beginners Paperback – May 15, 2019	CAD Folks	Independently published (May 15, 2019) ISBN-13: 978-1098820978
3.	AutoCAD	Berghauer /schlieve	BPB Publication, new Delhi.
4.	Corel DRAW 2021 & Corel DRAW Essentials 2021 - Training Book with many Exercises: Suitable for Corel DRAW Essentials 2021, Corel DRAW Home and Student 2021, and Corel DRAW 2021 [Print Replica]	Peter Schiessl	Lindemann Group (June 15, 2021) ASIN: B097CKBD4K

Sr. No.	Titles	Author(s)	Publisher and Edition with ISBN
5.	Corel DRAW 12: The Official Guide (Corel Press) Paperback – Import, 16 February 2004	Steve Bain	McGraw-Hill Education (16 February 2004) ISBN-13: 978-0072231915
6.	Corel Draw Training Guide Paperback – 1 January 2018	Satish Jain	BPB; First edition (1 January 2018) ISBN-13: 978-9387284005

(b) Online Educational Resources:

1. <https://www.investintech.com/resources/blog/archives/5947-free-online-autocad-tutorials-courses.html>
2. <https://www.coreldraw.com/en/learn/webinars/ebook-basics-of-illustration/>
3. <https://www.texintel.com/press-room/the-new-free-e-book-from-coreldraw-graphics-suite-transport-textile-and-apparel-designers-to-new-levels-of-creativity>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational recourses before use by the students.

(c) Others:

1. Autodesk AutoCAD
2. Corel CONNECT
3. Lab Manuals

- A) **Course Code** : 2450302(T2450302/P2450302/S2450302)
 B) **Course Title** : Components of Clothing Construction
 C) **Pre-requisite Course(s)** :
 D) **Rationale** :

Construction techniques are the backbone of any readymade garment industry therefore it is required to train students so that they recognize the mechanism of sewing machines and tools, construct samples of different basic hand and machine techniques, and know the application of various techniques and finishing required for clothing constructions. This course will help the students to develop foundation skills for garment construction techniques. The student will be able to introduce SNLS machines, their use, applications, handling, and operations.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in the classroom/laboratory/workshop/field/ industry.

After completion of the course, the students will be able to

- CO-1** Use sewing tools and operate a single needle lockstitch machine.
CO-2 Select the appropriate stitch, needle, and thread for different types of fabric materials.
CO-3 Prepare different hand and machine seams.
CO-4 Apply techniques to add fullness to the garments.
CO-5 Apply techniques of edge finishing in different components in the garments.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/development of solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Lifelong learning	PSO-1	PSO-2
CO-1	3	-	2	3	1	-	-		
CO-2	3	2	2	3	1	-	-		
CO-3	3	-	2	3	-	-	-		
CO-4	3	-	2	2	1	-	-		
CO-5	3	-	2	2	1	-	-		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by the respective program coordinator at the institute level. As per the latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					Total Credits (C)
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	
			L	T				
CACDDM	2450302	Components of Clothing Construction	02	-	06	02	10	06

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture(L), Tutorial(T), Case method, Demonstrations, Video demonstration, Problem-based learning. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/ practical performances /problem-based experiences in laboratory, workshop, field, or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities, etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources, etc.

C: Credits= (1xCI hours) + (0.5xLIhours) + (0.5xNotionalhours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure the outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
CACDDM	2450302	Components of Clothing Construction	30	70	20	30	20	30	200

Legend:

PTA: Progressive Theory Assessment in the classroom (includes class test, mid-term test, and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, microprojects, industrial visits, self-learning, any other student activities, etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignments, micro-projects, seminars, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria for internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare a checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW), and Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS), and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2450302**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p><i>TSO 1a.</i> Identify different parts of the given machine and their functions.</p> <p><i>TSO 1b.</i> Operate a single needle lock stitch machine for the given sample.</p> <p><i>TSO 1c.</i> Handle machine accessories and sewing tools in the given situation.</p> <p><i>TSO 1d.</i> Follow safety practices and safe postures while operating the given machine.</p>	<p>Unit-1.0 Introduction to Sewing Machine (SNLS) and Tools</p> <p>1.1 Identification of machine parts and their functions.</p> <p>1.2 Sewing tools- Bobbin and Bobbin case, Machine and sewing needle, hand and sewing needle, Thimble, Pincushions, threads, Ironing board, iron, Bobbin winder, Sewing Threads. Machine accessories for special tasks.</p> <p>1.3 Care and upkeep of the machine.</p> <p>1.4 Precautions while working on a machine.</p> <p>1.5 Operating SNLS machine</p> <p>1.6 Posture and precautions while working on a machine.</p>	CO1
<p><i>TSO 2a.</i> Identify the given type(s) of fabric.</p> <p><i>TSO 2b.</i> Correlate methods of handling the given type(s) of fabrics.</p> <p><i>TSO 2c.</i> Identify the trimming techniques and closure materials for the given situation.</p> <p><i>TSO 2d.</i> Explain the relation of fabric, needle, thread, and stitch.</p> <p><i>TSO 2e.</i> Identify the process parameters and operations for the given type(s) of sewing.</p> <p><i>TSO 2f.</i> Identify different sewing problems and their remedies.</p>	<p>Unit-2.0 Sewing Practice (Theory)</p> <p>2.1 Knowledge of fabric and its handling.</p> <p>2.2 Selection of needle, thread, SPI, seams, and finishing, according to the fabric.</p> <p>2.3 Trimming and closure materials.</p> <p>2.4 Sewing Practice</p> <ul style="list-style-type: none"> • Straight line • Ending and starting at a point • Curved line • Cornered angle • Circular gapping • Sewing practice on different fabrics <p>2.5 Problems in Sewing and Remedies.</p>	CO1, CO2
<p><i>TSO 3a.</i> Identify the different types of hand stitches.</p> <p><i>TSO 3b.</i> Perform the hand and machine stitches for the given situation.</p> <p><i>TSO 3c.</i> Identify the given Machine Seam finish(es).</p> <p><i>TSO 3d.</i> Identify the process parameters and operating parameters for making the given seam.</p> <p><i>TSO 3e.</i> Make appropriate seam for the given situation.</p>	<p>Unit-3.0 Stitches and Seam Finishes</p> <p>3.1 Hand Stitches</p> <ul style="list-style-type: none"> • Basting- Even and Uneven • Running • Different types of hemming-Blind and Simple • Chain Stitch • Stem Stitch • Buttonhole Stitch • Back Stitch <p>3.2 Machine Seam Finishes</p> <p>3.3 Method and Procedure of making a seam</p> <ul style="list-style-type: none"> • Plain seam • Curved seam • French Seam • Flat & Fell Seam 	CO1, CO3

