ATLAS SKILLTECH UNIVERSITY

SCHOOL OF DESIGN

Courses Offered

Core Courses, Elective Courses and Ability Enhancement Courses

Bachelor of Design

4 Year Full Time Program

(Academic Year 2022-23)

Preamble

The University Grants Commission (UGC) has initiated several measures to bring equity, efficiency and excellence in the Higher Education System of the country. The important measures taken to enhance academic standards and quality in higher education include innovation and improvements in curriculum, teaching learning process, examination and evaluation systems, besides governance and other matters. The UGC has formulated various regulations and guidelines from time to time to improve the higher education system and maintain minimum standards and quality across the Higher Educational Institutions (HEIs) in India. The academic reforms recommended by the UGC in the recent past have led to overall improvement in the higher education system. However, due to lot of diversity in the system of higher education, there are multiple approaches followed by universities towards examination, evaluation and grading system. While the HEIs must have the flexibility and freedom in designing the examination and evaluation methods that best fits the curriculum, syllabi and teaching–learning methods, there is a need to devise a sensible system for awarding the grades based on the performance of students. Presently the performance of the students is reported using the conventional system of marks secured in the examinations or grades or both. The conversion from marks to letter grades and the letter grades used vary widely across the HEIs in the country. This creates difficulty for the academia and the employers to understand and infer the performance of the students graduating from different universities and colleges based on grades. The grading system is considered to be better than the conventional marks system and hence it has been followed in the top institutions in India and abroad. So it is desirable to introduce a uniform grading system. This will facilitate student mobility across institutions within and across countries and also enable potential employers to assess the performance of students. To bring in the desired uniformity, in the grading system and method for computing the cumulative grade point average (CGPA) based on the performance of students in the examinations, the UGC has formulated these guidelines.

CHOICE BASED CREDIT SYSTEM

The CBCS provides an opportunity for the students to choose from the prescribed courses comprising core,elective/minor or skill based courses. The courses can be evaluated following the grading system, which is considered to be better than the conventional marks system. Therefore, it is necessary to introduce uniform grading system in the entire higher education system in India. This will benefit the students to move across institutions within India to begin with and across countries. The uniform grading system will also enable potential employers in assessing performance of the candidates. In order to bring uniformity in evaluation system and computation of the Cumulative Grade Point Average (CGPA) based on student’s performance in

examinations, the UGC has formulated the guidelines to be followed.

Outline of Choice Based Credit System

1. Core Course: A course, which should compulsorily be studied by a candidate as a core requirement is termed as a core course. The structure of course is defined under following points

1.1.All the UG degree programs shall be of either six semesters or eight semesters duration unless specified otherwise.

1.2. An academic year consists of two semesters: Odd Semester and EvenS emester. 1.3. A semester normally extends over a period of 16 weeks (6 day week) with 90 working days.

1.4. Every course offered may have three components: Lecture (L), Tutorial (T) and Practicals (P).Tutorial session consists of participatory discussion / self-study/ desk work/ brief seminar

presentations by students and such other novel methods.

1.5. The credit pattern for a course (L:T:P) shall be decided by the respective

Board of Studies (BoS).

1.6. Credit means the unit by which the course work is measured. One hour session of Lecture or

Tutorial per week for 16 weeks amounts to 1 credit.

1.7.Two hour session of Practicals per week for 16 weeks amounts to 1 credit per semester. The total duration of a semester is 20 weeks inclusive of semester-end examination.

1.8.A course of 3 to 6 credits will be evaluated for 100 marks. A course with less than 3 credits will be evaluated for 50 marks. For any other approved course, the evaluation method shall be decided by the respective BoS.

2. Elective Course:

Elective Course is a course which can be chosen from a pool of courses. It may be very specific or specialized or advanced or supportive to the discipline/ subject of

study or which provides an extended scope or which enables an exposure to some other discipline/subject/domain or nurtures the student's proficiency/skill.

2.1.Discipline Specific Elective (DSE) is a course offered under the main discipline/subject of study or a Project/Dissertation.

2.2.Project/Dissertation is an elective course designed to acquire special/ advanced knowledge, such as supplement study/ support study to a project work. A student has to study such a course on his/her own with advisory support of a faculty member.

2.3.Generic Elective (GE) is an elective course chosen from an unrelated discipline/subject with an intention to seek exposure beyond discipline/subject.

3. Ability Enhancement Courses (AEC): Ability Enhancement Courses may be of two types: Ability Enhancement Compulsory Courses (AECC) and Skill Enhancement Courses (SEC). 3.1.AECC courses are mandatory courses based upon the content that leads to knowledge

enhancement viz., Environmental Science, Indian Constitution and English/ Modern Indian

Languages (MIL) / Communication skills.

3.2. SEC courses are aimed at providing hands-on-training, competencies, skills, etc.

Program Educational Objectives (PEOs)

The students will be able to :

PEO1: design innovative and sustainable solutions: The program will equip students with the knowledge and skills to create designs that are both aesthetically pleasing and environmentally responsible. Graduates will be able to develop innovative solutions that meet the needs of clients while minimizing the impact on the environment.

PEO2: work effectively in interdisciplinary teams: The program will provide students with opportunities to collaborate with peers from different disciplines, such as engineering, business, and social sciences. Graduates will be able to work effectively in teams, communicate their ideas clearly, and contribute to the success of multidisciplinary projects.

PEO3: adapt to changing technologies and design practices: The program will expose students to emerging technologies and design practices that are relevant to the industry. Graduates will be able to adapt to new tools and techniques, stay up to date with the latest trends, and continue to learn and grow throughout their careers.

Program Outcome (POs)

PO1- To respond to complexity using effective higher order thinking skills to arrive at decisive courses of action.

PO2- To envision and evaluate possible future scenarios thereby creatively engineering impactful solutions

PO3- To adapt to diverse scenarios by collaborating and directing the creative process to arrive at globally relevant design outcomes.

PO4- To demonstrate ethically responsible design practice.

PO5- To evaluate and apply emerging technologies and deploy relevant digital skills contextually

PO6- To analyse systems, evaluate and construct new knowledge while demonstrating the capability of executing design-led innovation.

PO7- To demonstrate persuasive communication skills to drive outcomes in varied contexts

PO8- To demonstrate awareness and cultural sensitivity while developing human-centred innovations within different societal contexts.

PO9 - To apply creative and critical approaches in mutually supportive ways to enable T shaped thinking.

PO10 - To build qualities of environmental stewardship by reflecting on challenges in ecosystems and responding with value creations

PO11 - To demonstrate strong leadership skills by articulating a vision and inspiring team work.

PO12 - To develop a self initiated learning approach to generate unified solutions through experimentation with growth mindset

Program Specific Outcomes (PSO)

Program Specific Outcomes (PSOs)

Animation & VFX

PSO1
Students will be able to apply the design principles and elements as per the need of narrative structure to craft engaging visual experiences.

PSO2
Students will be able to demonstrate keen understanding of storytelling techniques and its role in current and emerging media.

PSO3
Students will be able to Identify and integrate effective techniques, tools and technology to seamlessly build on production pipelines.

Communication Design

PSO1
Create strong visuals through illustrations, pictures or type and use narrative style through aesthetics to communicate any message effectively.

PSO2
Understanding media, trends and being able to adapt to emerging technologies with required & relevant skills.

PSO3
Develop leadership qualities, collaborate and contribute within multidisciplinary teams, showing sensitivity and empathy.

Fashion Communication & Styling

PSO1
Understand, explore, and consolidate the thinking and expression behind appreciating fashion and lifestyle experiences and respond to the geographical, social, cultural, economic, environmental, and technological make-up.

PSO2

Demonstrate the ability to integrate fashion systems, business strategy, media, and communication design, critically evaluate, integrate, and apply in relevant context.

PSO3
Agility to adopt technology for professional use within the context of sustainable futures to impact fashion and lifestyle industries.

Fashion Design

PSO1
Develop the ability to cultivate a professional role and navigate a career within the fashion system.

PSO2
Show strength in the design process through a well-considered appraisal and staging of idea development.

PSO3
Proficiently apply technical knowledge of materials, forms, surface design, construction and production methods, understanding the implications for sustainable design.

Interior Design:

PSO1
Understand, explore, and articulate the thinking and representation within domains not limited to interior spaces, but including diverse spatial domains such as architecture, production design, brand building and product design.

PSO2
Demonstrate proficiency in technical knowledge of construction systems, building services, materials within varied contexts and typologies.

PSO3
Ability to create holistic multi-sensory experiences for any scale through a well-considered process of design development while understanding the implications for sustainable design.

Product Design:

PSO1
Specialized in industrial design, merging aesthetics, form, and function through extensive research and material expertise with a focus on ergonomics & sustainability.

PSO2
Mastering design thinking by blending traditional principles with frugal yet tech-infused visualization, emphasizing user empathy enabling them to solve real world problems.

PSO3
Proficient in both traditional and modern tech-enabled prototyping methods, including hand sketching, physical models, digital sketching, 3D printing, and virtual prototyping.

Strategic Design and Management

PSO1
Applying knowledge of management theories and practices to solve business challenges with a design thinking mindset.

PSO2
Demonstrate the skill to plan, build and thrive in the service and experiential economy.

PSO3
To develop and demonstrate strategic thinking for growth and entrepreneurship.

First Year Studies

First Year Studies
Bachelor of Design - AY 2022-23
Batch 2022-26

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	Mid Term	End Term	Attendance	Total
FIRST YEAR STUDIES									
Semester 1									
BDES 111	Design Research 1	2	1	1		50	40	10	100
BDES 113	Design Studio 1	3	1	1	2	50	40	10	100
BDES 117	Drawing Fundamentals 1	3	1	1	2	50	40	10	100
BDES 107	Imaging 1	2	1	1	2	50	40	10	100
BDES 119	History in Context to objects	3	1	1	2	50	40	10	100
BDES 115	Space and Materiality	3	1	2	2	50	40	10	100
BDES AE 01	ATLAS Elective	2	1	1		50	40	10	100
BDES SU 01	Skill Up	2	1	1		50	40	10	100
	TOTAL	**18**							
Semester 2									
BDES 112	Design Research 2	2	1	1		50	40	10	100
BDES 114	Design Studio 2	4	1	2	2	50	40	10	100
BDES 116	Drawing Fundamentals 2	1	1	1		50	40	10	100
BDES 106	Sustainable System	2	1	1	1	50	40	10	100
BDES 108	Time	2	1	1	1	50	40	10	100
BDES 110	Imaging 2	3	1	1	2	50	40	10	100
BDES AE 08	ATLAS Elective 1	2	1	1	1	50	40	10	100
BDES SU 01	Skill Up	2	1	1		50	40	10	100
	TOTAL	**20**							

B.Des 1st Year

Semester 1

Design Research 1 (BDES 111)

L	T	P
1	1	2

Course Name: Design Research 1

Course Contact Hours: 2

Course Credit Hours: 4

Course code : BDES 111

Course Objectives:

- Understand the role of research in design through engaging design methodologies.
- Explore biases, knowledge, and perception via self-exploration and observation.
- Master observational techniques, inspired by "On Looking" by Alxendra Horowitz.
- Develop skills in reflection, collaborative thinking, and storytelling for effective design narrative creation.

Course Description:

Design Research I will help the students understand the role of research in a design process. Through an explorative approach toward the self and their surroundings, students will identify the relationship between knowledge, opinion and bias.

The course will cover foundational research practices, methodologies and ethics that will encourage students to ask the right questions to develop a focused approach. The course provides a space for reflective thinking and decision-making. It will enable students to investigate, analyze and synthesize information in a coherent way.

Course Content:

Unit	Modules	No. of Hours
1	**Self Exploration/Investigation** 1.1 Perception and Assumption 1.2 Degrees of Knowing 1.3 Introspective and Reflective Thinking Process	8

2	**Observation/Investigation**		10
	2.1	Data collection through existing sources	
	2.2	Formulating Research Question	
	2.3	Paraphrasing and Citation Methods	
3	**Data Collection**		12
	3.1	Careful decision making through reflective process	
	3.2	Understanding diverse research methodologies	
	3.3	Richness in observation and data collection	
	3.4	Data interpretation and selection	

Course Outcomes

1. CO1: Demonstrate *strength* in observational skills, data collection and detail.
2. CO2: Demonstrate *strength* in identifying diverse resources.
3. CO3: Demonstrate *fluency* in basic research skills and research process.
4. CO4: Demonstrate *fluency* in data interpretation and analysis through a reflective process
5. CO5: Demonstrate an *understanding* of paraphrasing, citation and bibliography
6. CO6: Collaborate *effectively* in research endeavors, demonstrating teamwork and mutual learning.

References :

- Turabian, K. L., Booth, W. C., Colomb, G. G., Williams, J. M., & Chicago Press Staff, U. of. (2007). A Manual for Writers of Research Papers, Theses, and Dissertations.
- Horowitz, A. (2013). On Looking: A Walker's Guide to the Art of Observation. United States: Scribner.

Design Studio 1(BDES 113)

L	T	P
1	1	2

Course Name: Design Studio 1 **Course Contact Hours: 4**

Course Credit Hours: 3 **Course code : BDES 113**

Course Objectives:

- In Design Studio 1, students explore a range of visual, analytical, and making skills while working on projects that draw upon exploration, collaboration, and experimentation.
- The focus of this course is not only on the 'how' of making things but also on the 'why'.
- How is it that we make sense of our ideas, the information we collect, and our hunches and theories?
- What can this inquiry tell us about why we make decisions as creative thinkers? Integrative Studio encourages exploration through research and prototyping.

Course Description:

Design Studio 1 indicates classes that require hands-on work which includes visualization, analytical thinking, experimentation, prototyping and critical reflection to create explorative outcomes.

Course Content:

Unit		Modules	No. of Hours
		The Art of Seeing	
1	1.1	Capturing an emotion	16
	1.2	Interpretation of an image	
	1.3	Disrupting the perception	
	1.4	Planning for creation	
		The Act of Making	
2	2.1	Setting constraints	12
	2.2	Building Form	
	2.3	Trial and reflect	

		City as a Lab	
3	3.1	Exploration of chosen areas	12
	3.2	Analysis of data collection	
	3.3	Defining the problem/opportunity area	
		ISDI as a workshop	
4	4.1	Ideation and start of development	16
	4.2	Giving Shape	

Course Outcomes

1. CO1: Show they have KNOWLEDGE of visual representations, abstract ideas, and conceptual arguments.
2. CO2: Show COMPETENCE in making (ideate and prototype) using an iterative process and critical reflection *(here, reflection indicates feedback incorporated when required)*
3. CO3: Show FLUENCY in developing basic concepts and scenarios by experimenting, taking risks
4. CO4: Show STRENGTH in working with others in collaborative contexts to understand the value of self-learning and peer-to-peer learning.
5. CO5: EVALUATE the data collected from Primary, secondary and on site research to get insights helpful for ideating concepts
6. CO6: CREATE feasible solutions, helpful for identified problems.

References :

Drawing Fundamentals 1 (BDES 117)

L	T	P
1	1	2

Course Name: Drawing Fundamentals 1 **Course Contact Hours: 3**

Course Credit Hours: 4 **Course code : BDES 117**

Course Objectives:

- The students are enabled to start using drawing as a medium of exploration and thinking and not merely as a tool for depicting what is seen.
- Drawing is seen as a process for documenting the thought process and building upon it on an ongoing basis.
- Understanding the importance of making visual notes to guide future explorations.
- Enabling students to develop drawing skills to visualise complex forms and structures with ease and clarity.

