Program Name	: **Diploma in Dress Designing & Garment Manufacturing**
Program Code	: **DD**
Semester	: **Second**
Course Title	: **Digital Design Development - I**
Course Code	: 24015

1. RATIONALE

Design Development is a very important component of the fashion industry which is practiced digitally in recent time. This course aims to develop the abilities of designing a women's wear collection with similar parameters of the industry by using latest design softwares.

2. COMPETENCY

The aim of this course is to develop a theme based women's wear collection as per industry standards.

- **Develop a women's wear collection using design softwares as per industry standards.**

3. COURSE OUTCOMES (COs)

The theory and practical experiences associated with this course will allow the student to demonstrate the following industry oriented COs associated with the above mentioned competency:

   a) Develop a concept based on research and analysis of collect data.
   b) Develop relevant design boards from concept to final designs.
   c) Upgrade design boards using design softwares.
   d) Design a women's wear collection and prepare Teck packs digitally.

## 4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme			Credit (L+T+P)	Examination Scheme												
				Paper Hrs.	Theory						Practical					
L	T	P			ESE		PA		Total		ESE		PA		Total	
					Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min
--	--	6	6	--	--	--	--	--	--	--	50@	20	50~	20	100	40

'#':No Practical Examination, (~): For the practical only courses, the PA has two components under practical marks i.e. the assessment of practicals (seen in section 6) has a weightage of 60% (i.e. 30 marks) and micro-project assessment (seen in section 12) has a weightage of 40% (i.e. 20 marks). This is designed to facilitate attainment of COs holistically, as there is no theory ESE.

Legends: L- *Lecture;* **T** *– Tutorial/Teacher Guided Theory Practice;* **P** *- Practical;* **C** *– Credit,* **ESE** *- End Semester Examination;* **PA** *- Progressive Assessment,* *#: No theory paper.*

5. COURSE MAP (with sample COs, Learning Outcomes i.e.LOs and topics)
This course map illustrates an overview of the flow and linkages of the topics at various levels of outcomes (details in subsequent sections) to be attained by the student by the end of the course, in all domains of learning in terms of the industry/employer identified competency depicted at the centre of this map
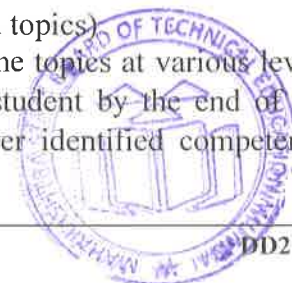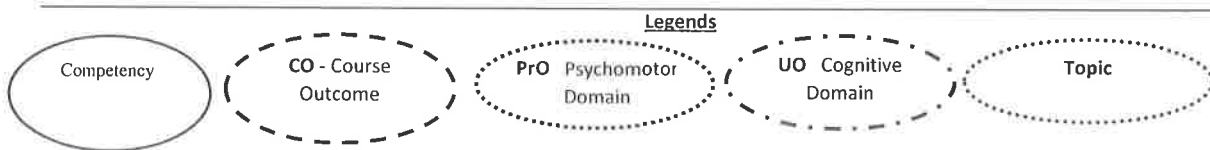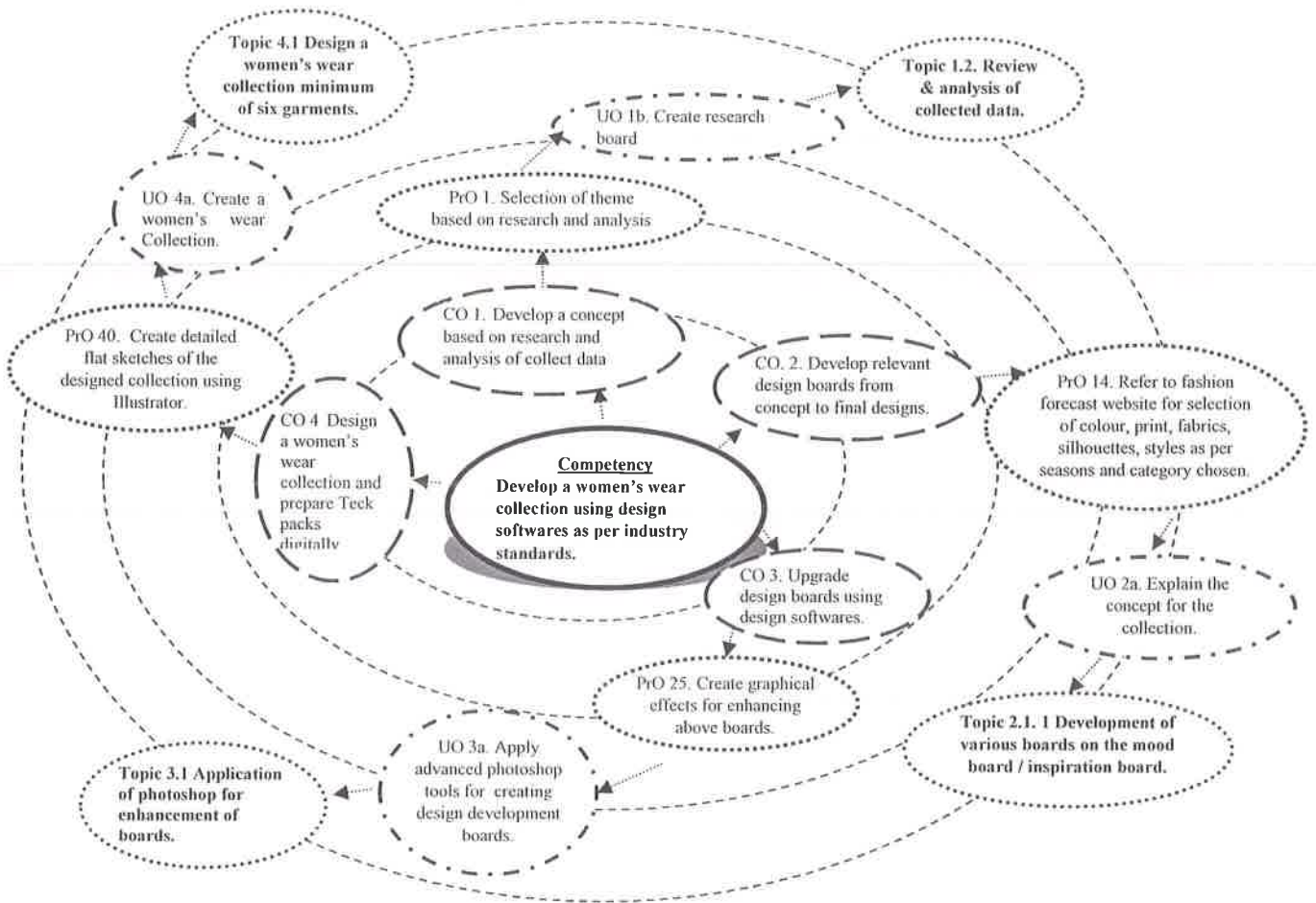
Figure 1 - Course Map