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
	<ul style="list-style-type: none"> • Turn and stitch • Pinked • Zig Zag • Bias Bound • Lapped Seam • Gathered Seam • Welt Seam • Corded Seam • Decorative Seam • To turn the corner, round finishes • Clipping (slits and notches) 	
<p><i>TSO 4a.</i> Identify the different techniques of adding fullness to garments using seaming techniques.</p> <p><i>TSO 4b.</i> Identify the process parameters and operating parameters for the given fullness technique(s).</p> <p><i>TSO 4c.</i> Apply appropriate fullness technique for the given situation.</p>	<p>Unit-4.0 Techniques of Adding Fullness</p> <p>4.1 Different types of-</p> <ul style="list-style-type: none"> • Darts • Tucks • Pleats • Gathers • Shirring • Ruffles • Smocking on plain fabric • Elastic Attachment 	CO1, CO4
<p><i>TSO 5a.</i> Identify the different edge finishes.</p> <p><i>TSO 5b.</i> Identify the process parameters and operating parameters for the given edge finishes.</p> <p><i>TSO 5c.</i> Finish the edges of the given component(s) of a garment.</p> <p><i>TSO 5d.</i> Identify the given closure technique(s).</p> <p><i>TSO 5e.</i> Identify the process parameters and operating parameters for the given closure technique(s).</p> <p><i>TSO 5f.</i> Identify the fusing techniques for the given situation.</p> <p><i>TSO 5g.</i> Identify the given neckline finishing(s).</p> <p><i>TSO 5h.</i> Identify the process parameters and operating parameters for the given neckline finishing(s).</p> <p><i>TSO 5i.</i> Identify the given types of pocket(s).</p> <p><i>TSO 5j.</i> Identify the given types of Cuffs and belts.</p>	<p>Unit-5.0 Edge Finishes, Necklines, Pockets</p> <p>3.1 Edge Finishes-Facing, Piping, Picot, Overcasting, Decorative finishes</p> <p>3.2 Closures- Plackets, Zippers, Button and Hole, Hook and Eye, Snaps, Velcro,</p> <p>3.3 Fusing</p> <p>3.4 Neckline Finishing (U, V, Square, Round, Scalloped Necklines)</p> <p>3.5 Pockets: Patch, Side, Slanted Pockets</p> <p>3.6 Cuff and Belt</p>	CO1, CO5

Note: One major TSO may require more than one Theory session/Period.

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2450302

Practical/Lab Session Outcomes (LSOs)	S. No	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
<p><i>LSO 1.1.</i> Operate the given SNLS.</p> <p><i>LSO 1.2.</i> Identify the machine parts, their functions, and setting parameters.</p> <p><i>LSO 1.3.</i> Follow safety practices and safe postures while operating the given machine.</p>	1.	Identify the various machine parts, and their functions and operate the given SNLS with different settings and safety measures	CO1
<p><i>LSO 2.1.</i> Select the appropriate fabric for the given situation.</p>	2.	Perform sewing on different available fabric materials using suitable thread,	CO1, CO2

Practical/Lab Session Outcomes (LSOs)	S. No	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
LSO 2.2. Practice different fabrics, needles, and threads on SNLS.		needle, process parameters, and settings on the given SNLS machine.	
LSO 3.1. Identify the operating parameters for the given sewing practice. LSO 3.2. Practice the appropriate sewing technique for the given situation.	3.	Perform Sewing practice for 1. Straight line 2. Ending and starting at a point 3. Curved line 4. Cornered angle 5. Circular gapping	CO1, CO2, CO3
LSO 4.1. Select thread and needle for the given situation. LSO 4.2. Make hand stitches for the given situation.	4.	Practice hand stitches on different fabrics.	CO1, CO3
LSO 4.3. Select thread and needle for the given situation. LSO 5.1. Make machine stitches for the given situation.	5.	Practice machine stitches on different fabrics.	CO1, CO3
LSO 6.1. Identify the suitable fullness technique for the given situation. LSO 6.2. Prepare garments with added fullness for the given situation.	6.	Practice techniques of adding fullness to the given garment(s).	CO1, CO4
LSO 7.1. Identify the appropriate technique of Edge finishing. LSO 7.2. Prepare edge finishes for the given situation.	7.	Practice techniques of Edge finishing in different parts of a garment.	CO1, CO5
LSO 8.1 Identify the appropriate closure techniques for the given situation. LSO 8.2 Prepare closures in garments for the given situation.		Practice stitching of closures like; button- buttonhole, hook-eye, zipper in the given garment.	CO1, CO5

L) **Suggested Term Work and Self-Learning: S2450302** Some sample suggested assignments, micro-projects, and other activities are mentioned here for reference.

a. **Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

1. Prepare a list of different types of sewing tools elaborating their functions in clothing construction.
2. List the different fabrics highlighting their usage in clothing construction.
3. Classify the fullness techniques that are USPs of different designers.

b. **Micro Projects:**

1. Assemble and disassemble the single-needle lockstitch machine.
2. Collection of pictures of a variety of SNLS available in the market.
3. Collection of samples of fabrics of different weights, needles of different numbers, and thread variety.
4. Prepare a chart for machine stitches and their code number used in garment manufacturing.
5. Visit nearby garment manufacturing industry/workshop and record interviews of workers, supervisors, and professionals about their experience related to Garment construction.

c. **Other Activities:**

1. Seminar Topics:

- Different types of stitching machines used in garment construction.
- General problems of sewing machines and their remedies.
- Opening and closures in different types of garments.
- Safe postures and practices while operating garment construction machines.