Course Description:

The course informs students about connections between their ideas and visual memory. Drawing, as a medium, enables the students to effectively shape their ideas, communicate as well as present various connections in their design process. Starting from the basics, the students will develop a deeper understanding and appreciation for the role of seeing (observation) in their creative process and how drawing can play a crucial role in creating tangible ideas.

Course Content:

Unit	Modules	No. of Hours
	Drawing basics	
	1.1 Drawing elements	
1	1.2 Fundamentals	15
	1.3 Orthographic Projections	
	1.4 Perspective Projections	
	Gesture and form	
2	2.1 Gestures	15

	2.2	Human form	
	Expression		
3	3.1	Introduction to color concepts	15
	3.2	Storyboarding concepts	

Course Outcomes

1. CO1: **UNDERSTANDING:** Understanding the purpose of various drawing elements.
2. CO2: **DEMONSTRATE**: Working with shapes and forms as creation tools.
3. CO3: **FLUENCY:** Fluency in using drawing as an expressive tool.
4. CO4: **COMPETENCE:** in effectively communicating ideas.
5. CO5: **STRENGTH:** in media of choice
6. CO6: **DEMONSTRATE**: communicating ideas through visuals

References :

- Andrew Loomis - Figure Drawing for All It's Worth
- Stan Lee - How to draw Comics the marvel way.

Imaging 1(BDES 107)

L	T	P
1	1	2

Course Name: Imaging 1

Course Contact Hours: 3

Course Credit Hours: 4

Course code : BDES 107

Course Objectives:

- Develop students into effective visual communicators.
- Ensure students develop problem solving skills for professional practice.
- Ensure students have the ability to define tool-purpose context for smarter working.
- Upskilling students to incorporate AI generative tools into traditional workflows.
- Ensure that students become fluent in adapting across platforms, typologies, briefs, & processes to efficiently complete tasks & meet industry standards.
- Ensure students gain proficiency in publication design & data interpretation.

Course Description:

Digital imaging is a key skill & core competency that all designers are required to have. This course takes the student into an advanced level of visual digital image making using industry standard softwares, publication design & data interpretation through visual representation processes.

Course Content:

Unit	Modules		No. of Hours
1	**Image Editing & Manipulation : Adobe Photoshop**		18
	1.1	The Fundamentals	
	1.2	INTRODUCTION TO PHOTOSHOP - Interface & Basics	
	1.3	EXPLORING PHOTOSHOP - Blending & Healing	
	1.4	EXPLORING PHOTOSHOP - Using Layers, Masking & Text	

2	1.5	EXPLORING PHOTOSHOP - Filters & Compositing	3
	1.6	THE PHOTOSHOP FINALE – Mini Project 1 - Review	
	Modeling & Spaces in 3D : Sketchup		
	2.1	INTRODUCTION TO SKETCHUP - Modelling & building in 3D	
3	**Vector Imaging & Graphic Design : Adobe Illustrator**		12
	3.1	INTRODUCTION TO ILLUSTRATOR - Working in Vector	
	3.2	EXPLORING ILLUSTRATOR - Core Tools & Asset Making	
	3.3	EXPLORING ILLUSTRATOR - Blends, Brushes, Textures & Effects	
	3.4	EXPLORING ILLUSTRATOR - Mini Project 2 - Review	
4	**Working Across Applications : Photoshop+Illustrator**		12
	4.1	THE FINAL PROJECT – Research Phase	
	4.2	THE FINAL PROJECT - Ideation, prototyping & mockups	
	4.3	THE FINAL PROJECT - The Making Phase	
	4.4	THE FINAL PROJECT REVIEW	

Course Outcomes

1. Show STRENGTH in knowledge of design elements and principles.
2. UNDERSTANDING the role, functionality & areas of application of software.
3. COMPETENCY in using digital design tools through a design thinking process across software typologies within 2D & 3D processes.
4. DEMONSTRATE the ability to understand a brief and design an appropriate solution
5. FLUENCY in digital imaging nomenclature, process and cross platform working

References :

- https://visme.co/blog/elements-principles-good-design/
- **Graphic Design and Print Production Fundamentals** by Wayne Collins, et al. - https://opentextbc.ca/graphicdesign/
- Abstract : The Art Of Design, Netflix
- http://lthscomputerart2.weebly.com/the-elements--principles-of-graphic-design.html
- https://youtu.be/BpHtWOQlNoo
- www.youtube.com/bringyourownlaptop
- Point & Line To Plane by Kandinsky
- Concerning The Spiritual In Art by Kandinsky

- **Website prototyping :** https://uizard.io/
- Colour matching and palette creation https://www.khroma.co/train/
- Digital drawing support https://www.autodraw.com/
- Writing and visual prompt based https://www.jasper.ai/
- Paper on GANPaint ai https://ganpaint.io/

Space and Materiality (BDES 115)

L	T	P
1	2	2

Course Name: Space and Materiality **Course Contact Hours: 4**

Course Credit Hours: 5 **Course code : BDES 115**

Course Objectives:

- Materials around us,
- The interdependence between actions and objects in the space around us.
- Spatial and material interactions.
- Realize how material or tool choices impact the growth of an idea.
- Apply and Practice: to be able to effectively apply their learnings and skills to future disciplines/other courses as well.

Course Description:

The course aim to develop a relationship between making and thinking which is central to this studio. This course will develop skills for thinking, operating, working, representing and finally communicating spatiality through an engagement with materials within contexts.

Course Content:

Unit	Modules		No. of Hours
1	**Introduction**		5
	1.1	Introduction to course, material set and Orientation to workshop	
	1.2	Build awareness and understand materials around us	
2	**Exploration**		20

	2.1	Material Exploration	
	2.2	Understanding and investigating - Surface, Volume, Scale and proportion through sketches	
	2.3	Prototype Development- selection of appropriate materials and model making	
	Sensorial design		
3	3.1	Concept development and material identification	20
	3.2	Material application and product/ design building	

Course Outcomes

1. CO1: **UNDERSTAND**: Understanding materials, their characteristics, properties, strengths and weakness.
2. CO2: **DEMONSTRATE:** How different materials interact with each other in a specific space context.
3. CO3: **FLUENCY:** Fluency in conceptualizing, representing and communicating design through the act of making (prototyping)
4. CO4: **COMPETENCE:** Competency to develop understanding of 2 and 3-dimensional forms
5. CO5: **ENGAGE**: Actively participate and demonstrate divergent thinking, pro-activeness, curiosity, commitment, and self-motivation while working independently and collaboratively.
6. CO6: **PRESENT:** To prepare and deliver basic presentations with improved clarity, organization, and confidence, using simple visual aids and speaking techniques.

References :

- Clark, Sheree. (1996) Great Design using Non- Traditional Materials, Adams Media
- Barber, Barrington. (2003) The Fundamentals of Figure Drawing, United Kingdom, Arcturus Publishing Ltd
- Loomis, Andrew. (2011) Anatomy Figure Drawing, United Kingdom, Titan Books; Facsimile edition
- Just make something! Making in a digital walled garden, by Dr. Miles Park
- Senior Lecturer, Industrial Design, UNSW Built Environment Room 2014, Red Centre West Wing UNSW AUSTRALIA | SYDNEY NSW 2052 | AUSTRALIA
- https://www.jennifercrupi.com/work
- Other readings (relevant journal articles) will be informed or perhaps made available
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History in Context to objects (BDES 119)

L	T	P
2	1	

Course Name: History in Context to objects **Course Contact Hours: 3**

Course Credit Hours: 3 **Course code: BDES 119**

Course Objectives:

- Introduce students to major trends in world history, focusing the developments that occurred at different times for different cultures.
- Discuss museums and the importance of recording and archiving historical artefacts with a focus will be on objects—from ordinary tools of daily life to extraordinary monuments of skill and significant moments in design.
- Introduce the basics of historical research - practical and ethical aspects
- Explore objects in terms of how and why they were made, by whom and for whom, the usage, what they meant to their users, and what social structures are embedded in them.

Course Description:

This course introduces students to the considered study of objects as expressions of a particular place and time. Building on interrelationships among societies across history, we find connections between what was made, why it was made and how it was made, to better understand and contextualize design in our own times.

Course Content:

Unit	Modules		No. of Hours
1	**Evolution of Systems**		12
	1.1	Development of socio-cultural, political, economic structures and their impact	
	1.2	Materiality and technology	
2	**Research**		3
	2.1	Diverse sources of research	

	2.2	Valid and invalid sources, ethical sourcing	
	2.3	Introduction to citation methods	
3	**Object Narratives**		15
	3.1	Understanding of objects in spaces	
	3.2	Contextual storytelling through objects	
	3.3	Personal narratives and shared histories	

Course Outcomes

1. **CO1***:* FLUENCY in contextualising crafted/designed objects **through visual analysis** within the varieties of human culture and the broad arc of human history.
2. **CO2**: UNDERSTAND the impact of culture, material, and technology on design in terms of function and utility
3. **CO3**: FLUENCY in practical and ethical aspects of resourcing and research.
4. **CO4**: UNDERSTAND the dynamics of working in collaborative settings and the value of self-learning and peer-to-peer learning.
5. **CO5:** DEMONSTRATE the ability to build contextual narratives.

References :

- MacGregor, Neil. 2012. A history of the world in 100 objects. London: Penguin Books.
- Harari, Yuval Noah. 2019. Sapiens: a brief history of humankind. London: Vintage.

B.Des 1st Year

Semester 2
Design Research 2(BDES 112)

L	T	P
1		2

Course Name: Design Research 2 **Course Contact Hours: 2**

Course Credit Hours: 3 **Course code :BDES 112**

Course Objectives:

- Develop the ability to ask insightful questions in design to gather necessary information effectively.
- Learn how to organize research findings and communicate them visually for clearer understanding.
- Enhance collaboration skills through peer learning, aiding in more effective discussions, analysis, and presentation of research.
- Improve the ability to discuss, analyze, and present research findings confidently and efficiently.

Course Description:

Design Research 2 provides students with a comprehensive understanding of design research and its role in the field of design. Students will delve into the core concepts of design research, building upon the foundational knowledge acquired in Design Research 1. The focus will be on equipping students with the skills necessary to not only ask insightful research questions but also to effectively address these questions through strategic data collection, organization and presentation.

Course Content:

Unit	Modules		No. of Hours
1	**Observing for Design**		6
	1.1	Contextual observational questions	
	1.2	Reflective thinking	
	1.3	Role Playing	
2	**Design Analysis - Inferential Comprehension**		14

	2.1	Defining area of focus and research	
	2.2	Understand design components	
	2.3	Interpret and evaluate case studies	
3	**Speculative Design Thinking**		8
	3.1	Understand several stages of design process	
	3.2	Deductive Reasoning	
	3.3	Hypothetical design solutions	

Course Outcomes

1. CO1: Demonstrate *fluency* in observational skills and data collection.
2. CO2: Demonstrate *fluency* in the application of basic research skills and processes.
3. CO3: Demonstrate *comprehension* of information and user behaviour through inference.
4. CO4: Demonstrate *strength* in working with others in collaborative contexts to understand the value of self-learning and peer-to-peer learning.
5. CO5: Demonstrate *proficiency* in critical thinking within research contexts.
6. CO6: Demonstrate effective *communication* of research findings through various mediums.

References :

- Manzini, E. (2015) Design, when everybody designs: An introduction to design for Social Innovation. Cambridge (Mass.): The MIT Press.
- Boradkar, P. (2014) Designing things: A critical introduction to the culture of objects. London: Bloomsbury Academic, an imprint of Bloomsbury Publishing Plc.
- Bevlin, M.E. (1984) Design through Discovery. NEW YORK; LONDON: HOLT, RINEHART AND WINSTON.

Design Studio 2 (BDES 114)

L	T	P
1	2	2

Course Name: Design Studio 2 **Course Contact Hours: 4**

Course Credit Hours: 5 **Course code : BDES 114**

Course Objectives:

- Ensure students develop a systemic understanding of professional practice and equip themselves with a good understanding of the roles and responsibilities within
- To upskill them with rational knowledge of observation which they will have to undertake after the end of semester.
- Apply research skills through the ability to identify information, cite examples, past iterations, creators, manufacturers, techniques, processes, & histories to develop knowledge, innovation & original designs.
- Create lifelong learners with the desire to constantly upskill by taking on new challenges, tools & processes
- Ensure that students become coherent in collaborating, adapting across platforms, typologies, briefs, & processes to efficiently complete tasks & meet industry standards.
- Ensure students gain proficiency in iterative form of the design process & data interpretation

Course Description:

Design Studio 2 builds on the exploratory skills introduced in Design Studio 1. This time a greater emphasis is placed on pertinent skills further building on the ones accomplished in last semester as the tool for forming connections between studio learnings. In the first half of the semester, assignments will introduce a variety of studio- based methods – both digital & analogue for generating questions, integrating research, and documenting discoveries in the student's design work focusing on various disciplines /programs. In the second half of the semester, students will define and pursue their own research-based project connected to your disciplines/programs of interest.

Course Content:

Unit	Modules		No. of Hours
1	**Identifying discipline specific skills – skills deficit**		4
	1.1	Mapping Skills acquired and skills required to become professional designers	
	1.2	Setting the context of studio with reference to observership with reference to business skills for design students/designers	
2	**Selection of program specific areas of work/interest**		

	2.1	Identifying individual areas of interest from given topics	4
	2.2	Ideation and relevant Concept sketching	
	Industry Analysis & Competitor Analysis		
	3.1	Understand the industry that you are in.	
	3.2	Know what competitors are doing	
3	3.3	Identify threats and competition	16
	3.4	Identifying & listing direct and indirect competitors.	
	3.5	Gather relevant data in the form of Statistical data, Product data and customer's data through secondary research	
	Discovery Driven Planning		
	4.1	Data analysis and synthesis to identify competitive factors	
	4.2	Using relevant tools and methods for correct identification	
4	4.3	Understanding basics of business ecosystem	16
	4.4	Discovering actors, flow of information, goods, and money	
	4.5	Estimating viability of the ideas	
5	**Designing of product/service and framework for business**		16

Course Outcomes

1. **CO1**: Show they have KNOWLEDGE of visual representations, abstract ideas, and conceptual arguments.
2. **CO2**: Show COMPETENCE in making (ideate and prototype) using an iterative process and critical reflection (here, reflection indicates feedback incorporated when required)
3. **CO3**: Show FLUENCY in developing basic concepts and scenarios by experimenting, taking risks
4. **CO4**: Show STRENGTH in working with others in collaborative contexts to understand the value of self-learning and peer-to-peer learning.
5. **CO5**: EVALUATE the different data and ideate various concepts
6. **CO6**: CREATE a feasible solution based on the processes followed, data collected and ideas generated.

References :

- Library resources (mandatory for reference) –
- Harvard Business review, Fortune magazine, Campaign Publication, Library Online databases

Drawing Fundamentals 2 (BDES 116)

L	T	P
1	1	1

Course Name: Drawing Fundamentals 2 **Course Contact Hours: 2**

Course Credit Hours: 3 **Course code : BDES 116**

Course Objectives:

- The students are enabled to start using drawing as a medium of exploration and thinking and not merely as a tool for depicting what is seen.
- Drawing is seen as a process for documenting the thought process and building upon it on an ongoing basis.
- Understanding the importance of making visual notes to guide future explorations.
- Enabling students to develop drawing skills to visualise complex forms and structures with ease and clarity.

Course Description:

Continuing from semester 1, Drawing 2 takes the students through the exploratory as well as technical aspects of drawing for designers. Developing further connections between ideas and visual memory, the students now start using drawing, as a medium, to effectively shape their ideas, communicate as well as present various connections in their design process. Most lectures will be task based.