6. SUGGESTED PRACTICALS / EXERCISES

The practical/exercises/tutorials in this section are psychomotor domain LOs (i.e.sub-components of the COs) are to be developed and assessed in the student to lead to the attainment of the competency.

S. No.	Practical Outcomes (PrOs)	Unit No.	Approx. Hrs. Required
1	Selection of theme based on research and analysis	I	02 hrs
2	Selection of theme based on research and analysis	I	02 hrs
3	Selection of theme based on research and analysis	I	02 hrs
4	Selection of theme based on research and analysis	I	02 hrs
5	Collection of visuals and arranging them in a collage form for	I	02 hrs

	6	concept board.		
	6	Collection of visuals and arranging them in a collage form for concept board.	I	02 hrs
	7	Collection of visuals and arranging them in a collage form for concept board.	I	02 hrs
	8	Collection of visuals and arranging them in a collage form for concept board.	I	02 hrs
	9	Use restoration technique on the created collage/image using photoshop.	I	02 hrs
	10	Use restoration technique on the created collage/image using photoshop.	I	02 hrs
	11	Use restoration technique on the created collage/image using photoshop.	I	02 hrs
	12	Use restoration technique on the created collage/image using photoshop.	I	02 hrs
	13	Use restoration technique on the created collage/image using photoshop.	I	02 hrs
	14	Refer to fashion forecast website for selection of colour, print, fabrics, silhouettes, styles as per seasons and category chosen.	II	02 hrs
	15	Refer to fashion forecast website for selection of colour, print, fabrics, silhouettes, styles as per seasons and category chosen.	II	02 hrs
	16	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	17	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	18	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	19	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	20	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	21	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	22	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	23	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	24	Create theme based boards. Concept/client/silhouettes/ colour/ fabric/ story board digitally.	II	02 hrs
	25	Create graphical effects for enhancing above boards.	III	02 hrs
	26	Create graphical effects for enhancing above boards.	III	02 hrs
	27	Create graphical effects for enhancing above boards.	III	02 hrs
	28	Create graphical effects for enhancing above boards.	III	02 hrs
	29	Create graphical effects for enhancing above boards.	III	02 hrs
	30	Create graphical effects for enhancing above boards.	III	02 hrs
	31	Create graphical effects for enhancing above boards.	III	02 hrs
	32	Create graphical effects for enhancing above boards.	III	02 hrs
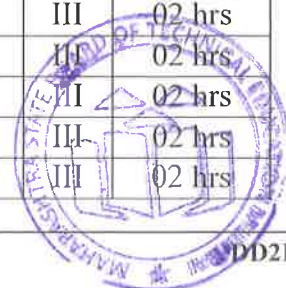
| 33	Create graphical effects for enhancing above boards.	III	02 hrs
34	Sketch silhouettes designs with rendering based on colours, textures and fabric used manual and digital.	IV	02 hrs
35	Sketch silhouettes designs with rendering based on colours, textures and fabric used manual and digital.	IV	02 hrs
36	Sketch silhouettes designs with rendering based on colours, textures and fabric used manual and digital.	IV	02 hrs
37	Sketch silhouettes designs with rendering based on colours, textures and fabric used manual and digital.	IV	02 hrs
38	Sketch silhouettes designs with rendering based on colours, textures and fabric used manual and digital.	IV	02 hrs
39	Create detailed flat sketches of the designed collection using Illustrator.	V	02 hrs
40	Create detailed flat sketches of the designed collection using Illustrator.	V	02 hrs
41	Create detailed flat sketches of the designed collection using Illustrator.	V	02 hrs
42	Create detailed flat sketches of the designed collection using Illustrator.	V	02 hrs
43	Create detailed flat sketches of the designed collection using Illustrator.	V	02 hrs
44	Compile a digital portfolio of the above collection.	V	02 hrs
45	Compile a digital portfolio of the above collection.	V	02 hrs
46	Compile a digital portfolio of the above collection.	V	02 hrs
47	Compile a digital portfolio of the above collection.	V	02 hrs
48	Compile a digital portfolio of the above collection.	V	02 hrs
Total			**96 hrs**