2. Visits:

- Visit nearby garment manufacturing industry/workshop and list out the sewing machines, tools, and other equipment.

3. Self-learning topics:

- Sewing techniques on SNLS.
- Different hand and machine stitches.
- Edge finishing techniques.
- Care and upkeep of machines, tools, and equipment.

M) Suggested Course Evaluation Matrix: The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate CO attainment.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	20%	20%	20%	20%	-	10%	20%
CO-2	10%	10%	10%	20%	-	15%	20%
CO-3	15%	15%	15%	20%	33%	25%	20%
CO-4	25%	25%	25%	20%	33%	20%	20%
CO-5	30%	30%	30%	20%	34%	30%	20%
Total Marks	30	70	20	20	10	20	30
			50				

Legend:

*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

** : Mentioned under point- (N)

: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

N) Suggested Specification Table for End Semester Theory Assessment: Specification table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1. Introduction to Sewing Machine (SNLS) and Tools	10	CO1	15	4	4	7
Unit-2.0 Sewing Practice (Theory)	8	CO1, CO2	10	3	2	5
Unit-3.0 Stitches and Seam finishes	8	CO1, CO3	10	4	2	4
Unit-4.0 Techniques of Adding Fullness	10	CO1, CO4	15	4	4	7
Unit-5.0 Edge Finishes, Necklines, Pockets	12	CO1, CO5	20	5	6	9
Total	48	-	70	20	18	32

Note: A similar table can also be used to design class/mid-term/ internal question papers for progressive assessment.

O) Suggested Assessment Table for Laboratory (Practical):

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
1.	Identifying machine parts and their functions. Operating SNLS	CO1	30	60	10
2.	Handling of different fabric materials in SNLS using an appropriate number of needles and thread.	CO1, CO2	40	50	10
3.	Sewing practice for <ul style="list-style-type: none"> • Straight line • Ending and starting at a point • Curved line • Cornered angle • Circular gapping 	CO1, CO2, CO3	30	60	10
4.	Practice hand stitches.	CO1, CO3	30	60	10
5.	Practice machine stitches.	CO1, CO3	30	60	10
6.	Practice techniques of adding fullness in garments.	CO1, CO4	30	60	10
7.	Practice techniques of Edge finishing in different parts of a garment.	CO1, CO5	30	60	10
8.	Practice stitching of closures like; button- buttonhole, hook-eye, zipper.	CO1, CO5	30	60	10

Legend:

PRA*: Process Assessment

PDA**: Product Assessment

Note: This table can be used for both end semester as well as progressive assessment of practicals. Rubrics need to be prepared by the course teacher for each experiment/practical to assess the student's performance.

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lectures, Tutorial, Case Methods, Group Discussions, Industrial visits, Industrial Training, Field Trips, Portfolios, Learning, Role Play, Live Demonstrations in Classrooms, Labs, Field Information, and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

Q) List of Major Laboratory Equipment, Tools and Software:

S. No.	Name of Equipment, Tools and Software	Broad Specifications	Relevant Experiment/Practical Number
1.	Single Needle Lockstitch machine	Zuki/Zac/Singer/Usha/Brother brand can be taken. Basic stitch functions. Flatbed, full round shuttle movement.	All
2.	Multipurpose stitching machine (Fashion maker)	Singer/Usha/Brother brand can be taken. With all foot and needle attachments for multipurpose use.	All
3.	Steam Iron	With temperature regulator.	2 to 8
4.	Measuring tape, Scales, markers,	Basic/ standard specifications	All
5.	Scissors and cutters	10-inch to 6-inch scissors, various types. With metal or plastic handles	All

R) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Standard Processes in Dressmaking	E. Lucy Towers	University of London Press Ltd. ISBN-10. 0340091088, ISBN-13. 978-0340091081.
2.	McCall's Sewing Hand Book.	McCall's	Atlantic Publishers ISSN :978-0394410036.
3.	The Basic Book of Sewing	Eve Harlow	Octopus Books, London ISBN-13-978-0907407294
4.	Comparative Clothing Construction Techniques	Virginia Stolpe Lewis	Surjeet Publications ISSN:978-81-229-1042-1

(b) Online Educational Resources:

- <https://study.com/academy/lesson/clothing-construction-lesson-plans.html>
- <https://www.udemy.com/course/analyse-garment-construction-z/>
- <https://www.assembl.com/remote-learning-resources-for-fashion-design-and-sewing/>
- <https://ce.byu.edu/catalog/course/sfl>
- <https://www.uen.org/cte/family/clothing-1/construction.shtml>

Note: Teachers are requested to check the Creative Commons license status/ financial implications of the suggested, online educational resources before use by the students.