Course Content:

Unit	Modules		No. of Hours
1	**Lighting Exploration**		8
	1.1	Lighting Study	
	1.2	Live sketching exercise	
2	**Polygonal Exploration – Tessellations**		8
	2.1	Tessellation concepts	
	2.2	Exploratory Sketches	
3	**Technical Drawing**		8

	3.1	Flat Drawing of a T-Shirt	
	3.2	Flat drawing of packaging	
	3.3	Technical drawings of interior space	
4	**Sketchbook session**		6

4.2 Storytelling with drawing

Course Outcomes

1. CO1: **UNDERSTANDING:** Understanding the purpose of various drawing elements.
2. CO2: **DEMONSTRATE**: Working with shapes and forms as creation tools.
3. CO3: **FLUENCY:** Fluency in using drawing as an expressive tool.
4. CO4: **COMPETENCE:** in effectively communicating ideas.
5. CO5: **STRENGTH:** in media of choice
6. CO6: **DEMONSTRATE**: communicating ideas through visuals

References :

- Andrew Loomis - Figure Drawing for All It's Worth
- Stan Lee - How to draw Comics the marvel way.

Imaging 2(BDES 110)

L	T	P
1	1	2

Course Name: Imaging 2 **Course Contact Hours: 3**

Course Credit Hours: 4 **Course code : BDES 110**

Course Objectives:

- Develop students into effective visual communicators.
- Ensure students develop problem solving skills for professional practice.
- Ensure students have the ability to define tool-purpose context for smarter working.
- Upskilling students to incorporate AI generative tools into traditional workflows.
- Ensure that students become fluent in adapting across platforms, typologies, briefs, & processes to efficiently complete tasks & meet industry standards.
- Ensure students gain proficiency in publication design & data interpretation.

Course Description:

Digital imaging is a key skill & core competency that all designers are required to have. This course takes the student into an advanced level of visual digital image making using industry standard softwares, publication design & data interpretation through visual representation processes.

Course Content:

Unit	Modules		No. of Hours
1	**Adobe Photoshop : Digital Painting & Rendering**		6
	1.1	Digital Painting & Rendering	
	1.2	Enhancement, Lighting & Frame Animation	
2	**Adobe Illustrator : Visual Asset Pipelines**		9
	2.1	Asset Pipeline Planning, Grids & Mockups, Typography Experiments	
	2.2	3D Assets & Modeling	
	2.3	Infographics	

3	**Adobe InDesign : Publication Design**		12
	3.1	INTRODUCTION TO INDESIGN - Publication Design	
	3.2	EXPLORING INDESIGN - Core Tools, Effects & Layouts	
	3.3	EXPLORING INDESIGN - Book & Brochure Design Basics	
	3.4	EXPLORING INDESIGN - Visual Branding	
4	**Working Across Applications : Final Project : Specialisation Brochure**		15
	4.1	THE FINAL PROJECT – Research Phase	
	4.2	THE FINAL PROJECT - Ideation, prototyping & mockups	
	4.3	THE FINAL PROJECT - The Making Phase	
	4.4	THE FINAL PROJECT PEER REVIEW	
	4.5	THE FINAL PROJECT REVIEW	

Course Outcomes

1. CO1 - Show STRENGTH in knowledge & application of design elements and principles.
2. CO2 - UNDERSTANDING the role, functionality & areas of application of software & Artificial Intelligence.
3. CO3 - COMPETENCY in using digital design tools through a design thinking process across software typologies within 2D, 3D & video based production.
4. CO4 - DEMONSTRATE the ability to understand a brief and design an appropriate solution.
5. CO5 - FLUENCY in digital imaging nomenclature, process and cross platform working in order to create clear & functional publications
6. CO6 - UNDERSTANDING of industry roles & processes

References :

- **Graphic Design and Print Production Fundamentals** by Wayne Collins, et al. - https://opentextbc.ca/graphicdesign/
- Abstract : The Art Of Design, Netflix
- http://lthscomputerart2.weebly.com/the-elements--principles-of-graphic-design.html
- https://youtu.be/BpHtWOQlNoo
- www.youtube.com/bringyourownlaptop
- Point & Line To Plane by Kandinsky
- Concerning The Spiritual In Art by Kandinsky
- https://www.adobe.com/in/creativecloud/buy/students.html
- https://inkscape.org/
- https://www.photopea.com/
- https://www.blackmagicdesign.com/in/products/davinciresolve
- https://www.scribus.net/downloads/

- https://www.marq.com/
- **Website prototyping :** https://uizard.io/
- Colour matching and palette creation https://www.khroma.co/train/
- Digital drawing support https://www.autodraw.com/
- Writing and visual prompt based https://www.jasper.ai/
- Paper on GANPaint ai https://ganpaint.io/

Sustainable System (BDES 106)

L	T	P
1	1	1

Course Name: Sustainable System **Course Contact Hours: 2**

Course Credit Hours: 3 **Course code : BDES 106**

Course Objectives:

- Exhibit respect for diverse cultural attitudes regarding our ecological systems and an awareness for their relevance to creative practice
- Exhibit awareness of moral and ethical problems related to sustainability
- Drive scientific inquiry related to questions raised during lectures.
- Linkages, connectedness and participative work can lead to a better understanding of designed spaces, products and services etc.

Course Description:

Through a series of seminars and studio classes students will experiment with ideas to understand the concepts of the following:

- Understanding systems as a natural order. What are multiple kinds of systems in nature and our day to day lives?
- Are we going to run out of anything?
- Circular Economy- Who are the stakeholders? Circular economy can be implemented efficiently only if equal support from suppliers, designers, businesses, policy makers and consumers.
- Life Cycle of Materials- where important materials in products we use every day come from, how they get discarded and how these materials can be used more efficiently.

The course pushes students further to understand multiple perspectives and resources that influence us as a society, as communities and as individuals– citizens and, most importantly as designers. In the set tasks the students should also discover the impact we exercise with our decisions as designers on the environment and therefore, the future of our plant. While designing better futures designers are also meant to look at addressing concerns ailing the eco-systems that have been created by anomalies of the past. The class sessions will be a mixture of conversations and discussions on the premise that is defined above. Students will express their understanding, reflections and perspectives through papers/ reports, presentations and a final project.

Course Content:

Unit	Modules	No. of Hours

	Materials		
1	1.1	INTRODUCTION TO COURSE	8
	1.2	DISCUSSION ON CIRCULARITY AND MATERIALS	
	1.3	RESEARCH THROUG CASE STUDIES	
	1.4	PRESENTATION/ REPORT SUBMISSION	
	Circular Business Ideas		
2	2.1	IDEATION	8
	2.2	MID TERM REVIEW	
3	**Policies and rules/ regulations**		
	3.1	FIELD TRIP	6
	3.2	RESEARCH EXISTING POLICIES LOCAL AND GLOBAL	
	Conceptual Design Using Chosen material		
4	4.1	IDEATION	6+2
	4.2	PROTOTYPING	
	4.3	3D VISUALIZATION	
	4.4	PRESENTATION	

Course Outcomes

1. CO 1. **UNDERSTANDING** systems as a progression with a life cycle;
2. CO 2. **COMPETENCE** in devising meaningful design practices;
3. CO 3. **UNDERSTANDING** to consider the environment, economic and social aspects as inter related tracts of thought and design.
4. CO 4. **EXHIBITING** awareness of interrelationships within and between systems
5. CO 5. **COMPETENCE** in use a combination of analogue and digital tools for research and analysis in Progress work
6. CO6: **STRENGTH:** in the development of 2D, 3D, creative works for final outcomes.

References :

Chris Goodall, All that Matters- Sustainability

Suggested Documentaries for self study

1. Consumed
2. The story of stuff
3. The true cost
4. Minimalism
5. Standing Tall

6. Plugged In : The True Toxicity of Social Media Revealed
7. Gringo Trails
8. Culture in decline:consumption - vanity disorder
9. Zero Days
10. State of surveillance
11. The bureau of digital sabotage
12. The great hack
13. Human
14. A class divided
15. Explained series – Season 1 episode 3 – Why women are paid less?
16. Explained series – season 1 -episode 20 – The racial wealth gap
17. Explained series – Season 2 -episode 4– The next pandemic
18. Gender diversity & identity in Queertopia - VPRO documentary
19. India's Third Gender Movement | The Zainab Salbi Project Ep. 2
20. Equal Half
21. Indian hospital revisited – episode 1 and 2 Incurable India
22. Delivering Healthcare in India
24. Future Intelligence
25. The great leap forward
26. The strange world of nano science
27. Visions of the future
28. After Ebola: Nebraska and the next pandemic
29. Why do viruses kill?
30. The Secrets of Viruses & Bacteria, Evolution to Epidemic
31. Big Data vs. Big Disease: How Algorithms Can Stop Pandemics
32. The New Black

Time (BDES 108)

L	T	P
1	1	3

Course Name: Time **Course Contact Hours: 4**

Course Credit Hours: 5 **Course code : BDES 108**

Course Objectives:

- Time explores the concepts of abstraction, sequencing for building narratives, deconstruction, and analysis.
- By the end of the course, the students should not only understand the value of time but how to apply contextual inquiry in each project they take up.
- The course will also teach critical reflections while understanding self growth through individual and group assignments.
- This course is not about skill learning rather about skill application. It allows the students to figure their own pathways to complex realities and how to make sense of it all through metaphors, narratives and ideation.

Course Description:

Time is a course about context and its importance in any design or non-design project. This course makes the students challenge their perceptions of time and how that may correlate to the world around them and their own paths in design.

We often think about Time as a concept where abstractions are bound by the idea of documenting and archiving information, where Time is recorded as a means to understand the passage of it in relation to the outside. Given the lucidity of time, where it can be both linear and circular simultaneously, the ideas of time are also linked to both space and memory. Keeping all this in mind the Time course dives deep into one's understanding of time as a contextual buildup through various debates, discussions, and deconstructions.

Course Content:

Sr.No	Modules/ Units	No. of Hours	**No. of Hours**
1	**Sequential Storytelling - Project 1**	**32**	
	1.1 Time: scale, memory 1.2 Panel transitions, sequential imagery 1.3 Metaphors in image-building 1.4 Abstraction: colours, shapes		6

2	**Cinema and You - Project 2**	**28**	
	2.1 Introduction to Indian cinema 2.2 Film analysis and deconstruction 2.3 Narrative building through context 2.4 Development process and group collaboration		6

Course Outcomes

1. CO1: Show they have knowledge of abstraction, storytelling, and reflection in their contextual inquiries
2. CO2: Show competence in representing ideas through any medium that fits the context best and not be inhibited to pick up a new skill for the same
3. CO3: Show fluency in analysing complex patterns using forms that depict passage of time
4. CO4: Show strength in working with others in collaborative contexts to understand the value of self-learning and peer-to-peer learning
5. CO5: Develop an understanding of contextual inquiry
6. CO6: Understand the basic theories and perspectives about Time as a concept and apply the same in narrative building

References :

- The Age of Earthquakes: A Guide to the Extreme Present by Douglas Coupland, Hans Ulrich Obrist, Shumon Basar

Specialization: Animation & VFX

ANIMATION & VFX									
Semester 3									
BDES ANM 201	Animation Film Studies	3	2	2	2	50	40	10	100
BDES ANM 203	Introduction to Animation	3	1	3	2	50	40	10	100
BDES ANM 205	Drawing for Animation	3	1	3	2	50	40	10	100
BDES ANM 207	Post-production Studio	3	1	3	2	50	40	10	100
BDES ANM 209	Visual Stories	3	1	3	3	50	40	10	100
BDES LS 03	Life Skills	2	1	1					
BDES MT 01	Minor Elective	3	1	1	2	50	40	10	100
	TOTAL	**20**							
Semester 4									
BDES ANM 202	Character Design in Animation	3	1	3	2	50	40	10	100
BDES ANM 204	Pre-production Studio 2	4	1	3	2	50	40	10	100
BDES ANM 206	Modelling Studio	4	1	3	2	50	40	10	100
BDES ANM 208	Rigging and Animation	3	1	3	2	50	40	10	100
BDES ANM 210	ANM Elective A - Motion Graphics	3	1	3	2	50	40	10	100
	ANM Elective B - Fundamentals of VFX		1	3	2	50	40	10	100
BDES MT 02	Minor Elective	3	1	1	2	50	40	10	100
	TOTAL	**20**							
Semester 5									
BDES ANM 301	Character Animation	4	1	3	2	50	40	10	100
BDES ANM 303	Environment Design	3	1	3	2	50	40	10	100

BDES ANM 305	Look Development	3	1	4	2	50	40	10	100
BDES ANM 307	3D Lighting	4	1	4	2	50	40	10	100
BDES ANM 309	ANM Elective A - Advanced VFX	3	1	3	2	50	40	10	100
	ANM Elective B - Stop Motion Animation					50	40	10	100
	ANM Elective C - Advanced Modelling					50	40	10	100
BDES MT 02	Minor Elective	3	1	2	1	50	40	10	100
	TOTAL	**20**							
Semester 6									
BDES ANM 302	Collaborative Project	5	1	3	2	50	40	10	100
BDES ANM 304	Experimental Animation	3	1	3	2	50	40	10	100
BDES ANM 306	Unreal Engine	2	1	4	2	50	40	10	100
BDES ANM 308	Immersive Storytelling - Design for VR	2	1	4	2	50	40	10	100
BDES ANM 310	ANM Elective A - VFX Production	3	1	4	2	50	40	10	100
	ANM Elective B - Creature and Mech Animation					50	40	10	100
	ANM Elective C - Creature and Mech Modelling					50	40	10	100
MT	Minor Elective	3	1	2	2	50	40	10	100
BDES LS 06	Life Skills	2	1	1		50	40	10	100
	TOTAL	**20**							
Semester 7									
BDES ANM 401	Graduation project Pre production	4	1	3	2	50	40	10	100
BDES ANM 404	Professional Practice	1	1	3	2	50	40	10	100
BDES ANM 405	Industry Capstone	8	1	4	2	50	40	10	100

BDES ANM 407	Industry capstone documentation	4	0	4	2	50	40	10	100
MT	Minor Elective	3	1	2	1	50	40	10	100
	TOTAL	**20**							
Semester 8									
BDES ANM 404	Project Production Process	7	1	3	2	50	40	10	100
BDES ANM 402	Project Post Production Process	6	1	3	2	50	40	10	100
BDES ANM 408	Project Management	4	1	4	2	50	40	10	100
BDES MT 02	Minor Elective	3	1	3	1	50	40	10	100
	TOTAL	**20**							

BDES 2nd Year
Semester 3
Animation Film Studies (BDES ANM 201)

L	T	P
2	2	2

Course Name: Animation Film Studies **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 201**

Course Objectives:

- Visual Media Analysis: This course focuses on developing students' ability to critically analyze and interpret moving images within modern media landscapes. It aims to provide tools for deconstructing visual storytelling, including narrative structure, aesthetics, and cultural contexts.
- Historical Animation Study: Students will explore the historical evolution of animation from its early beginnings to modern forms. The course examines how animation mirrors and shapes social, cultural, and political landscapes over time.
- Cultivating Critical Thinking: Emphasizing the development of critical thinking skills, the course equips students to evaluate animated content for its societal impact, cultural significance, and artistic contributions within broader contexts.

Course Description:

The course is designed to enrich students with information, sensibility and methods of analysing moving images through viewing films and media and exercises based on them. Students identify and learn narrative frameworks, significance and roles of the visual and story elements in the storytelling formats. The program will also focus on the historical evolution of animation as a medium and discusses social, logical, cultural and political aspects of it. Students will be able to analyse, identify and differentiate between the knowledge of various forms of animation techniques and processes and its relevance with the content.