Note

i.   A suggestive list of PrOs is given in the above table. More such PrOs can be added to attain the COs and competency. A judicial mix of minimum 24 or more practical need to be performed, out of which, the practicals marked as '*' are compulsory, so that the student reaches the 'Application Level' of Bloom's Taxonomy' as generally required by the industry.

ii.   The 'Process' and 'Product' related skills associated with each PrO are to be assessed according to a suggested sample given below:

Sr. No.	Performance Indicators	Weightage in %
1	Research and analysis.	10
2	Collection of data and visuals.	20
3	Interpretation of research for creation of Design Development boards.	30
4	Digital Skills.	20
5	Presentation of output.	20
Total		**100**

The above PrOs also comprise of the following social skills/attitudes which are Affective Domain Outcomes (ADOs) that are best developed through the laboratory/field based.
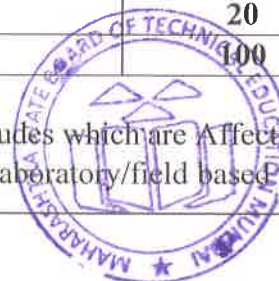
experiences:
   a. Follow safety practices.
   b. Practice good housekeeping.
   c. Demonstrate working as a leader/a team member.
   d. Maintain tools and equipments.
   e. Follow ethical Practices.

The ADOs are not specific to any one PrO, but are embedded in many PrOs. Hence, the acquisition of the ADOs takes place gradually in the student when s/he undertakes a series of practical experiences over a period of time. Moreover, the level of achievement of the ADOs according to Krathwohl's 'Affective Domain Taxonomy' should gradually increase as planned below:
   • 'Valuing Level' in 1st year
   • 'Organizing Level' in 2nd year
   • 'Characterizing Level' in 3rd year.

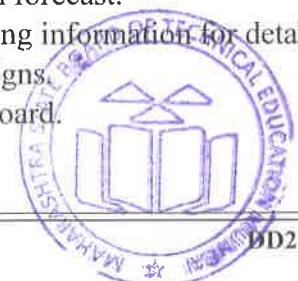## 7. MAJOR EQUIPMENT/ INSTRUMENTS REQUIRED

The major equipment with broad specification mentioned here will usher in uniformity in conduct of experiments, as well as aid to procure equipment by authorities concerned.

S. No.	Equipment/Instruments/Other resources name with Broad Specifications	PrO. No.
1.	Computer with latest version windows /Photoshop / Illustrator	All
2.	L.C.D Projector and screen.	All
3.	Scanner laser printer & inkjet printer.	All
4.	Internet facility.	All
5.	Fashion forecast website.	All
6.	Stationery items required for drawing painting & presentation.	All

8. UNDERPINNING THEORY COMPONENTS:

The following topics/subtopics should be taught and assessed in order to develop LOs in cognitive domain for achieving the COs to attain the identified competency.