(c) Others:

- A) **Course Code** : 2450308(P2450308/S2450308)
 B) **Course Title** : Design Details in Garment
 C) **Pre-requisite Course(s)** :
 D) **Rationale** :

As a diploma graduate in Costume design, it is important to have hands-on experiences specifically related to design concepts associated with garment design. This course will help the students to carry out the design aspects through illustration. Students will be able to comprehend about structural design, applied design, and the drape of the fabric through this course.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to

- CO-1** Illustrate different types of fullness techniques for garment design.
CO-2 Draw different types of trimmings and fasteners required for garments.
CO-3 Illustrate different types of fabric falls and drapes.
CO-4 Draw different types of textile designs/prints.
CO-5 Create various textures and patterns of the fabric.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Program Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	-	-	2	1	-	2		
CO-2	3	2	2	2	1	2	2		
CO-3	3	2	2	2	1	2	2		
CO-4	3	2	2	2	1	2	2		
CO-5	3	2	2	2	1	2	2		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by the respective program coordinator at the institute level. As per the latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					Total Credits (C)
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	
			L	T				
CACDDM	2450308	Design Details in Garment	-	-	04	02	06	03

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstrations, Problem-based learning, etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field, or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities, etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources, etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and Feedback of the teacher to ensure the outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
CACDDM	2450308	Design Details in Garment	--	--	20	30	20	30	100

Legend:

PTA: Progressive Theory Assessment in the classroom (includes class test, mid-term test, and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities, etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignments, micro-projects, seminars, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria for internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare a checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW), and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS), and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units:**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<i>TSO 1a.</i> Apply different types of darts, tucks, pleats, and ruffles in garment design.	Unit 1. Fullness Techniques 1.1 Types of darts. 1.1.1 Half dart 1.1.2 Full dart (fish dart) 1.2 Types of tucks. 1.2.1 Pin tuck 1.2.2 Cross tuck 1.2.3 Corded tuck 1.2.4 Shell or scalloped tuck 1.3 Types of pleats 1.3.1 Accordion or Crystal 1.3.2 Knife pleats 1.3.3 Box pleats 1.3.4 Inverted box pleat 1.4 Types of Ruffles 1.4.1 Circular ruffles 1.4.2 Straight ruffles	CO1
<i>TSO 2a.</i> Apply different types of trimmings and fasteners in garment design.	Unit 2. Trimmings and Fasteners 2.1 Types of Trimmings 2.1.1 Topstitching 2.1.2 Tucking 2.1.3 Faggoting 2.1.4 Insertion 2.1.5 Shirring 2.1.6 Braiding 2.1.7 Cording 2.1.8 Rick-rack 2.1.9 Bias binding 2.1.10 Quilting 2.1.11 Smocking 2.1.12 Laces 2.1.13 Edging 2.1.14 Eyelet 2.1.15 Plaiting 2.2 Types of buttons and Placket openings	CO2
<i>TSO 3a.</i> Create effects of different types of fabric falls and drapes.	Unit 3. Fabric Falls and Drapes 3.1 Crepe 3.2 Soft and Sheer 3.3 Lace 3.4 Tulle and net 3.5 Organdies 3.6 Satin	CO3

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
	3.7 Velvet 3.8 Taffeta	
<i>TSO 4a.</i> Identify textile designs and prints. <i>TSO 4b</i> Select appropriate textile prints as per the need of the garment or apparel category.	Unit 4. Textile Designs/Prints 4.1 Natural 4.1.1 Floral 4.1.2 Animal 4.2 Geometric 4.3 Abstract 4.4 Man-made 4.5 Decorative 4.6 Nursery 4.7 Polka-dot	CO4
<i>TSO 5a</i> Identify fabric textures and patterns. <i>TSO 5b</i> Apply fabric textures and patterns designs and prints in garment design.	Unit 5. Fabric Textures and Patterns 5.1 Diagonal 5.2 Herringbone 5.3 Basketweave 5.4 Glen plaids 5.5 Corduroy 5.6 Stripes 5.7 Checks 5.8 Plaids	CO5

Note: One major TSO may require more than one Theory session/Period.

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2450308

Practical/Lab Session Outcomes (LSOs)	Sr. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
<i>LSO 1.1.</i> Illustrate different types of darts in garment design. <i>LSO 1.2.</i> Illustrate different types of tucks in garment design. <i>LSO 1.3.</i> Illustrate different types of pleats in garment design. <i>LSO 1.4.</i> Illustrate different types of ruffles in garment design.	1.	1.1 Draw different types of darts. 1.1.1 Half dart 1.1.2 Full dart (fish dart) 1.2 Draw different types of tucks. 1.2.1 Pin tuck 1.2.2 Cross tuck 1.2.3 Corded tuck 1.2.4 Shell or scalloped tuck 1.3 Draw different types of pleats. 1.3.1 Accordion or Crystal 1.3.2 Knife pleats 1.3.3 Box pleats 1.3.4 Inverted box pleat 1.4 Draw different types of Ruffles. 1.4.1 Circular ruffles 1.4.2 Straight ruffles	CO1
<i>LSO 2.1.</i> Draw different types of trimmings. <i>LSO 2.2.</i> Draw different types of buttons and Placket openings	2.	2.1 Draw different types of Trimmings. 2.1.1 Topstitching 2.1.2 Tucking 2.1.3 Faggoting 2.1.4 Insertion 2.1.5 Shirring 2.1.6 Braiding 2.1.7 Cording 2.1.8 Rick-rack 2.1.9 Bias binding	CO2