Course Contents:

1: Introduction to Animated Storytelling

- Introduction to Animation and Film Studies
- Rise of Animation 1 (History of Animation)
- Rise of Animation 2 (Contemporary Animation)
- Rise of Animation 3 (Innovative Visual Experiences)

2: Character, Genre and World Building Analysis

- Analysing film through different lenses
- Character Archetypes
- Character Design and Breakdown
- Genres and how Classics are made
- World Building and Environment Design

3: Scene Deconstruction

- Deconstruction of Scenes
- Visual breakdown and Mise en scene
- Audio breakdown and Diegetic and non-diegetic sound
- Semiotics of film stories
- Action sequence breakdown

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Students will be able to identify the cultural and historical context as well as themes and motifs present in a particular film or animation.

CO2: Students will be able to relate how different animation or film techniques contribute to the storytelling process.

CO3: Students will be able to compare and contrast the use of colour, language, sound, forms and lighting in different animation or film genres.

CO4: Students will be able to demonstrate their comprehension of motion design through the creation of a visual or informative documentation that showcases their learning.

CO5: Student will be able to critically analyse the application of animation as a form of storytelling in education, Advertising, Gaming and other allied disciplines other than films

CO6: Students can critically evaluate the ethical and moral implications of animation or film in relation to topics such as representation, censorship, and globalisation.

References
Required Resources

- "Film Art: An Introduction" by David Bordwell and Kristin Thompson - A comprehensive introduction to film aesthetics and analysis.
- "Understanding Movies" by Louis Giannetti - Explores the elements of film language and analysis.
- "In the Blink of an Eye: A Perspective on Film Editing" by Walter Murch - Offers insights into film editing techniques.

- "Sculpting in Time" by Andrei Tarkovsky - A philosophical exploration of cinema by the renowned filmmaker.

Recommended Resources:

- Film Studies for Free (filmstudiesforfree.blogspot.com): Curates links to free online resources related to film studies.
- Senses of Cinema (sensesofcinema.com): Features in-depth articles and essays on film theory and analysis.
- Film Comment (filmcomment.com): Offers film reviews, interviews, and analysis.

BDES 2nd Year
Semester 3
Introduction to Animation (BDES ANM 203)

L	T	P
1	3	2

Course Name: Introduction to Animation **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 203**

Course Objectives:

- Comprehensive Understanding of Visual Storytelling: This course aims to offer students a thorough grasp of visual storytelling across diverse sequential narrative formats like illustration, picture books, graphic novels, and storyboards.
- Essential Storytelling Skills: The course focuses on imparting fundamental storytelling skills and techniques crucial for creative industries like publishing, animation, and film.
- Preparation for Creative Industries: By providing essential skills in visual storytelling, students are prepared to enter and excel in creative fields such as publishing, animation, and film, equipped with the foundational knowledge needed for success.

Course Description:

This course introduces students to the art of visual storytelling through sequential narrative formats such as illustration, picture books, graphic novels, and storyboards. Students will learn the fundamentals of storytelling, including plot, character development, and conflict, as well as techniques for visual research and cultural study. The course will also provide an opportunity for students to apply their knowledge of pre-production skills to generate visually stimulating and captivating stories. Through critiques, group discussions, and creative exercises, students will develop the skills to create original and compelling visual narratives.

Course Contents:

Unit 1: Workplace Evolution wrt Client/ Typology

- Introduction to commercial spaces and due considerations.
- History and evolution of office spaces and typologies
- Design research and space analysis for commercial spaces.

Unit 2: Site & Programming

- Site and location analysis
- Understanding of program and function chart.

Unit 3: Design development and application

- Concept development and ideation
- Branding wrt. Space planning
- Design development
- Translating ideas into working drawings
- 3D visual representation

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Students will be able to recall and recognize fundamental concepts and terminology related to 2D animation.
CO2: Students will be able to comprehend and apply the principles and techniques of 2D animation.
CO3: Students will apply their drawing skills in order to design an all rounded, dynamic structural drawing for 2D animation.
CO4: Students will be able to use different digital tools, such as Adobe Animate or Toon Boom, to create and execute 2D animations.
CO5: Students will be able to apply their knowledge and skills in creating effective and engaging 2D animations.
CO6: Students will demonstrate the ability to work effectively within a team environment to contribute to collaborative animation projects.

References

- "Understanding Comics: The Invisible Art" by Scott McCloud
- "The Elements of Story: Field Notes on Nonfiction Writing" by Daniel M. Smith

Required Resources

- "Creating Characters: How to Build Story People" by Dwight V. Swain
- "The Animator's Survival Kit" by Richard Williams
- "Graphic Storytelling and Visual Narrative" by Will Eisner

BDES 2nd Year
Semester 3
Drawing for Animation (BDES ANM 205)

L	T	P
1	3	2

Course Name: Drawing for Animation **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 205**

Course Objectives:

- Fundamental Drawing Skills: This course aims to develop students' foundational abilities in image creation, drawing, and composition, essential for pre-production in animation and related visual storytelling fields.
- Hands-On Learning: Through hands-on instruction and practical exercises, students will refine their skills in traditional and digital artistic techniques, preparing them for character animation, environmental design, and storyboard development.
- Creative Skill Enhancement: The course focuses on enhancing students' creative capabilities, enabling them to meet the artistic demands of animation and visual storytelling industries through practical skill development and application.

Course Description:

The course introduces students to the pre production processes and essential knowledge and skill sets in a rigorous hands on modality. Students will learn Image making techniques, drawing, sculpting, rendering skills and composition techniques which are fundamental to the more constructive aspects of pre production. The course enables students to merge their learning of the manual as well as digital media to achieve desired results through drawing, sculpting and digital rendering.

Course Contents:

Unit 1. Human Anatomy

- Introduction to Drawing Fundamentals
- Anatomy for human
- Gesture Drawing and Poses
- Expressions and Emotions

- Clay Sculpting Introduction

Unit 2. Animal Anatomy

- Anatomy drawing for 4 leg animals and birds
- Difference of drawing in cat family and dog family
- Clay Modelling Characters

3. Action and movement

- Drawing for Animation
- Application of perspective in dynamic figure drawing
- Clay Modelling Human + Material + Props

Unit 4. Lighting and texturing

- Light and shade and color moods
- texture and materials

Unit 5. Basics of Animation Layout and BG

- Animation Layout
- Foreground, Background and Overlay

Unit 6. Animation drawing styles

- Manga and Anime
- Experimental and Contemporary Styles

Course Outcomes (COs): After completing the course, the student shall be able to:
CO1: Students will be able to explain the role and significance of pre-production in the animation or film making process.
CO2: Students will apply fundamental principles and drawing to learn concepts of anatomy and 3D structure.
CO3: Students will adapt current trends and technology to craft visuals.
CO4: Students will acquire and develop essential representation drawing and sculpting skills required for creating visuals for Animation.

CO5: Students will utilise elements of visual design like colour, space and forms to build complex structures and visual concepts.
CO6: Students will gain a clear understanding of the importance and functions of pre-production in animation and filmmaking, including its role in conceptualizing, planning, and preparing for production stages.

References

Required Resources

- "Drawing on the Right Side of the Brain" by Betty Edwards
- "Force: Dynamic Life Drawing for Animators" by Mike Mattesi

Recommended Resources:

- "Drawing on the Right Side of the Brain" by Betty Edwards
- "Force: Dynamic Life Drawing for Animators" by Mike Mattesi
- "The Animator's Sketchbook" by Tony White
- "Framed Ink: Drawing and Composition for Visual Storytellers" by Marcos Mateu-Mestre
- "Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic Novels" by Tom Bancroft
- "The Complete Guide to Figure Drawing for Comics and Graphic Novels" by Dan Cooney

BDES 2nd Year
Semester 3
Post-production Studio (BDES ANM 207)

L	T	P
1	3	2

Course Name: Post-production Studio **Course Contact Hours: 4**

Course Credit Hours: 7 **Course code : BDES ANM 207**

Course Objectives:

- Foundational Principles of Photography and Videography: This course introduces students to key principles and tools necessary for photography and videography, covering cinematography concepts like camera movements, lensing, framing, and cinematic lighting.
- Advanced Video and Sound Editing: Students also develop proficiency in video and sound editing techniques, enhancing their ability to manipulate and refine visual and auditory elements in post-production.
- Solid Foundation in Post-Production: By the end of the course, students acquire a solid foundation in essential post-production techniques, enabling them to effectively apply their skills in photography and videography for creative projects and professional endeavors.

Course Description:

The course acquaints students with the principles and tools essential for photography and videography. They learn and apply cinematography concepts such as camera movements, lensing, framing, and cinematic lighting. Furthermore, students advance their skills in video and sound editing techniques. Overall, the course equips students with a solid foundation in essential post production techniques.

Course Contents:

Unit 1: Introduction to Photography and Videography

- Introduction to Cinematography and Film Studies
- Overview of cinematography principles, film history, and key concepts in visual storytelling.
- Camera Movements and Techniques
- Exploration of camera movements, angles, and framing techniques in photography and videography.
- Lensing and Focal Lengths
- Understanding different types of lenses and their impact on composition and visual storytelling.

- Cinematic Lighting
- Techniques for using light creatively to enhance mood, atmosphere, and storytelling in photography and videography.

Unit 2: Video and Sound Editing Techniques

- Video Editing Fundamentals
- Introduction to video editing software, techniques for cutting, pacing, and storytelling through editing.
- Sound Design and Mixing
- Basics of audio editing, sound effects, and mixing for video projects.
- Color Grading and Visual Effects
- Techniques for color correction, grading, and adding visual effects to enhance the final look of videos.

Unit 3: Post-Production and Project Development

- Project Planning and Storyboarding
- Principles of project planning, storyboarding, and pre-production techniques.
- Advanced Editing and Workflow
- Advanced video editing techniques, workflow optimization, and project management.
- Output and Distribution
- Exporting video projects in different formats and preparing for distribution and presentation.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Students will recall fundamental principles of photography and videography and Identify common cinematography concepts essential for execution.
CO2: Students will be able to describe the importance of cinematic lighting techniques, colour grading in creating mood and atmosphere.
CO3: Students will be able to identify and solve technical issues that may arise during the production process.
CO4: Students will be able to assess the effectiveness of their own work and the work of others in achieving the desired goals and objectives.
CO5: Students will apply a variety of tools and techniques to create compelling and effective visual narratives.
CO6: Students will demonstrate competency in color grading, visual effects, and editing software to achieve desired mood, style, and narrative impact.

References
Required Resources

- The Filmmaker's Handbook: A Comprehensive Guide for the Digital Age" by Steven Ascher and Edward Pincus
- "In the Blink of an Eye: A Perspective on Film Editing" by Walter Murch
- "Color Correction Handbook: Professional Techniques for Video and Cinema" by Alexis Van Hurkman
- "The Bare Bones Camera Course for Film and Video" by Tom Schroeppel

Recommended Resources:

- "Cinematography: Theory and Practice" by Blain Brown
- "The Visual Story: Creating the Visual Structure of Film, TV and Digital Media" by Bruce Block
- "Digital Video Editing with Final Cut Pro X" by Michael Wohl, Micael R. Sweet, Steve Martin

BDES 2nd Year
Semester 3
Visual Stories (BDES ANM 209)

L	T	P
1	3	3

Course Name: Visual Stories **Course Contact Hours: 4**

Course Credit Hours: 7 **Course code : BDES ANM 209**

Course Objectives:

- Foundational Skills in Visual Storytelling: This course is designed to impart students with essential skills and techniques for effectively conveying narratives through visual mediums like illustration, picture books, graphic novels, and storyboards.
- Exploration of Storytelling Fundamentals: Students will delve into storytelling basics and visual research to gain insights into plot development, character design, and conflict resolution within sequential art.
- Engaging and Culturally Informed Narratives: The objective is to equip students with tools to create engaging and culturally relevant visual narratives, applying pre-production skills creatively.
- Creativity and Cultural Awareness: Through critiques, discussions, and hands-on exercises, students will refine their abilities to craft original and compelling stories that resonate with diverse audiences, fostering creativity, storytelling proficiency, and cultural awareness essential for success in visual storytelling.

Course Description:

This course introduces students to the art of visual storytelling through sequential narrative formats such as illustration, picture books, graphic novels, and storyboards. Students will learn the fundamentals of storytelling, including plot, character development, and conflict, as well as techniques for visual research and cultural study. The course will also provide an opportunity for students to apply their knowledge of pre-production skills to generate visually stimulating and captivating stories. Through critiques, group discussions, and creative exercises, students will develop the skills to create original and compelling visual narratives.

Unit 1: Introduction to Visual Storytelling

- Overview of Visual Storytelling
- Understanding the role of visual storytelling in different narrative formats.
- Fundamentals of Storytelling
- Exploring key storytelling elements such as plot, character development, conflict, and narrative structure.
- Techniques for Visual Research
- Introduction to methods for researching visual inspiration, cultural contexts, and thematic exploration.

Unit 2: Illustration Techniques and Styles

- Introduction to Illustration
- Overview of illustration techniques, styles, and their applications in storytelling.
- Visual Language and Expression
- Understanding how to use visual elements to convey emotions, moods, and narrative themes.
- Character Design and Development
- Techniques for creating compelling characters with distinct personalities and visual traits.

Unit 3: Picture Books and Graphic Novels

- Picture Book Creation
- Exploring the structure and layout of picture books, focusing on pacing and page composition.
- Graphic Novel Storytelling
- Understanding sequential art techniques, panel design, and pacing in graphic novel narratives.
- Visual Narrative Flow
- Analyzing how visual storytelling techniques influence reader engagement and comprehension.

Course Outcomes (COs): After completing the course, the student shall be able to:

- CO1: Students will be able to recognize different elements of storytelling, such as theme, plot, character, and conflict.
- CO2: Students will be able to apply their knowledge and skills in creating effective scripts and screenplays.
- CO3: Students will be able to analyse and evaluate visual storytelling techniques used in various media formats, including film, animation, and graphic novels.
- CO4: Students will be able to synthesise and apply knowledge of story structure, character development, and pacing to create effective visual stories.
- CO5: Students will apply a range of techniques and tools to design compelling and engaging visual stories.

- CO6: Students will become familiar with genres and cultural storytelling contexts in the visual narrative space.

References
Required Resources

- Novels" by Tom Bancroft
- "Framed Ink: Drawing and Composition for Visual Storytellers" by Marcos Mateu-Mestre
- "The Elements of Style" by William Strunk Jr. and E.B. White

Recommended Resources:

- "Understanding Comics: The Invisible Art" by Scott McCloud
- "The Anatomy of Story: 22 Steps to Becoming a Master Storyteller" by John Truby
- "Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic

BDES 2nd Year
Semester 4
Character Design in Animation (BDES ANM 202)

L	T	P
1	3	2

Course Name: Character Design in Animation **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 202**

Course Objectives:

- Comprehensive Skills Development: This course aims to equip students with the skills and knowledge necessary to create compelling and memorable characters that enhance the motion design experience within the Animation VFX program.
- Emphasis on Character Dynamics: Students will develop a deep understanding of character dynamics through hands-on practice in character creation, fostering the ability to engage viewers and evoke emotional responses.
- Preparation for Animation and VFX Careers: By focusing on creative exploration and practical skill-building, this course prepares students for successful careers in the animation and VFX industry by cultivating their abilities to create captivating characters.