Unit	Unit Outcomes (UOs) (in cognitive domain)	Topics and Sub-topics
Unit– I **Research Analysis**	1a. Gain indepth knowledge on selected topic of research. 1b. Create research board. 1c. Interrelate data collected for finishing a concept.	1.1 Research any one topic for creating the theme. 1.2 Review & analysis of collected data. 1.3 Concept building.
Unit– II **Design Board Development**	2a. Explain the concept for the collection. 2b. Awareness of trends for upcoming seasons. 2c. Silhouettes / Surface ornamentation / colour and fabric boards. 2d. Gist of the design	2.1 Development of various boards on the mood board / inspiration board. 2.2 Fashion forecast. 2.3 Gathering information for details of the designs. 2.4 Story board.

	process on one paper.	
Unit – III **Enhancement of boards using Photoshop / Design Softwares.**	3a. Apply advanced photoshop tools for creating design. development boards. 3b. Remove unwanted images like water mark & restoring the image. 3c. Merge & blend images. 3d. Improve the look of the Image. 3e. Create and use shapes and brush strokes in designs. 3f. Give graphical effects on an image.	3.1 Application of photoshop for enhancement of boards. 3.2 Restoration and touch-up to improve images. 3.3 Advanced layer masking, blending techniques & layer style. 3.4 Colour Correction techniques 3.5 Working with shapes & brushes 3.6 Working with filters.
Unit – IV **Women's wear collection with Tech pack.**	4a. Create a women's wear Collection. 4b. Create Tech pack & Flat sketches. 4c. Create detailed flat Sketches.	4. 1 Design a women's wear collection minimum of six garments. Using Illustrator • Tools for flat sketches and Tech pack • Working with brushes, symbols, graphic styles

Note: *To attain the COs and competency, above listed UOs need to be undertaken to achieve the 'Application Level' and above of Bloom's 'Cognitive Domain Taxonomy'*

9. SUGGESTED SPECIFICATION TABLE FOR QUESTION PAPER DESIGN

- Not Applicable.

10. SUGGESTED STUDENT ACTIVITIES

    a. Collect data for theme building from internet, library books, museum visits and exhibitions.
    b. Collect pictures and visuals for references.
    c. Practice photoshop and Illustrator software's for design development boards.

11. SUGGESTED SPECIAL INSTRUCTIONAL STRATEGIES

These are sample strategies, which the teacher can use to accelerate the attainment of the various outcomes in this course:

    a. Massive open online courses (MOOCs) may be used to teach various topics/ sub topics.
    b. Different types of teaching methods and media that are to be employed to develop the outcomes.
    c. About 15 – 20 % of the topics/sub- topics which is relatively simpler or descriptive in nature is to be given to the students for self-directed learning and assess the development of the Cos through classroom presentations (see implementation guideline for details).
    d. Teachers need to ensure to create opportunities and provisions for co – curricular activities.
    e. Guide students in undertaking micro-projects.
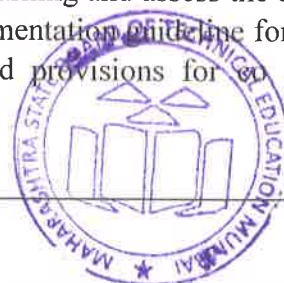
    f.   Guide students for reviewing and analysing data and provide them state of art computer lab.

12. SUGGESTED MICRO PROJECTS
    a.   Online research on Tech packs used in various fashion houses.
    b.   Market research of various brands related to chosen category of garments.

13. SUGGESTED LEARNING RESOURCES :

Sr. No.	Title of Book	Author	Publication & ISBN No
1.	Fashion 150 : 150 Years / 150 Designers	Piazza, Arianna - Ed.	London, Laurence King Publishing Ltd., 2016 ISBN-9781780676203
2.	The Trendmakers : Behind The Scenes Of The Global Fashion Industry	Lantz, Jenny	London, Bloomsbury, 2016 ISBN-9781474259781
3.	Research And Design : The Systematic Investigation Into And Study Of Materials And Sources	Seivewright, Simon	Switzerland, Ava Publishing Sa, 2007 ISBN-9782940373413
4.	The Fashion Designer's Directory Of Shape And Style : Over 500 Mix-And-Match Elements For Creative Clothing Design	Travers-Spencer, Simon Zaman, Zarida	Singapore, Page One Publishing Pte. Ltd., 2008 ISBN-9780764138669
5.	Fashion Design - Process, Innovation And Practice	Mckelvey, Kathryn Munslow, Janine	New Delhi, Om Books International / Blackwell Science Limited, 2005 ISBN-9780632055999

14. SUGGESTED SOFTWARE / LEARNING WEBSITES
    a)   http://searchingforstyle.com/2014/11/fashion-101-how-to-do-fashion-design-research/
    b)   https://www.milanote.com/guide/create-better-moodboards
    c)   https://photoshopcafe.com/use-layer-masks-photoshop-7-layer-masking-tips/
    d)   https://successfulfashiondesigner.com/tutorials/4-ways-to-sketch-fashion-flats-in-illustrator/
    e)   https://helpx.adobe.com/in/illustrator/using/brushes.html