Practical/Lab Session Outcomes (LSOs)	Sr. No.	Laboratory Experiment/Practical Titles	Relevant COs Number(s)
		2.1.10 Quilting 2.1.11 Smocking 2.1.12 Laces 2.1.13 Edging 2.1.14 Eyelet 2.1.15 Plaiting 2.2 Draw different types of buttons and Placket openings	
LSO 3.1. Illustrate the effects of different types of Fabric falls and drapes.	3.	Illustrate the following Fabric falls and drapes 3.1 Crape 3.2 Soft and Sheer 3.3 Lace 3.4 Tulle and net 3.5 Organdies 3.6 Satin 3.7 Velvet 3.8 Taffeta	CO3
LSO 4.1. Draw different types of textile designs/prints	4.	Draw different types of textile designs/prints (5 designs/print of each) 4.1 Natural 4.1.1 Floral 4.1.2 Animal 4.2 Geometric 4.3 Abstract 4.4 Man-made 4.5 Decorative 4.6 Nursery 4.7 Polka-dot	CO4
LSO 5.1. Design various textures and patterns of fabric.	5.	Draw the following Textures and Patterns 5.1 Diagonal 5.2 Herringbone 5.3 Basketweave 5.4 Glen plaids 5.5 Corduroy 5.6 Stripes 5.7 Checks 5.8 Plaids	CO5

L) **Suggested Term Work and Self-Learning: S2450308** Some sample suggested assignments, micro-projects, and other activities are mentioned here for reference.

a. **Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

1. Collect pictures of different types of garments having darts, tucks, pleats, ruffles, trimmings, etc. Paste it in your scrapbook and name it.
2. Collect pictures of different types of garments having trims and fasteners etc. Paste it in your scrapbook and name it.
3. Collect pictures of drapes and falls of various textile materials/garments.
4. Collect pictures of different types of motifs/designs of textiles. Paste it in your scrapbook and name it.
5. Collect pictures of different types of stripes, checks, and plaids. Classify it and paste it into a scrapbook.

b. Micro Projects:

1. Make a chart/PowerPoint presentation on fullness techniques.
2. Make a chart/ PowerPoint presentation on trims and fasteners.
3. Make a chart/ PowerPoint presentation on fabric falls and drapes.
4. Make a chart/ PowerPoint presentation on textile designs/prints.
5. Make a chart/ PowerPoint presentation on fabric textures and patterns

c. Other Activities:

1. Seminar Topics:

- Fullness techniques.
- Trims and fasteners
- Fabric falls and drapes.
- Textile designs/prints.
- Fabric textures and patterns

2. Visits: Visit nearby garment industry to see different types of structural as well as applied designs used in garments. Also, observe different types of trimmings and fasteners used over there.

3. Self-learning topics:

- Structural design
- Applied design.
- Buttons of various shapes and materials

M) Suggested Course Evaluation Matrix: The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
		Assignments	Micro Projects	Other Activities*			
CO-1	-	-	25%	20%	25%	25%	20%
CO-2	-	-	25%	20%	25%	25%	20%
CO-3	-	-	15%	20%	15%	15%	20%
CO-4	-	-	15%	20%	15%	15%	20%
CO-5	-	-	20%	20%	20%	20%	20%
Total Marks	-	-	20	20	10	20	30
			50				

Legend:

- *: Other Activities include self-learning, seminars, visits, surveys, product development, software development, etc.
- ** : Mentioned under point- (N)
- # : Mentioned under point-(O)

Note:

- The percentages given are approximate
- In the case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided among all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to the achievement of each CO.

N) Suggested Specification Table for End Semester Theory Assessment: (Not Applicable)**O) Suggested Assessment Table for Laboratory (Practical):**

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
1.	1.1 Draw different types of darts. 1.1.1 Half dart 1.1.2 Full dart (fish dart) 1.2 Draw different types of tucks. 1.2.1 Pin tuck 1.2.2 Cross tuck 1.2.3 Corded tuck 1.2.4 Shell or scalloped tuck 1.3 Draw different types of pleats 1.3.1 Accordion or Crystal 1.3.2 Knife pleats 1.3.3 Box pleats 1.3.4 Inverted box pleat 1.4 Draw different types of Ruffles 1.4.1 Circular ruffles 1.4.2 Straight ruffles	CO1	30	60	10
2.	2.2 Draw different types of Trimmings 2.2.1 Topstitching 2.2.2 Tucking 2.2.3 Faggoting 2.2.4 Insertion 2.2.5 Shirring 2.2.6 Braiding 2.2.7 Cording 2.2.8 Rick-rack 2.2.9 Bias binding 2.2.10 Quilting 2.2.11 Smocking 2.2.12 Laces 2.2.13 Edging 2.2.14 Eyelet 2.2.15 Plaiting 2.2 Draw different types of buttons and Placket openings	CO2	40	50	10
3.	Illustrate the following Fabric falls and drapes 3.1 Crape 3.2 Soft and Sheer 3.3 Lace 3.4 Tulle and net 3.5 Organdies 3.6 Satin 3.7 Velvet 3.8 Taffeta	CO3	30	60	10
4.	Draw different types of textile designs/prints (5 designs/print of each) 4.1 Natural 4.1.1 Floral 4.1.2 Animal 4.2 Geometric 4.3 Abstract 4.4 Man-made 4.5 Decorative 4.6 Nursery	CO4	30	60	10

S. No.	Laboratory Practical Titles	Relevant COs Number(s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
	4.7 Polka-dot				
5.	Draw the following Textures and Patterns 5.1 Diagonal 5.2 Herringbone 5.3 Basketweave 5.4 Glen plaids 5.5 Corduroy 5.6 Stripes 5.7 Checks 5.8 Plaids	CO5	30	60	10

Legend:

PRA*: Process Assessment

PDA**: Product Assessment

Note: This table can be used for both end semester as well as progressive assessment of practicals. Rubrics need to be prepared by the course teacher for each experiment/practical to assess the student's performance.