Course Description:

Characters carry the story and engage viewers in the motion design experience. From the most realistic to the most fantastical, characters are loved, hated and remembered for ages. The course discusses aspects like psyche, appearance, body language, behaviour of the character from various media. Students analyse and deconstruct characters to write, design and manifest characters of their own. The course pushes imaginative and creative abilities of students through observations, demonstrations, showcases and hands on exercises on character development and design. Students apply their drawing, rendering and sculpting skills to create production ready character sheets.

Course Contents:

Unit 1: Understanding Characters in Media

- Introduction to Character Psychology and Appearance
- Body Language and Behavior Analysis

- Character Archetypes and Symbolism

Unit 2: Analyzing and Deconstructing Characters

- Character Deconstruction and Analysis
- Writing and Developing Original Characters
- Hands-on Character Design Exercises

Unit 3: Production-Ready Character Sheets

- Drawing, Rendering, and Sculpting Techniques
- Creating Character Model Sheets
- Showcase and Critique

Course Outcomes (COs):

CO1: Students will be able to identify the key elements of character design, such as appearance, behaviour, anthropomorphism and psyche in various motion or print media.
CO2: Students will be able to recall key concepts and terminology related to character design for animation and VFX.
CO3: Students will be able to articulate and write new character concepts with corresponding stories and environment.
CO4: Students will understand the use of different design techniques, such as sketching, rendering, and sculpting, in character design.
CO5: Students will be able to adapt various aspects of the character from cultural , historical, social-political and visual research.
CO6: Students will be able to identify the role of character design process in the story and animation development story for diverse media.

References
Required Resources

- Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic Novels" by Tom Bancroft
- "Character Design from the Ground Up" by Kevin Crossley
- "Character Animation Crash Course!" by Eric Goldberg

Recommended Resources:

- "The Art of Animal Character Design" by David Colman
- "Force: Character Design from Life Drawing" by Mike Mattesi

- "Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic Novels" by Tom Bancroft

BDES 2nd Year
Semester 4
Pre-production Studio 2 (BDES ANM 204)

L	T	P
1	3	2

Course Name: Pre-production Studio 2 **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 204**

Course Objectives:

- **Enhances Visual Storytelling**: Storyboarding and animatics are crucial tools for translating narrative ideas into visual form, essential for conveying story elements and pacing in animation and VFX.

- **Prepares for Production**: Mastery of storyboarding and animatics streamlines the pre-production phase, ensuring that stories are well-planned and ready for animation production.

- **Empowers Creative Decision-Making**: By refining storytelling elements through storyboarding and animatics, students gain insights into narrative dynamics and creative choices, empowering them to make informed decisions in animation and VFX projects.

Course Description:

Stories turn tangible when they are visualised in storyboard form and are mapped on the timeline in the form of Animatics. Students apply drawing skills, composition techniques and layouts to create the best visualisations of the narrative structures. Students test the motion, timing and dynamics of the storyboard by designing animatics. The course enables students to master a significant part of the pre production and make the story production ready.

Course Contents:

Unit 1: Introduction to Storyboarding

- Understanding Storyboard Basics (4 hours)
- Drawing Skills for Storyboarding (4 hours)
- Composition Techniques and Layouts (4 hours)

Unit 2: Creating Visual Narratives

- Visualizing Narrative Structures (4 hours)

- Motion, Timing, and Dynamics (4 hours)
- Refining Storyboards for Production (4 hours)

nit 3: Mastering Pre-Production Skills

- Importance of Pre-Production in Animation and VFX (4 hours)
- Collaborative Workflow and Communication (4 hours)
- Creative Decision-Making and Iterative Refinement (4 hours)

Course Outcomes (COs):

CO1: Students will be able to recall key concepts and terminology related to storyboard and animatics design.
CO2: students will be able to compare and contrast different approaches to storyboard and animatics design and their suitability for different film and television genres.
CO3: Students will be able to evaluate the impact of different camera angles, shot types, and composition choices on viewer engagement in storyboards and animatics.
CO4: Students will be able to apply apt software, such as Adobe Photoshop and Storyboard Pro, to create high-quality storyboards and animatics.
CO5: Students will be able to create unique and engaging storyboards and animatics that convey the story, composition, and timing of each shot to all stakeholders.
CO6: Students will be able to identify the elements of script or story which will correspond to the elements of visual representation.

References
Required Resources

- Storyboarding Essentials: SCAD Creative Essentials (How to Translate Your Story to the Screen for Film, TV, and Other Media)" by David Harland Rousseau
- "The Five Cs of Cinematography: Motion Picture Filming Techniques" by Joseph V. Mascelli
- "Prepare to Board! Creating Story and Characters for Animated Features and Shorts" by Nancy Beiman
- "The Animator's Sketchbook: How to See, Interpret & Draw Like a Master Animator" by Tony White

Recommended Resources:

- "Directing the Story: Professional Storytelling and Storyboarding Techniques for Live Action and Animation" by Francis Glebas
- "The Art of Pixar: 25th Anniversary: The Complete Color Scripts and Select Art from 25 Years of Animation" by Amid Amidi
- "Layout and Composition for Animation" by Ed Ghertner
- "Timing for Animation" by Harold Whitaker and John Halas

- "Producing Animation" by Catherine Winder and Zahra Dowlatabadi
- "Creating Characters with Personality: For Film, TV, Animation, Video Games, and Graphic Novels" by Tom Bancroft

BDES 2nd Year
Semester 4
Modelling Studio (BDES ANM 206)

L	T	P
1	3	2

Course Name: Modelling Studio **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 206**

Course Objectives:

- Skill Development in 3D Modelling: This course aims to equip students with essential skills and techniques to create optimized 3D models using Maya for animation and VFX projects.

- Proficiency in Organic and Hard Surface Modelling: Students will develop proficiency in creating both organic (characters, creatures) and hard surface (props, environments) models suitable for animation and VFX applications.
- Creative Problem-Solving: Through practical exercises and projects, students enhance their creative problem-solving abilities by applying learned techniques to solve real-world modelling challenges encountered in animation and VFX production.

Course Description:

In this comprehensive course on 3D Modelling in Maya, students will delve into the intricate process of organic and hard surface modelling, preparing them to create models optimized for animation projects. Through hands-on practice and exploration, students will master various techniques using Maya, leveraging both built-in and third-party plugins to design dynamic and visually captivating models.

Course Contents:

Unit 1: Introduction to 3D Modelling Basics

- Overview of 3D Modelling Principles
- Understanding Organic vs. Hard Surface Modelling

Unit 2: Organic Modelling Techniques

- Character Modelling Fundamentals
- Sculpting and Detailing with Maya's Sculpting Tools)

Unit 3: Hard Surface Modelling Techniques

- Prop and Environment Modelling
- Advanced Polygon Modelling Techniques

Unit 4: Optimization and UV Unwrapping

- Model Optimization for Animation

Unit 5: Introduction to Maya Plugins

- Utilizing Built-in Tools and Plugins

Course Outcomes (COs):

CO1: Students will be able to identify basic 3D modelling terminology, such as vertices, edges, and faces.

CO2: Students will gain proficiency in industry-standard 3D modelling software, such as Maya, 3ds Max, or Blender.
CO3: Students will be able to create forms using basic geometric shapes, such as cubes and spheres along with apt features of the platform.
CO4: Students will learn how to autonomously create 3D models from scratch, including designing and modelling objects, characters, and environments.
CO5: Students will develop problem -solving and troubleshooting skills, including identifying and solving common issues in 3D modelling, such as mesh errors, texture seams, and structural imperfections.
CO6: Students will Learn techniques for optimizing models, including proper edge flow, polygon reduction, and UV unwrapping, ensuring models are animation-ready and perform efficiently in production pipelines.

References
Required Resources

- Autodesk Maya Learning Channel (YouTube):
- Maya Learning Channel
- Autodesk Maya Documentation and Tutorials:
- Autodesk Maya Documentation
- Pluralsight Maya Courses
- LinkedIn Learning (formerly Lynda.com) Maya Courses:
- LinkedIn Learning Maya Courses
- SimplyMaya (Online Maya Training):

Recommended Resources:

- SimplyMaya (Online Maya Training):
- SimplyMaya Maya Tutorials
- Digital-Tutors (Pluralsight):
- Digital-Tutors Maya Courses
- 3D Buzz Maya Video Tutorials
- Highend3D (Maya Scripts and Plugins):
- Highend3D Maya Scripts and Plugins

BDES 2nd Year
Semester 4
Rigging and Animation (BDES ANM 208)

L	T	P
1	3	2

Course Name: Rigging and Animation **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 208**

Course Objectives:

- Hands-On Rigging and Animation: This course offers a hands-on approach to designing and crafting rigs for 3D models, focusing on practical skills in rigging and animation.
- Exploration of Animation Techniques: Students study different types of rigs and learn to apply them to various types of motion, translating pre-production concepts into 3D animation using self-built rigs.
- Preparation for Advanced Character Animation: Through practicing techniques like procedural animation and object interaction, the course introduces and explores rigging and animation concepts, preparing students for advanced stages of character animation in the animation and VFX industry.

Course Description:

The Rigging and Animation course takes students through a hands-on approach to designing and crafting rIgs for 3D Models. Students study different types of rigs and their application in different types of motions. Students will learn to translate the pre production concepts in 3D Animation using rigs built by them. Students will practice various techniques and methods of animation such as procedural animation, object interaction. The program aims to introduce and explore concepts of rigging and animation and prepare students for the advanced stages of character animation.

Course Contents:

Unit 1: Introduction to Rigging

- Project Setup
- Groups and Hierarchies
- Constraint Techniques

Unit 2: Set Driven Keys and Expression Editor

- Animating with Set Driven Keys
- Animation of a Basic Automobile

Unit 3: Exploring Joints

- Rigging a Ball with Joints
- Rigging and Animating Different Types of Pendulums
- Animating the Pendulum (Follow through)

Unit 4: Exploring Spline IK Constraint

- Adding Legs to the Tailed Ball
- Rigging the Tail with Spline IK
- Rigging a Robotic Arm

Unit 5: Joint Setup and Skinning

- Controls and Cleanup
- Testing the Animation

Unit 6: Character Rigging

- Joint Setup and Skinning
- Character Animation
- Animating a Simple Walk Cycle
- Animating a Run Cycle

Course Outcomes (COs):

CO1: Recall different types of 3D rigs used in animation.
CO2: Explain how rigging techniques apply to various motion types.
CO3: Translate pre-production concepts into 3D animations using self-built rigs.
CO4: Evaluate animation techniques like procedural animation and object interaction.
CO5: Critique and refine rigging and animation work for improvement.
CO6: Develop complex rigs using advanced techniques for expressive character animation.

References
Required Resources

- The Animator's Survival Kit" by Richard Williams
- "CG101: A Computer Graphics Industry Reference" by Terrence Masson
- "Introducing Maya 2022: Learn Maya in 20 Hours" by Dariush Derakhshani
- Online tutorials and courses on rigging and animation platforms like Udemy, Coursera, and Pluralsight
- Autodesk Maya official documentation and tutorials
- Blender Foundation's tutorials on rigging and animation
- Online forums and communities like CGSociety and Stack Exchange for rigging and animation discussions and troubleshooting

Recommended Resources:

- "Digital Creature Rigging: The Art and Science of CG Creature Setup in 3ds Max" by Stewart Jones
- "Stop Staring: Facial Modeling and Animation Done Right" by Jason Osipa
- "Rig it Right! Maya Animation Rigging Concepts" by Tina O'Hailey
- "Learning Autodesk Maya 2022: A Practical, Hands-On Guide to Real-World 3D Animation and Visual Effects" by Dariush Derakhshani

BDES 2nd Year
Semester 4
Program Elective - Motion Graphics (BDES ANM 210)

L	T	P
1	3	2

Course Name: Program Elective Motion Graphics **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 210**

Course Objectives:

- Portfolio Specialization in Animation: This course allows students to focus on animation, enhancing their portfolio with motion graphics skills using design software like Adobe After Effects.
- Motion Graphics Design and Visualization: Students will learn to plan and design motion sequences that visualize sounds, stories, and concepts for various screen applications.
- Elements of Visual Design: The course covers visual design principles, including illustrations, graphic types, timing, and effects, enabling students to create compelling and impactful motion graphics for chosen briefs.

Course Description:
The course offers an opportunity to students to steer their portfolio by specialising in Animation. Students learn to plan and design motion graphics with design software suite and Adobe after effects. Students visualise sounds, stories and design motion sequences for screens. Students will learn the visual design and application of elements of design, Illustrations and graphic types, timing and effects. Students will design and manage assets for the chosen brief.

Course Contents:

Unit 1: Introduction to Animation and Motion Graphics

- Understanding the role of animation in visual storytelling
- Exploring motion graphics and its applications
- Introduction to design software suite and Adobe After Effects
- Overview of animation principles and techniques

Unit 2: Motion Graphics Planning and Design

- Planning motion sequences and storyboarding
- Visualizing sounds and stories for screen-based media
- Designing motion graphics using design software suite
- Incorporating elements of design, illustrations, and graphic types.

Unit 3: Animation Techniques and Timing

- Learning timing and pacing in animation
- Exploring keyframe animation and easing techniques
- Applying effects and transitions to enhance motion sequences
- Integrating audio-visual synchronization in motion design

Course Outcomes (COs):

CO1: Students will learn the basic principles and concepts of motion graphics, such as typography, Colour theory, composition, and animation.

CO2: Students will learn how to create motion graphics for different mediums, target audience and the role of motion graphics in context.

CO3: Students will learn to plan and design assets for motion graphics.

CO4: Students will develop problem-solving and troubleshooting skills, including identifying and solving common issues in motion graphics, such as rendering errors, keyframe issues, and codec problems.

CO5: Students will be able to aptly apply industry standard tools like adobe after effects or animate in collaboration to generate desired results.

CO6: Students will be able to manage projects from script to final outcome on their own.

References
Required Resources

- "The Animator's Survival Kit" by Richard Williams
- "Design for Motion: Fundamentals and Techniques of Motion Design" by Austin Shaw
- "After Effects Apprentice: Real-World Skills for the Aspiring Motion Graphics Artist" by Chris and Trish Meyer

Recommended Resources:

- Motionographer (website showcasing motion design and animation work)
- Behance (platform to discover and showcase creative work, including motion graphics)
- Vimeo (for inspiration and examples of motion graphics and animation)

- Sound libraries and resources for sound design in motion graphics
- Online repositories for free graphic assets (icons, illustrations, textures, etc.)
- Motion design podcasts and blogs for industry insights and trends

BDES 2nd Year
Semester 4
Program Elective - Fundamentals of VFX (BDES ANM 210)

L	T	P
1	3	2

Course Name: Program Elective - Fundamentals of VFX **Course Contact Hours: 4**

Course Credit Hours: 6 **Course code : BDES ANM 210**

Course Objectives:

- Core VFX Principles and Techniques: This course introduces foundational VFX techniques including compositing, rig removal, set extension, tracking, matte painting, lighting, and advanced editing.
- Technical Proficiency in VFX Pipeline: Students gain proficiency in VFX pipeline processes, learning about physics simulations, light studies, material properties, and time manipulation essential for effective VFX production.
- Project Planning and Execution Skills: Students develop the ability to independently plan and execute VFX projects, making informed design decisions to enhance storytelling and visual narratives.
- Career Readiness and Portfolio Development: By mastering fundamental VFX practices, students are prepared to contribute confidently to complex projects and build strong portfolios showcasing their capabilities in visual effects for animation and film production.