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lectures, Tutorials, Case Methods, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolios, Learning, Role Play, Live Demonstrations in Classrooms, Labs, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

Q) List of Major Laboratory Equipment, Tools and Software:

Sr. No.	Name of Equipment, Tools and Software	Broad Specifications	Relevant Experiment/Practical Number
1.	Drawing tools such as pencils of different shades, ruler, eraser, micro-tip pens	----	All
2.	Drawing sheets	A-3 size thick drawing sheets	All
3.	Drawing colours- pencil, charcoal, Staedtler colours,	----	All

R) Suggested Learning Resources:

(a) **Books:**

Sr. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Garment Technology for Fashion Designers	Gerry Cooklin	Wiley India Pvt. Ltd.-2008. ISBN-13 9788126515844
2.	Cutting & Sewing Theory	Gayathri Verma & Kapil Dev	Asian Publishers-2019 ISBN-978-81-7317-245-8
3.	Visual Design in Dress	Marian L Devis	Pearson College-1996 ISBN-13-9780131121294
4.	Shorthand Fashion Sketching	Patricia L. Rowe	Fairchild Publications, Inc. Newyork-10003 1964. ISBN-13 - 9780870050688
5.	Garment Manufacturing Technology	Rajkishore Nayak, Rajiv Padhye	Woodhead Publishing-2015 ISBN-13-9781782422327.

(b) Online Educational Resources:

1. <https://sewguide.com/motifs-in-indian-textiles/>
2. <https://cbseportal.com/ebook/vocational-books-fashion-design-and-garment-technology>
3. <https://bie.tg.nic.in/Pdf/bie.pdf>
4. <https://www.fashionistasketch.com/fashion-fabric-design/>

Note: Teachers are requested to check the Creative Commons license status/ financial implications of the suggested, online educational recourses before use by the students.

(c) Others:

1. <https://www.booksfree.org/sewing-for-fashion-designers-by-anette-fischer-pdf-free-download-a/>
2. <https://bie.tg.nic.in/Pdf/GarmentTextBookfinal.pdf>
3. https://www.usha.com/sites/default/files/sewing_tutorials/indian-garment-design-coursebook.pdf

- A) **Course Code** : 2450303(T2450303/S2450303)
 B) **Course Title** : Basics of Fashion
 C) **Pre-requisite Course(s)** :
 D) **Rationale** :

The knowledge of fashion trends is essential for fashion designers for better acceptance of their designs in the market. This course helps to comprehend the concepts of fashion and fashion terminologies. It also enables us to analyze the factors that affect fashion.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to

- CO-1** Identify the different fashions, styles, and trends.
CO-2 Apply the knowledge of fashion theories and fashion cycles in relevant applications.
CO-3 Use elements of fashion on garments.
CO-4 Analyze the factors affecting fashion.
CO-5 Select the apparel as per the occasion.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	2	-	2	1	1		
CO-2	3	2	2	-	2	1	1		
CO-3	3	2	2	-	2	1	1		
CO-4	3	2	2	-	2	1	1		
CO-5	3	2	2	-	2	1	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by the respective program coordinator at the institute level. As per the latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
CACDDM	2450303	Basics of Fashion	03	-	-	02	05	04

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning, etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field, or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities, etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources, etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
CACDDM	2450303	Basics of Fashion	30	70	20	30	-	-	150

Legend:

PTA: Progressive Theory Assessment in the classroom (includes class test, mid-term test, and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities, etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignments, micro-projects, seminars, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria for internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare a checklist & rubrics for these activities.

I) **Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW), and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS), and others must be integrated appropriately.

J) **Theory Session Outcomes (TSOs) and Units: T2450303**

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
<p>TSO 1a. Distinguish between style, fashion, and trend.</p> <p>TSO 1b. Explain the principles of fashion.</p> <p>TSO 1c. Describe the intangibles of fashion.</p>	<p>Unit-1.0- Fundamentals of Fashion</p> <p>1.1 Define fashion</p> <p>1.2 Style, fashion, and trend</p>	CO1
<p>TSO 2a. Describe Veblen's theory of leisure class</p> <p>TSO 2b. Explain various fashion terminologies</p> <p>TSO 2c. Describe fashion adoption theories</p> <p>TSO 2d. Explain the fashion cycle/ bell curve</p> <p>TSO 2e. Interpret changes in the fashion cycle</p> <p>TSO 2f. Interpret lengths and breaks in the fashion cycle.</p>	<p>Unit-2.0- Fashion Theory</p> <p>2.1 Veblen's theory of leisure class</p> <p>2.2 The bell curve</p> <p>2.3 Fashion terminologies such as Haute couture, pert e porter, high fashion, diffusion line, bridge fashion, mass-manufactured, etc.</p> <p>2.4 Trends in fashion</p> <p>2.5 Trickle up, trickle down, and trickle across theory</p> <p>2.6 Fads and Classic</p>	CO2
<p>TSO 3a. Apply appropriate elements of fashion</p> <p>TSO 3b. Select the appropriate fabric in the given situation.</p> <p>TSO 3c. Suggest colour and its effects.</p> <p>TSO 3d. Describe the importance of fitness in garment.</p> <p>TSO 3e. Interpret fabric fall.</p> <p>TSO 3f. Describe shape and proportion.</p>	<p>Unit-3.0- Elements of Fashion</p> <p>3.1 Fabric: fabric quality, weave, texture, Ornamentation etc.</p> <p>3.2 Colour</p> <p>3.3 Fit</p> <p>3.4 Fall</p> <p>3.5 Shapes and Proportions</p>	CO3
<p>TSO 4a. Explain the effect of different factors on fashion</p> <p>TSO 4b. Enlist factors affecting fashion</p> <p>TSO 4c. Distinguish accelerating and retarding factors of fashion movements</p> <p>TSO 4d. Describe accelerating factors of fashion movements.</p> <p>TSO 4e. Describe retarding factors of fashion movement</p> <p>TSO 4f. Interpret the given situation for identification of factors affecting fashion</p>	<p>Unit-4.0- Factors Affecting Fashion</p> <p>4.1 The following factors affect fashion</p> <p>4.1.1 Age and gender,</p> <p>4.1.2 Geography</p> <p>4.1.3 Culture</p> <p>4.1.4 Economy and Class</p> <p>4.1.5 Technology</p> <p>4.1.6 Fashion 'icon'</p> <p>4.1.7 Popularity (fashion leaders and fashion followers)</p> <p>4.1.8 Taste</p> <p>4.1.9 Time period</p>	CO4
<p>TSO 5a. Enlist apparel categories.</p> <p>TSO 5b. Categorize apparel on the basis of given criteria</p> <p>TSO 5c. Differentiate various apparel categories.</p> <p>TSO 5d. Recommend the category of apparel for any given situation</p>	<p>Unit-5.0 Categories of Apparel</p> <p>5.1 Streetwear</p> <p>5.2 Formal wear</p> <p>5.3 Business casuals</p> <p>5.4 Ethnic wear</p> <p>5.5 Bridal wear</p> <p>5.6 Children wear</p> <p>5.7 Denim wear</p>	CO5

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
	5.8 Loungewear 5.9 Resort wear 5.10 Beach wear 5.11 Sportswear 5.12 Active sportswear	

Note: One major TSO may require more than one Theory session/Period.

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: (Not Applicable)

L) **Suggested Term Work and Self-Learning: S2450303** Some sample suggested assignments, micro-projects, and other activities are mentioned here for reference.

a. **Assignments:** Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

- 1) Write about fashion, style, and trends.
- 2) Explain fashion theories.
- 3) Explain any one element of fashion in detail.
- 4) Explain accelerating and retarding factors of fashion.
- 5) Write the difference between the following:-
 - i) Formal wear and business wear
 - ii) Sportswear and active sportswear

b. **Micro Projects:**

1. Prepare a report on the latest Fashion trends in T.V./films/Sports/Media/theatre etc.
2. Prepare a chart showing the fashion cycle with details.
3. Make a report on fashion changes during past decades. Explain cultural/social influence and other such influences on fashion. Also, narrate in terms of elements of fashion.
4. Make a presentation on accelerating and retarding factors of fashion.
5. Draw garment designs as per apparel categories.

c. **Other Activities:**

1. Seminar Topics:

- Current fashion trends in various fields.
- Fashion terminologies and fashion forecast
- Apparel categorization as per their usage.
- Colours used in garments during various seasons.
- Types of Surface embellishment in garments

2. Visits: Visit nearby craft exhibitions/malls/emporiums of state textiles and other such units.

3. Self-learning topics:

- Current Fashion trends
- Latest fashion styles
- Movements in fashion
- Effects of fashion retarding factors
- Effects of fashion accelerating factors

M) Suggested Course Evaluation Matrix: The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate CO attainment.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	10%	10%	10%	20%	20%	-	-
CO-2	15%	15%	15%	20%	20%	-	-
CO-3	15%	15%	15%	20%	20%	-	-
CO-4	30%	30%	30%	20%	20%	-	-
CO-5	30%	30%	30%	20%	20%	-	-
Total Marks	30	70	20	20	10	-	-
			50				

Legend:

*: Other Activities include self-learning, seminars, visits, surveys, product development, software development, etc.

** : Mentioned under point- (N)

: Mentioned under point-(O)

Note:

- The percentages given are approximate
- In the case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided among all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises questions related to the achievement of each CO.

N) Suggested Specification Table for End Semester Theory Assessment: The specification table represents the reflection of sample representation of assessment of the cognitive domain of the full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Fundamentals of Fashion	8	CO1	10	3	3	4
Unit-2.0 Introduction to Fashion Theory	8	CO2	10	3	2	5
Unit-3.0 Elements of Fashion	10	CO3	15	5	4	6
Unit-4.0 Factors Affecting Fashion	10	CO4	15	5	6	4
Unit-5.0 Categories of Apparel	12	CO5	20	4	6	10
Total	48	-	70	20	21	29

Note: A similar table can also be used to design class/mid-term/ internal question papers for progressive assessment.

O) Suggested Assessment Table for Laboratory (Practical): (Not Applicable)

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorials, Case Methods, Group Discussions, Industrial visits, Industrial Training, Field Trips, Portfolios, Learning, Role Play, Live Demonstrations in Classrooms, Labs, Field Information, and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

Q) List of Major Laboratory Equipment, Tools, and Software: (Not Applicable)**R) Suggested Learning Resources:****(a) Books:**

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Fashion Design Essentials:100 Principles of Fashion Design	Jay Calderin	Rockport publication-2012 ISBN 13 - 9781592538270
2.	The Culture of Fashion	Christopher Breward	Manchester University press-1995 ISBN 13- 9780719041259
3.	Fashion and Modernity	Christopher Breward	Berg publication-2005 ISBN 13- 9781845200282
4.	Fashionology: An Introduction to Fashion Studies	Yuniya Kawamura	Berg publication-2005 ISBN 13 - 9781859738146
5	Fashion and Its Social Agendas: Class, Gender, and Identity in Clothing	Diana Crane	University of Chicago press-2001 ISBN 13 -9780226117997
6	Fashion Cultures: Theories, Explorations and Analysis	Stella Buzzi	Routledge -2013 ISBN 13- 9780415680066
7	Fashion from Concept to Consumer	Gini Stephens Pearson	Prentice Hall- 2007 ISBN-13- 9780131590335
8	The Dynamics of Fashion	Elaine Stone	Fairchild Publication-2008 ISBN-13 2901563676863
9	Fashion Source Book	Kathryn McKelvey	Blackwell Publishing New Delhi1996 ISBN-13- 978-0632039937
10	Individuality in clothing,	Kafgen Mary	Houghton Mifflin Company-1971 ISBN- 13 -978-0023621901
11	Elements of Fashion and Apparel Design	Sumathi, G.J.	New Age International Publishers, New Delhi-2002 ISBN-13 - 978-8122413717