Course Description:

The course explores the specialisation of VFX for students. Students learn the fundamentals of the VFX practice such as Compositing, Rig Removal, Set extension, tracking, matte painting, Lighting and advanced editing techniques. Students learn VFX pipeline and technical concepts like Physics, light study, materials and time manipulation. The course enables students to plan and execute the VFX project autonomously by taking aesthetic and practical design decisions.

Course Contents:

Unit 1: Fundamentals of VFX in After Effects

- Introduction to After Effects
- Basic Compositing Techniques
- Rig Removal and Cleanup

Unit 2: Tracking and Set Extensions

- Motion Tracking
- 3D Camera Tracking
- Set Extensions

Unit 3: Advanced Techniques and Matte Painting

- Matte Painting Fundamentals
- Advanced Editing and Time Manipulation
- Lighting and Materials

Unit 4: VFX Pipeline and Project Execution

- VFX Project Planning
- Technical Concepts and Application
- Autonomous Project Execution

Course Outcomes (COs):

CO1: Recall fundamental VFX techniques such as compositing, tracking, and lighting principles.

CO2: Interpret VFX pipeline processes including physics simulations, light studies, and material properties.

CO3: Apply VFX concepts to solve complex problems and integrate VFX elements into live-action footage.

CO4: Break down VFX sequences to assess lighting strategies, spatial relationships, and material usage.

CO5: Assess VFX projects based on aesthetic quality, technical execution, and project requirements.

CO6: Develop original VFX compositions demonstrating creative and technical proficiency.

References
Required Resources

- "The Art and Science of Digital Compositing" by Ron Brinkmann
- "Digital Lighting and Rendering" by Jeremy Birn
- "The Invisible Art: The Legends of Movie Matte Painting" by Mark Cotta Vaz and Craig Barron
- "Matchmoving: The Invisible Art of Camera Tracking" by Tim Dobbert

Recommended Resources:

- "Adobe After Effects Classroom in a Book" by Lisa Fridsma and Brie Gyncild
- Online tutorials and courses on compositing, tracking, and VFX techniques

Specialization: Communication Design (CD)

BDES: 4 -Year (8-Semester)

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 3									
BDES CD 207	History of Communication Design	2	2			50	40	10	100
BDES CD 211	Fundamentals of Digital Prototyping	4		2	4	50	40	10	100
BDES CD 213	Fundamentals of Visual Narratives	3	2		2	50	40	10	100
BDES CD 215	Research Methodology 1-CD	2	2			50	40	10	100
BDES CD 217	Introduction to Typography	4		2	4	50	40	10	100
BDES LS 03	Life Skills	2			4	50	40	10	100
BDES MT 01	Minor Elective	3	2		2	50	40	10	100
		20							
Semester 4									
BDES CD 212	Fundamentals Of Immersive Media	3		2	4	50	40	10	100
BDES CD 214	Fundamentals of Interaction Design	4	2	2	4	50	40	10	100
BDES CD 216	Advanced Typography	4	2	2	4	50	40	10	100
BDES CD 218	Indian Context of Communication Design	3	2		2	50	40	10	100
BDES CD 220	Semiotics in Communication	3	2		4	50	40	10	100
BDES MT 02	Minor Elective	3	2		2	50	40	10	100
	TOTAL	**20**							

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 5									
BDES CD 311	Digital & Print Publication Design	3	1	2		50	40	10	100
BDES CD 313	Design Research & Ethnographic Study	2	2		2	50	40	10	100
BDES CD 317 (A)	Program Elective - Advertise Immersive Media	3	1	1	2	50	40	10	100
BDES CD 317 (B)	Program Elective - Advertise Web Development								
BDES CD 317 (C)	Program Elective - Environmental Graphics								
BDES CD 307	Branding Studio	4		4		50	40	10	100
BDES CD 315	Motion Graphics - CD	3	1		4	50	40	10	100
BDES MT 03	Minor Elective	3	1	1	2	50	40	10	100
Code	Apprenticeship	2			4	50	40	10	100
	TOTAL	**20**							
Semester 6									
BDES CD 302	Communication Design Studio	4		4		50	40	10	100
BDES CD 304	Research Methodology - Visual Cultures	4	2		2	50	40	10	100
BDES CD 306	Sustainable Packaging Design	4		4		50	40	10	100
BDES CD 308	Consumer Behaviour and Technology	2	2	2.5		50	40	10	100
BDES CD 310 (A/B/C)	CD Elective A : Comic book Design	4		4		50	40	10	100
	B : Speculative Design								
	C : Motion Graphics								

BDES MT 04	Minor Elective	2	1	1		50	40	10	100
	TOTAL	**20**							

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 7									
BDES CD 401	Interaction Design Studio	4		4		50	40	10	100
BDES CD 403	Digital Dynamics	6		4	4	50	40	10	100
BDES CD 405	Professional Practices and Ethics - CD	2	2			50	40	10	100
BDES CD 407	Brand strategies	4	4			50	40	10	100
BDES MT 05	Minor Elective	4	2	2		50	40	10	100
IT 03	Internship	2			4				100
	TOTAL	**22**							
Semester 8									
BDES CD 402	Design Studio 6 Capstone - CD	20			40	50	40	10	100
	TOTAL	**20**							

BDES 2nd Year
Semester 3
History of Communication Design (BDES CD 207)

L	T	P
2		

Course Name: History of Communication Design **Course Contact Hours: 2**
Course Credit Hours: 2 **Course Code: BDES CD 207**

Course Objectives:

- Understanding and analyzing the patterns of evolution of visual art & design
- Critical inquiry into what shaped design in the past leading to the present and what it will lead to in the future
- Building empathy through interpretation of visual design from diverse perspectives
- Understanding the importance of being agile and adaptive in the design process

Course Description:

Looking at the global story of evolution of Design, this course covers philosophical, social and scientific movements that have contributed to emerging trends defining the need, urge and desires of our society.

The course predominantly looks at the various domains through the lens of visual culture. Students are informed about and respond to conversations on how cultural, social constructs and rituals play a role in defining expression. And reflect on these aspects that have contributed to the discourse around representation.

Course Contents:

1. **Power, Religion, & Rebellion**
   - Gothic
   - Renaissance
   - Baroque
   - Rococo
2. **Shifting Ideas/ Inquiry**
   - Romanticism
   - Neoclassicism
   - Impressionism
   - Post- Impressionism
3. **Personal Expression & Exploration**
   - Symbolism

- Expressionism
- Art Nouveau

4. **Experimentation**
    - Fauvism
    - Cubism
    - Dadaism
5. **New World**
    - Art Deco, 2 Bauhaus
    - Surrealism, Abstract
    - Pop - Art, Minimalism

Course Outcomes:

CO1: Demonstrate a broad-based knowledge of significant 16th to 20th century styles of art and design across the globe along with recognizing iconic and diverse design thinkers and practices
CO2: Understand the evolution and factors that influence design ecosystems by investigating the history of visual practices and their impact over time
CO3: Develop a visual design literacy and critically engage in the major debates and issues informing the study of visual culture
CO4: Applying visual elements learnt in their practice of Communication Design
CO5: Analyze iconic art/architecture/etc using formal design principles and historical context

References:

Required Resources:

1. Margolin, V. (2017). World History of Design Volume 1. Bloomsbury Publishing. (specifically chapters 7 Cross-Cultural Encounters and 9 The Age of Exhibitions: Great Britain and 11 The Age of Exhibitions: Europe Outside Great Britain)

Recommended Resources:

1. Girst, T. (2014, March 1). The Duchamp Dictionary: A to Z.
2. Margolin, V. (2017). World History of Design Volume 1. Bloomsbury Publishing.

BDES 2nd Year
Semester 3
Fundamentals of Digital Prototyping (BDES CD 211)

L	T	P
	4	

Course Name: Fundamentals of Digital Prototyping **Course Contact Hours: 4**
Course Credit Hours: 4 **Course Code : BDES CD 211**

Course Objectives:

- This course aims to provide students with a clear understanding of user experience (UX) design specifically for digital screens of different sizes and pixels.
- Introduces the basics of what makes up the World Wide Web and discusses the basics of human-computer interaction (HCI).
- Focuses on providing a hands-on understanding to HTML and CSS programming and helps the students create a basic portfolio website.
- Provides an understanding of P5 and JavaScript programming and teaches about building simple games

Course Description:
User experience (UX) design consists of creating the backend process for websites, thereby giving relevant experience to the users. The course focuses on right from understanding the basics of websites to creating a portfolio website with relevant tools.

Course Content:

1. **Introduction to basics of devices, screens and Human-Computer Interaction (HCI)**
    - Basics of computer devices and screens
    - Smart devices and intelligent devices at homes
    - Basics of HCI, GUI and websites
2. **Introduction to HTML and CSS programming**
    - Basics of websites
    - Code vs. No-Code approach to websites
    - Basic HTML tags
    - Images, Hyperlinks and tables
    - Inline and Global CSS programming
    - Classes, Divs and IDs.
3. **Bootstrap Website Development**

- Introduction to bootstrap
- Responsive vs. Mobile-first web design
- Containers and Bootstrap grids
- Buttons and Navigation
- Bootstrap forms

4. **P5 and JavaScript**
    - Flowcharts and algorithms
    - Variables and Data types
    - Loops
    - Conditions
    - Functions
    - Game Development
    - Image filtering

Course Outcomes:

CO1: Understanding of Computers and it's working.
CO2: Understanding of the World Wide Web, websites, & mobile applications
CO3: Understand the significance of HCI and Graphical User Interface (GUI)
CO4: Create a basic portfolio website using HTML and CSS programming
CO5: Apply strength in building responsive prototypes of mobile apps or websites
CO6: Analyze the logic building with JavaScript

References:

Required Resources:

1. Duckett, J. (2014). JavaScript & jQuery ; HTML & CSS. John Wiley & Sons. 9781118008188
2. Engin Arslan, & Springerlink (Online Service. (2018). Learn JavaScript with p5.js : Coding for Visual Learners. Apress. 9781484234266

Recommended Resources:

1. Duckett, J. (2011). Beginning Web Programming with HTML, XHTML, and CSS. John Wiley & Sons. 9781118058794
2. Frain, B. (2020). Responsive web design with HTML5 and CSS : develop future-proof responsive websites using the latest HTML5 and CSS techniques. Packt Publishing. 9781839219795
3. McCarthy, L., Reas, C., & Fry, B. (2015). Getting Started with p5.js. Maker Media, Inc. 9781457186738

BDES 2nd Year
Semester 3
Fundamentals of Visual Narratives (BDES CD 213)

L	T	P
	2	2

Course Name: Fundamentals of Visual Narratives **Course Contact Hours: 2**
Course Credit Hours: 4 **Course Code: BDES CD 213**

Course Objectives:

- Understand the significance of a various traditional and folk paintings for India;
- Understand the value of research and study the evolution of folk and traditional paintings;
- Conducting their own analysis to substantiate a set of design challenges;
- Learn from peer and faculty feedback the different possible approaches undertaken and the outcomes thereof;
- Understand various methods to promote some of the dying forms of Indian paintings.

Course Description:

Indian Cultural Art has a plethora of unique visual languages – ones that can teach design students new ways to understand and interpret visual communication. What's more is that these are very much embedded in our living culture even today. We may have lost access to it in day-to-day urban living, but at some level we are aware of these forms and also take a sense of pride and comfort in them. When we see a piece of art that we can identify, there is a sense of pride in ourselves that is awakened.

The focus will be to understand Indian Cultural Art and their plethora of unique visual languages – ones that can teach design students new ways to understand and interpret visual communication. What's more is that these are very much embedded in our living culture even today.

Course Contents:

1. **Poetics of Painting**
    - Indian Mural Traditions
    - Indian Paintings
    - Narrative Paintings

2. **Poetics of Performing Arts**
    - Dance-Dramatics
    - Puppets
3. **Idioms of Indian Architecture**
    - Buddhist-Jain-Hindu-Islamic Architecture
    - Performing Arts & Architecture

Course Outcomes:

CO1: Understand the value of research and study the evolution of folk and traditional paintings;
CO2: Organize their own analysis to substantiate a set of design challenges;
CO3: Compare from peer and faculty feedback the different possible approaches undertaken and the outcomes thereof;
CO4: Understand the importance of Indian art and identify various methods to promote some of the dying forms of Indian art.
CO5: Appraise from various regional art forms and implement them in their design.
CO6: Recognize gain insight into the various traditional performing arts and storytelling traditions in India and how they can be implemented in design

References:
Required Resources:

1. Dehejia, H. V. (2010). Akriti to Sanskriti : the journey of Indian forms. Niyogi Books. 9788189738532

Recommended Resources:

1. Dallapiccola, A. L. (2001). Indian Painting: The Lesser Known Traditions. Mapin Publishing.
2. Seth, M. (2008). Indian Painting: The Great Mural Tradition. Lustre Press.

BDES 2nd Year
Semester 3
Research Methodology 1 - CD (BDES CD 215)

L	T	P
2		

Course Name: Research Methodology 1 - CD **Course Contact Hours: 2**
Course Credit Hours: 2 **Course Code : BDES CD 215**

Course Objectives:

- Apply design thinking principles to identify relevant research areas and problems within communication design.
- Critically evaluate various research methodologies (quantitative, qualitative, mixed methods) and their suitability for different communication design inquiries.
- Develop a comprehensive research plan encompassing: Formulation of clear research questions and objectives. Selection of appropriate research methods. Data collection and analysis strategies. Ethical considerations in research conduct
- Apply research methods to gather and analyze data effectively in a communication design context.
- Formulate actionable insights based on research findings to inform design decisions.
- Evaluate the effectiveness of research methodologies in achieving project goals.
- Communicate research findings clearly and concisely through reports and presentations tailored to a communication design audience.

Course Description:

Research Methodology will build upon learnings from Design Research 1 and 2 to introduce design thinking processes and methodologies. It will delve into steps that precede the actual research work viz. identifying areas of inquiry, selecting appropriate methodology to conduct that inquiry, and formulating workable insights. Through a combination of theoretical exploration, practical application, and critical analysis, students will learn how to conceptualize, plan, execute, and evaluate research projects relevant to communication design

Course Contents:

1. **Research for Communication Design**
    - Research in Context of CD
    - Understanding Insights: Inquiry

2. **Design Thinking**
    - Intro. to Design Thinking
    - Practicing DT: Empathise, Define & Ideate
3. **Understanding Users: Culture Probe Kit Project**
    - Framing Research Questions
    - Research Design: Culture Probe
    - Qualitative Data: Analysis and Synthesis
    - Report Writing

Course Outcomes:

CO 1: Develop fluency in Design Thinking process and methodologies

CO 2: Demonstrate knowledge and implementation/usage of key research methodologies used in Visual and UX Research.

CO 3: Demonstrate competence in articulating research questions, findings etc

CO 4: Demonstrate competence in identifying research findings and building insights.

CO 5: Demonstrate strength in working with others in collaborative contexts to understand the value of self-learning and peer-to-peer learning.

CO 6: Develop the ability to write clear, concise, and well-structured research reports for communication design projects.

References:

Required Resources:

1. O'Grady, J. V., & O'Grady, K. (2009). *A designer's research manual: Succeed in Design by Knowing Your Clients and What They Really Need*. Rockport Publishers.