(b) Online Educational Resources:

1. <http://www.purushu.com/2010/08/elements-of-design-in-fashion.html>
2. <https://www.proprofs.com/quiz-school/story.php?title=elements-principles-design>
3. <https://www.khanacademy.org/humanities/ap-art-history/start-here-apah#elements-of-artapah>
4. <http://www.invisionapp.com/design-defined/principles-of-design/>
5. <https://www.femina.in/fashion/how-to/common-fashion-terms-and-their-meaning68484.html>

Note: Teachers are requested to check the Creative Commons license status/ financial implications of the suggested, online educational recourses before use by the students.

(c) Others:

1. <https://ncert.nic.in/textbook/pdf/lehe202.pdf>
2. https://cbseacademic.nic.in/web_material/doc/2014/13_Fashion_Studies_Textbook_XI.pdf
3. https://cbseacademic.nic.in/web_material/doc/fashion_studies/3_XII_Text_Book.pdf

- A) **Course Code** : 2450306(P2450306/S2450306)
 B) **Course Title** : Summer Internship -I (Common For all Programmes)
 C) **Pre- requisite Course(s)** :
 D) **Rationale** :

Diploma students are required to give exposure of their own diploma programme related industrial hardware, software and practices, just after completing one semester, so that they can correlate this industrial exposure with the concept being taught in the branch specific specialized engineering courses in forthcoming semesters. Mentors/Coordinators/ Teachers need to map the academic contents of the programme of study with the activities of this industrial exposure and are advised to follow the 'Whole to Part' approach to make the students aware about the potential industry's expected outcomes & setup ('Whole') from the diploma programme – and then teaching the related concepts ('Part') of the same in subsequent semesters. In this way before actually being exposed to academic input specific to diploma programmes, the students need to be sent to the nearby/local industries and also may be advised to explore information related to their programme of study using different sources related to potential employment opportunities of both wage and self-employment, job function, job position, nearby relevant industries and so on.

The summer internship will provide the direction to the students and also help in mind mapping to plan their futuristic course of action, after passing the diploma. This would also bridge the gap between their virtual imagination about the outcome of the programme and real happenings related to the diploma programme.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/laboratory/workshop/field/ industry.

After completion of the course, the students will be able to-

- CO-1** Comprehend the practices of identified industry or world of work related to diploma engineering programme of study.
CO-2 Map real equipment, processes, product, management, operations etc. to the course of study through various glimpses of input, process and output in different type of industries.
CO-3 Identify the probable enterprises /startups for futuristic planning and self-growth.
CO-4 Identify the probable job function and job position in their relevant programme of study.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	-	-	1	-	-	1		
CO-2	3	-	-	1	-	-	1		
CO-3	3	-	-	-	1	-	2		
CO-4	3	-	-	-	1	-	2		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Board of Study	Course Code	Course Title	Scheme of Study (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
	2450306	Summer Internship -I	-	-	02	02	04	02

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Board of Study	Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
			Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
	2450306	Summer Internship -I	-	-	10	15	10	15	50

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) **Suggested Instructional/Implementation Strategies:** Mentors/ Coordinators/ Teachers need to plan and implement the summer internship in their respective programme as per the outcome expected from the programme. However in general, summer internship would help in exploring and exposing the student to the below mentioned dimensions of the world of work. These dimensions can further be explored in depth as per the need and advancement in respective programmes in later stages. Mentors/Coordinators/ Teachers need to map the academic contents of the programme of study with the activities of this industrial exposure and are advised to follow the whole to part approach to make the students aware about the potential industry's expected outcomes & setup ('Whole') from the specific diploma programme and then teaching the related concepts ('Part') of the same in subsequent semesters.

- Industrial Layout
- Organizational Structure
- Corporate Communications
- Strategic, Rolling and Developmental plans
- Maintenance Procedures
- Inventory Control and Management System
- Purchase and Store Procedures
- Major Machinery, Tools, Equipment, Devices, Software, Control System etc.
- Product Development, Manufacturing, Packaging and Delivery
- Project Management
- Operation and Maintenance
- Warehouse Management
- Assembly Line
- Quality Assurance and Testing Cell
- Process/ Software Development/ Fabrication/ Construction Work Management
- Testing and Quality Assurance Practices
- Total quality management
- Callibration and Certification practices
- Safety Practices
- Industrial Acts
- Industrial Grievances
- Behavioural Aspects
- Conduction of Meetings and Discussions
- Sales and Marketing Strategies
- Forecasting and Target Setting
- Production Planning and Control
- Storage Retrieved and Material handling Practices
- Automation and Control Facilities
- Enterprise Resource Planning (ERP)
- Supply Chain
- Customer Satisfaction Strategies
- Finance and Accounts
- Research and Development
- Promotion and Capacity Building Schemes
- Reduce, Reuse and Recycling Efforts and Policies
- Recognitions and Rewards
- After Sale Services
- Promotional Avenues
- Social Corporate responsibilities

J) Assessment of Summer Internship -I

S. No.	Criteria of Assessment	% of Weightage
1.	Maintaining the log book after having exposure to different types of industry/ world of work	15
2.	Preparing the list of job functions and job positions of relevant programme	20
3.	Identify the probable enterprise/ startup for futuristic planning	15
4.	Report writing of summer internship as per the prescribed format	30
5.	Presentation of Report	20
Total		100

Note: S. no. 1 to 3 shall be considered for progressive assessment. While S. No. 4 & 5 shall be considered for end term assessment