Recommended Resources:

1. *IDEO method cards*. (2003).
2. https://static1.squarespace.com/static/584fd364893fc05a8352c25b/t/590b5ee86b8f5b6147911f28/1493917421580/p21-gaver.pdf?authuser=0
3. **Designing Probes — Probetools**
4. Report Template for Culture Probe Kit

BDES 2nd Year
Semester 3
Introduction to Typography (BDES CD 217)

L	T	P
	2	2

Course Name: Introduction to Typography **Course Contact Hours: 4**
Course Credit Hours: 4 **Course Code : BDES CD 217**

Course Objectives:

- Understand and use basic vocabulary and semantics of typographic terms so as to respond to critique productively;
- Evaluate how typographic decisions and its variables are applied to a textual context to convey messages effectively
- Understand hierarchy and composition while working with basic as well as complex grids;
- Learn to select and use typefaces effectively for specific needs and contexts;
- Understand type as image and experiment with typography
- Demonstrate the ability to use typographic design to alter or enhance meaning.
- Evaluate own outcomes and proposed refinements.

Course Description:

Typography is language made visible. Sophomore students in semester three are introduced to the current practices in the use of type in all areas of communication design: from the simplest publication to advanced information graphics and screen-based interactive media. Students will learn to see, understand, and manipulate the building blocks of visual language as a powerful communication tool through assignments. This class will teach students an understanding of how typefaces are created, their properties, contexts and how types help readers absorb, respond and navigate through messages. The class will investigate letterform structure, principles and type classification systems and various modes of print reproduction, and the use of typographic contrast in composition, legibility, hierarchy, and form as tools for appropriateness in expression and communication through practice.

Course Contents:

1. **Basic Introduction to typography Grammar**
    - Typography grammar
    - Categories of typefaces based on historical events and structural grammar of typefaces.

- Line spacing, word spacing and kerning.

2. **Type Classification**
   - Architecture and Typography
   - Study of Typefaces, typographers
   - Their association with time periods.
3. **Type construction**
   - Understanding basic construction of font
   - Type modification
   - Type application
4. **Layouting**
   - Type as a System
   - Layout Principles
   - Understanding layout system
   - Understanding grids
   - font pairing.

Course Outcomes:

CO1: Understanding Typography Basics, classification and anatomy
CO2: Understand the form and function of typography.
CO3: Be able to apply current typographic practice in producing design work.
CO4: Understand current typographic practice and its application to print and digital outcomes.
CO5: Be able to select and use types to meet specific requirements.
CO6: Produce typographic work that demonstrates flexibility of function, legibility, aesthetic values and meaning, as appropriate to specific requirements

References:

Required Resources:

2. Ambrose, G., & Harris, P. (2011). The fundamentals of typography. Fairchild Books, An Imprint Of Bloomsbury Publishing. 9782940411764
3. Bringhurst, R. (2004). The elements of typographic style. Hartley & Marks, Publishers. 978088179205
4. Garfield, S. (2010). Just my type : eats, shoots and leaves - for fonts. Profile.

Recommended Resources:

5. Cullen, K. (2012). Design Elements, Typography Fundamentals. Rockport Publishers. 9781610584005
6. Lupton, E. (2024). Thinking with Type. Chronicle Books LLC. 9781797232515

BDES 2nd Year
Semester 4
Fundamentals of Immersive Media (BDES CD 212)

L	T	P
	2	4

Course Name: Fundamentals of Immersive Media **Course Contact Hours: 6**
Course Credit Hours: 3 **Course Code: BDES CD 212**

Course Objectives:

- Understand and implement 3d asset creation workflow.
- create 3d models with the desired surface finish.
- Understand how immersive spaces work.
- Use a Game engine to design an immersive Spa

Course Description:

'Immersive Media' is a combined term used for Augmented Reality/Virtual Reality/ Mixed Reality which can be leveraged in many areas like games, walkthroughs, visualizations, and training simulators, where users get real-time feedback for the actions or decisions they make during the experience.
The course will focus on the basic first building block of immersive media, i.e. 3d asset creation using 3d animation software like Autodesk Maya, where they will learn modeling texturing and lighting tools. Students will also understand how to optimize & import 3D assets in Game Engine and add interactivity to their design.

Course Contents:

1. **Understanding of 3d space**
   - Understanding of 3d space XYZ coordinate system and planes.
   - Understanding of components in 3d models, vertex, edge, face, polygon, create 3d models with the desired surface finish.
2. **Poly Modeling**
   - Understanding different tools to make polygon models.
   - Understand extrusion, bevel, and insert edge loops
3. **UV Mapping & Unwrapping, materials and texturing**
   - Understand UV sapce for 2d surface texturing.
   - Learn different techniques of UV mapping and Unwrapping.
4. **Immersive space creation**
   - Understand AR, VR & MR as immersive spaces

- Unity Interface and Game asset pipeline and Set up the light sources and be able to generate good-quality visuals in different environments.

Course Outcomes:

CO1: Ability to create 3d models using polygonal modeling techniques.
CO2: Understand surface finishes and recreate using materials and textures.
CO3:Understanding of basic lighting in 3d space.
CO4: Understanding of keyframe animation in 3d space.
CO5:Understanding of UX in immersive space.
CO6: Ability to create an immersive space using a game engine.

References:

Required Resources:

1. Murdock, K. L. (2023). Autodesk Maya 2024 Basics Guide. ISBN: 978-1-63057-580-9.

Recommended References:

1. https://www.youtube.com/@Autodesk_Maya
2. https://3dtotal.com/tutorials/maya
3. https://area.autodesk.com/m/matt-chan/tutorials/intro-to-maya-lesson-1-basic-skills

BDES 2nd Year
Semester 4
Fundamentals of Interaction Design (BDES CD 214)

L	T	P
2	2	4

Course Name: Fundamentals of Interaction Design **Course Contact Hours: 8**
Course Credit Hours: 4 **Course Code: BDES CD 214**

Course Objectives:

- Design and develop complex interactive projects
- Undertake comprehensive research to inform project development
- Direct the thinking process from brainstorming to final outcome
- Conceive, plan, and develop interactive systems
- Gain awareness of the importance of their role in interactive media development

Course Description:

Interaction Design is the art of effectively creating delightful and compelling experiences between people and the products and services that they use. Core Studio Interaction examines the fundamental principles of Interaction Design from physical objects to digital interfaces, HCI (Human-Computer Interaction) and Human Centered Design, interfaces and usability along with an understanding of hands-on UX (user experience) techniques. In this course we will provide a thorough and elaborate study of interactive concepts and techniques for applications. We will conduct an extensive investigation into the interface, mechanism, controls, and aims of interactive works.

Course Contents:

1. **Human Computer Interaction**
    - Human Computer Interaction
    - Principles of Interaction Design
    - GESTALT Principles
2. **Interaction Design**
    - Dimensions of Interaction Design
    - Low fidelity prototypes
3. **Models**
    - Mental & Conceptual Models
    - Ethnography research

Course Outcomes:

CO1: Understand the history and evolution of interaction design as a discipline
CO2: Develop the ability to analyze problems based on primary and secondary research, and reframe them through an understanding of the larger context.
CO3: Develop an understanding of the iterative making process in interaction design, using incremental methods such as user research, prototyping, and evaluation to build toward more advanced work.
CO4: Demonstrate the ability to design purposeful, pragmatic, and elegant interactive design solutions.
CO5: Demonstrate a comprehension of skills, methods, techniques and processes to realize interactive systems

References:

Required Resources:

1. Dix, A. (2008). Human Computer Interaction. Pearson Education India. 9788131717035

Recommended Resources:

1. Yablonski, J. (2020). Laws of UX design principles for persuasive and ethical products. O'REILLY MEDIA, INC, USA. 978149205528

BDES 2nd Year
Semester 4
Advanced Typography (BDES CD 216)

L	T	P
2	2	4

Course Name: Elective: Advanced Typography **Course Contact Hours: 8**
Course Credit Hours: 4 **Course Code : BDES CD 216**

Course Objectives:

- Expand your knowledge about historical, and visual aspects of typography.
- Experiment with various fonts in order to make the message powerful.
- Learn how to critically analyze design concepts in order to improve your final design solution.
- To become aware of various approaches to communicating with typographical forms.

Course Description:

This semester students dive deeper into their typographic journeys. The course offers a depth of knowledge in history, culture and psychology, as well as concrete strategies to gain a greater command of the art and craft of typography. The core objective of the course is to develop students' understanding of how colour, imagery and type can transform different spaces. It will help students achieve an understanding of how typographic design achieves quick cognition, information and causes movement or action as intended. It includes experimentation with different mediums.

Course Contents:

1. **Multilingual Typography: Indic lettering practice**
    - Introduction to Indic Scripts
    - Principles and process of Bilingual typefaces.
2. **Type as presentation: Exploring 3D type**
    - Understanding Layouting, compositions
    - Experimenting with forms & proportions.
    - Material exploration
3. **Calligraphy**
    - Understanding the character and potential of a writing instrument
    - Writing as a communication tool
    - Implementing calligraphy into merchandise
4. **Type as entertainment: Type in motion**
    - Understanding technique for type animations

- Kinetic Typography Techniques
- Exploring typography motion: scaling, rotation, tracking, etc.
- Typography in motion: considerations for legibility and impact.

Course Outcomes:

CO1: Develop meaningful concepts.
CO2: Create visually strong layouts and understand the value and power of type as a main element in visual communication.
CO3: Produce typographic work that demonstrates flexibility of function, legibility, aesthetic values and meaning, as appropriate to specific requirements
CO4: To narrate stories using typography.
CO5: Create experimental design ideas to challenge current typographic practice
CO6: Demonstrate the ability to use typographic design to alter or enhance meaning in arranged words.

References:

Required Resources:

1. White, A. W. (2015). *Advertising Design and Typography* [Paperback]. Published on September 1, 2015.

Recommended Resources

1. https://www.jayantmathew.com/copy-of-incredible-india
2. https://www.youtube.com/watch?v=ZtuakxFr8cs
3. https://elements.envato.com/movie-title-VEPSHNA
4. https://elements.envato.com/detective-movie-titles-VMLUSZK
5. https://filmora.wondershare.net/filmora-video-editor.html?gad_source=2&gclid=EAIaIQobChMIh-KW4cqghQMVAs08Ah0CAg34EAEYASABEgJSwfD_BwE

BDES 2nd Year
Semester 4
Indian Context of Communication Design (BDES CD 218)

L	T	P
2		2

Course Name: Indian Context of Communication Design **Course Contact Hours: 4**
Course Credit Hours: 3 **Course Code: BDES CD 218**

Course Objectives:

- Understanding and analyzing the evolution of visual art & design in India
- Critical inquiry into the factors that shaped Indian design within greater socio-cultural movements
- Investigating the shifts of visual practices and their impact through personal and collective storytelling
- Building a unique approach to design process through application of research, writing, visual design skills, and hands-on skills

Course Description:

The course looks at the evolution of Indian art and design, examining the social and cultural movements that influence these ecosystems. This is aided with an understanding of what 'Indianness' is and how cultural, social constructs and rituals play a role in defining expression. The course analyzes systems, patterns, and shifts through the lens of visual design and material that emerged from here.

It aims at understanding trends in visual culture and how shifting ideologies play a role in determining trends through critical inquiry and deconstruction.

Course Contents:

1. **Design in India**
    - What is Indianness? And Indian design?
    - Understanding the India Report by Charles & Ray Eames

2. **Storytelling forms in India**
    - Looking at different cultures, beliefs, values in India
    - Short-film exploration

Course Outcomes:

CO1: Building an understanding of cultural systems, their unique role in current society, media, and modern Indian design

CO2: Develop agency into their work through exploration of visual design and theoretical approaches

CO3: Building narratives by collecting/using evidence and presenting the same through diverse visual mediums

CO4: Demonstrate fluency of significant markers of Indian art/design through exploration of personal narratives

CO5: Identify and discuss the relationship between social and cultural contexts and expression

CO6: Evaluate the importance of critical thinking and deconstruction in understanding visual culture

References:

Required Resources:

1. Eames, C., & Eames, R. (1958). The India Report. NID.

Recommended Resources:

1. **Baat wahi hai:** https://www.youtube.com/watch?v=ab47VL1DAYY

2. **Sandesh** https://www.youtube.com/watch?v=h9cMnZUgU-4

3. **Aav re varsaad:** https://www.youtube.com/watch?v=7pBN66yvO88

4. **Kavad:** https://www.youtube.com/watch?v=iRaZlSzqGdo

BDES 2nd Year
Semester 4
Semiotics in Communication (BDES CD 220)

L	T	P
2		4

Course Name: Semiotics in Communication **Course Contact Hours: 4**
Course Credit Hours: 3 **Course Code: BDES CD 220**

Course Objectives:

- Students will understand the significance of cultural symbols and the metaphorical meaning behind these symbols and Understand the difference between symbols, icons and index.
- Conducting their own analysis to substantiate a set of design challenges;
- Develop an icon set based on a generated brief and learn from peer and faculty feedback the different possible approaches undertaken and the outcomes thereof.
- Students will understand how Color symbolism is the subjective meaning humans attach to various colors and Students will be able to understand the significance and application of color in Graphic Design when forming an image as color creates a focal point in addition to organizing hierarchies.

Course Description:

Semiotics is the study of signs and sign-systems. To study semiotics is to ask how meaning works. How is meaning produced? How does it circulate?

The student will be introduced to Semiology / Semiotics and its relevance to understanding human communities and cultures. The notion of a sign as a broad term encompassing a range of concepts. Understanding symbols, indexes and icons as categories within this range. Knowing how each of these categories vary in their degree of abstraction. Symbols as the most abstract and as being based on convention, not looking like the objects or concepts that they signify. Icons are at the other end of the spectrum. Icons resembling the objects or ideas that they are referring to (the referent).

The students need to understand the multifarious manners in which signs and symbols function in contemporary spaces and contexts of meaning making

Course Contents:

1. **Introduction to Signs & Symbols**
    - Cultural Signs & Symbols
    - Basic geometry and its meanings

2. **Introduction to Semiotics and colour symbolism**

- Symbols, signs and index
- The Psychology of Color Symbolism

Course Outcomes:

CO1: Students will understand the significance of cultural symbols and the metaphorical meaning behind these symbols.
CO2: Conducting their own analysis to substantiate a set of design challenges
CO3: Develop an icon set based on a generated brief.
CO4: Students will be able to understand the significance and application of color in Graphic Design when forming an image as color creates a focal point in addition to organizing hierarchies.
CO5: Manipulate the variants of the icons and symbols for different uses and applications.
CO6: Students will be able to graphically represent complex philosophies and use it in games too.

References:
Required Resources:

2. Eames, C., & Eames, R. (1958). The India Report. NID.

Recommended Resources:

Thurlow, M., & Thurlow, C. (2013). The complete guide from script to screen. Bloomsbury. 9780857853875
Ramachandran, N. (2017). Lore of the Land. Penguin Random House India Private Limited. 9789387326217

Specialization: Fashion Communication & Styling (FCS)

BDES: Four Year (8 - Semesters)

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 3									
BDES FCS 211	The Fashion System	4	1	1	4	50	40	10	100
BDES FCS 203	Fashion and Society	3	1	1	2	50	40	10	100
BDES FCS 209	Technical Prototyping	4	1	1	4	50	40	10	100
BDES FCS 213	Psychology of Fashion: Understanding Style and Behaviour	4	1	2	2	50	40	10	100
BDES LS 07	Life Skills - Observership	2			4	50	40	10	100
BDES MT 01	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**							
Semester 4									
BDES FCS 202	Business Models And New Markets	3	1	1	4	50	40	10	100
BDES FCS 204	History of Fashion Theory	3	1	1	2	50	40	10	100
BDES FCS 212	Fashion Styling Lab	4	1	1	4	50	40	10	100
BDES FCS 208	Visual Communication	3	1	1	2	50	40	10	100
BDES FCS 214	Fashion Photography Studio	4	1	1	4	50	40	10	100
BDES MT 02	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**							

BDES 2nd Year
Semester 3

The Fashion System (BDES FCS 211)

L	T	P
1	1	4

Course Name: The Fashion System **Course Contact Hours: 4**
Course Credit Hours: 4 **Course Code: BDES FCS 211**

Course Objectives:

- To provide a broad foundation for students hoping to become a part of this segment of the industry which includes apparel, accessories, cosmetics, green design, and more.
- Embrace and comprehend the diversity of this segment through forward, challenging, comprehensive and exciting assignments and examples.

Course Description:

This course is an introduction to fashion communication studies and fashion as an industry for the students. It provides students with an in-depth overview of the industry structure, professional **practices** and the interrelationships, processes, sustainability, and environmental responsibility between the primary, secondary, tertiary, and auxiliary markets.

Course Contents:

1. **Classical Theory: The Environment of Fashion**
    - Fashion Ecosystem
    - Fashion markets
    - Circular Economy
2. **Elements & Principles of Fashion**
    - Explore and apply the use of visual elements, including schemes, psychology trends.
    - Explore, analyze, and apply the use of principles on and how they influence imagery through local ,regional subculture study
3. **Textiles: Technicalities, Fabrics, Culture and Sustainable Ecosystem**
    - Fabric construction, types of studies
    - Finishing Processes: Discuss textile finishing processes such as dyeing, printing, bleaching, and coating, and their impact on fabric properties
    - Communicating circularity effectively
    - Fashion sustainability & Ownership
4. **Global Fashion Markets & The Changing World of Fashion**
    - Emerging Markets: Explore the growth of emerging fashion markets in regions through studying the zeitgeist

- Fashion Industry Trends for the Current season
- Global Supply Chains and Analyze the complexity of forecasting.

Course Outcomes:

CO1: Understand the structure of the fashion industry, awareness of people involved and important roles at a variety of levels.
CO2: Expression of information and layers involved in the fashion industry and considerations while communicating about it.
CO3: Apply strength in understanding of the multiple levels encompassed by fashion communication in the interconnected fashion marketplace.
CO4: Analyze and grasp the movements in fashion, the reason for change in trends.
CO5: Investigate and demonstrate the fashion making processes in the fashion industry, explore a range of materials & techniques.
CO6: Apply fashion expressions in art and commerce

References:
Required Resources:

1. Stone, E. (2015). The Dynamics of Fashion (4th ed.). Fairchild Books.
2. Tungate, M. (2008). Fashion Brand.
3. Dior, C. (2007). Little Dictionary of Fashion.

Recommended Resources:

1. https://www.businessoffashion.com

BDES 2nd Year
Semester 3
Fashion and Society (BDES FCS 203)

L	T	P
1	1	2

Course Name: Fashion and Society **Course Contact Hours: 3**
Course Credit Hours: 4 **Course Code: BDES FCS 203**

Course Objectives:

- Understand Socio cultural contexts that will guide students into deciphering how society, human behavior and needs determines our identity (how we think, what we wear and adorn ourselves with, how we present ourselves to others, how we identify ourselves and others, and the parameters we use to form opinions and judgments)
- Inform students why and who decides what style and fashion are, their elements, nuances, features, markers.
- Immerse students into several styles of communication, develop a strong understanding of culture, heritage and communities and create expressions including textual & visual.

Course Description:
The course is a global survey of communities and cultures to discover the inherent meaning of fashion through the socio - cultural, anthropological, geographical, financial, aesthetic, functional contexts, prevalent through the history of human existence across time. Students will learn to decode these through research, analysis, communication and expression tools and methodologies imparted through the course.

Course Contents:

1. **Fashion & Gender**
    - Gender Fluidity in Fashion
    - Fashion Icons and Gender Representation
    - Gender Expression Through Clothing
2. **Fashion & Identity**
    - Personal Style as Identity Expression.
    - Fashion and Social & Digital Identity
3. **Fashion & Art**
    - Fashion as Artistic Expression
    - Artistic References & Movements in Fashion
    - Fashion in Art Institutions

4. **Fashion & Curation**
    - Fashion Curation in Museums
    - Fashion Curation and Cultural Heritage
    - Fashion Archives and Libraries
5. **Multiculturalism**
    - Multicultural & multigenerational associations
    - Cultural Heritage and Family Traditions
    - Cultural Identity Formation
    - Intergenerational Learning and Knowledge Transfer

Course Outcomes:

CO1: Understand human behavior and identity through what they wear, adorn, and present themselves
CO2: Express through research, analysis, communication, tools and methodologies imparted through the course.
CO3: Justification on fashion expressions in art and commerce
CO4: Competence to analyze information to identify insights, patterns, and relationships.
CO5: Application through demonstration and decipher personal style and create expressions discovered from sociocultural contexts.
CO6: Analyze information to uncover meaningful observations, detect recurring structures, and recognize connections between different elements.

References:
Required Resources:

1. The Culture of Fashion: A New History of Fashionable Dress: 0001 (Studies in Design) Paperback – Illustrated, 15 May 1995

Recommended Resources:

1. https://artsandculture.google.com/
2. Adorned in Dreams: Fashion and Modernity Paperback – 14 May 2020
3. Thinking Through Fashion: A Guide to Key Theorists (Dress Cultures) Kindle Edition by Agnès Rocamora (Editor), Anneke Smelik (Editor) by Elizabeth Wilson (Author)7 March 2019

BDES 2nd Year
Semester 3
Technical Prototyping (BDES FCS 209)

L	T	P
1	1	4

Course Name: Technical Prototyping
Course Credit Hours: 6
Course Contact Hours: 4
Course code: BDES FCS 209

Course Objectives:

- Students will focus on the communication of meaning and the power of an image, through visual media using a variety of drawing and digital techniques.
- Evolution in students' individual design language and aesthetic.
- Students will update their knowledge, and understanding of skills, using new and more effective methods of communicating ideas.
- Students' emphasis moves to the focus of developing an autonomous visual language in the context of fashion and how meaning is constructed and communicated through a design identity.

Course Description:

Visual Language of Fashion builds skills in observation, visual expression of ideas, organization, and representational forms. The ability to communicate ideas in original and innovative ways is essential for all communication and design practitioners and more for fashion communicators. In this course students will engage in integration of a variety of digital skills media to communicate their design ideas.

Course Contents:

1. **Introduction To Visual Culture**
    - Perspectives Of Visual Culture
    - Evolving types of visual communication
    - How to observe an image
2. **Fundamental elements of Visual design**
    - Ideation techniques, Visualization
    - Gestalt principles
3. **Basics of Typography**
    - Typography and Branding
    - Typefaces and Fonts
    - Hierarchy and Emphasis
    - Grid Systems

Course Outcomes:

CO1: Define a variety of contexts and audiences.
CO2: Apply basic design principles of design in the fashion context to present ideas, information, products, and services in a creative visual manner.
CO3: Describe communication of ideas graphically and help to convey more meaningful content by applying required digital skills.
CO4: Implement the ability to articulate their message through skillful construction of both, image (tangible: photography/ video) and context (intangible: social, political, environmental, or philosophical ideas).
CO5: Implement the ability to critically compose their visual work, for the purpose of communication, integrating its most essential aspects through skillful organization.
CO6: Support hierarchy and composition while working with basic as well as complex grids.

References:
Required Resources:

1. Davis, M., & Hunt, J. (2017). *Visual Communication Design: An Introduction to Design Concepts in Everyday Experience* (Required Reading Range) (75th ed.). Publisher

Recommended Resources:

1. Baldwin, J., & Roberts, L. (2006). Visual Communication: From Theory to Practice (Required Reading Range Book 30) (1st ed.). Kindle Edition.
2. Machin, D. (Ed.). (2014). Visual Communication (Handbooks of Communication Science Book 4) [Kindle Edition]. Part of: Handbooks of Communication Science [HoCS].
3. Brand, W. (2017). Visual Thinking: Empowering People & Organizations Through Visual Collaboration. Paperback.
4. Leborg, C. (2006). Visual Grammar: A Design Handbook (Visual Design Book for Designers, Book on Visual Communication) (Design Briefs). Paperback.

BDES 2nd Year
Semester 3
Psychology of Fashion: Understanding Style and Behaviour (BDES FCS 213)

L	T	P
1	1	2

Course Name: Psychology of Fashion: Understanding Style and Behaviour
Course Contact Hours: 4
Course Credit Hours: 4 **Course code : BDES FCS 213**

Course Objectives:

- Comprehend human behavior in the context of Fashion
- Recognize, prevailing mental health issues and their impact on consumer segmentation
- Engaging in Fashion and Sustainability
- Awareness on body image; cognitive function & fashion
- Decode emotional Intelligence and Empathy
- Understand the relationship between Clothing, self-expression, and Psychology

Course Description:
This course will equip the students to tackle the current challenges of understanding the new-age consumer segment with vivid personalities and environment. This understanding will enable the creation of better strategies and a less restrictive consumer experience.

Course Content:

1. **Introduction to Design Visualization**
    - Design representation and rendering techniques
    - Types of media used for visualization
2. **3D to 2D Visualizations**
    - Paper modeling techniques
    - Hand rendering and visualization methods
3. **Schematic Mapping and Diagramming**
    - Introduction to reading site drawings and Analysis
    - Information mapping and visualization techniques for site
4. **2D to 3D Visualizations**
    - Translating 2D analogue and digital drawings to digital renders
    - 3D visualizations using multi platforms like AutoCAD, Illustrator and Photoshop

- Introduction to 3D modeling platform Coohom

Course Outcomes:

CO1: Mastery to demonstrate the evolving consumer perception and expectations
CO2: Understanding of generational differences and how it impacts the mindset of each consumer segment and of cognitive-behavioral therapy.
CO3: Recognising and social influences and their reflection on thinking and behavior.
CO4: Evaluating connections between communication and mental health issues, their analytical understanding and implication in the fashion industry.
CO5: Mastery in being able to articulate how clothing impacts an individual in terms of buying, choices, and social behavior
CO6: Apply the connectivity between fashion and mindful consumption that impacts the environment.

References:
Required Resources:

1. Mair, P. C. (2018). The Psychology of Fashion (The Psychology of Everything). Oxfordshire, England: Routledge; 1st edition.

Recommended Resources:

1. Jain Mathew, R. F. (2021). Mental Health in the Times of Corona: A model for Positive Mental Health During the Global Pandemic. Psychological Studies, 66.
2. Kodzoman, D. (2019). The psychology of clothing: meaning of Colors, Body Image and Gender Expression in Fashion. Textile & Leather Review, 90-103.
3. Sae Eun Lee, Y. L.-J. (2029). Understanding the Fashion Therapy (FT) Experience. International Journal of Costume and Fashion, 10.

BDES 2nd Year
Semester 4
Business Models And New Markets (BDES FCS 202)

L	T	P
1	1	4

Course Name: Business Models And New Markets **Course Contact Hours: 5**
Course Credit Hours: 6 **Course Code: BDES FCS 202**

Course Objectives:

- Develop a comprehensive understanding of various fashion business models, including traditional and innovative approaches.
- Examine strategies for entering new markets within the fashion industry.
- Recognize the need for adaptability for successfully changing trends and consumer behaviors.
- Identifying untapped markets within the fashion industry.
- Effectively convey the unique value propositions of fashion businesses.
- Develop a holistic understanding of how various elements intersect and contribute to the overall success of a fashion business.

Course Description:

This course objective is to introduce students to a structured way to think and learn elements in a Business Model; analyze the change in business due to the digital economy and opening of new fashion markets around the globe.The course explores fashion brands and their business models across various segments to understand how they operate and how they work to deliver this value using communication tools, to its customers.

Course Contents:

1. **Introduction to Fashion Business and its Models**
    - Types of Business Model
    - Introduction to the Business Model canvas
2. **The Beauty Edit: Beauty Industry Business Models**
    - Brand diagnosis
    - Beauty and wellness models adapting to change
3. **The Luxury Concept: Exclusivity to Inclusivity**
    - Brand diagnosis
    - Radical transformation and adaptation of the luxe concept in a business model

4. **Sustainability and Sustainable Fashion Models**
    - Brand diagnosis
    - Global and native Ecosystems and social connections.
5. **The Changing World of Fashion and its Longevity**
    - The Debate
    - Analysis of the debate

Course Outcomes (COs):

CO1: Understand emerging markets, business models and changing economies.
CO2: Demonstrate strength in understanding industry transformation and collaborative ecosystems.
CO3: Enable students to grasp the movements in fashion business.
CO4: Awareness on volving and innovations in fashion business models
CO5: Competency to analyze information to identify insights, patterns, and relationships.
CO6: Ability to assess data for all the above points and communicate business value

References:
Required Resources:

1. Osterwalder, A., & Pigneur, Y. (2010). Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers.
2. Osterwalder, A., & Pigneur, Y. (2014). Value Proposition Design: How to Create Products and Services Customers Want (The Strategyzer series).

Recommended Resources:

1. Business of Fashion. (n.d.). State of fashion BOF MCKINSEY reports. Retrieved from https://www.businessoffashion.com

BDES 2nd Year
Semester 4
History of Fashion Theory (BDES FCS 204)

L	T	P
1	1	2

Course Name: History of Fashion Theory **Course Contact Hours: 3**
Course Credit Hours: 4 **Course Code: BDES FCS 204**

- **Course Objectives:**
- Understand zeitgeist of the period, silhouette evolution, major designers.
- Explore Materiality of garments within their historical moment and cultural context

Course Description:
This course provides a continuous chronological study of the History of Fashion through the major shift in output of designers from haute couture, which was and still is handcrafted and custom made for each client, to the design of cheaper, limited edition diffusion lines and rapidly manufactured ready-to-wear fashions.

Course Contents:

1. **Exploration of fashion**
    - Styles influencing contemporary fashion.
    - Introduce fashion terminology
2. **Expression of individuality and society**.
    - Shift in trend
    - Changes in social life and emergence of idols
3. **Critical thinking on key movements in fashion**
    - Fashion capitals, Changes, social protest movements impacted on fashion
    - The rapid growth of prêt-a-porter and futuristic innovations
4. **Distinctive elements and cyclical nature of fashion**
    - Trickle down styles from the catwalks into mainstream fashion and the reverse process.
    - Globalization and hyper connectivity

Course Outcomes (COs):

CO1: Understanding contexts in fashion within a given time
CO2: Comprehend Fashion as a social and cultural phenomenon.

CO3: Competence in contextualized understanding of their practice as Fashion Communicator & Stylist
CO4: Strength to analyze an informational text about the history of fashion.
CO5: Demonstration Researching fashion history independently.
CO6: Fluency in fashion vocabulary.

References:
Required Resources:

1. Tortora, P. G. (n.d.). Survey of Historic Costume (5th ed.) [+ Free Student Study Guide].

Recommended Resources:

1. De la Haye, A., & Mendes, V. (2010). Fashion Since 1900.
2. Mendes, V. (1999). 20th Century Fashion.
3. Bruzzi, S., & Church Gibson, P. (2013). Fashion Cultures Revisited: Theories, Explorations and Analysis.

BDES 2nd Year
Semester 4
Fashion Styling Lab (BDES FCS 212)

L	T	P
1	1	2

Course Name: Fashion Styling Lab **Course Contact Hours: 4**
Course Credit Hours: 4 **Course Code: BDES FCS 212**

Course Objectives:

- Students must learn to process ideas to build mood boards and have the chance to see their ideas come to life.
- Hands-on experiences on how to adjust for both on- and off-figure styling creatively and technically.
- Students must explore the use of clothing as a vehicle for storytelling.

Course Description:
This course provides the fundamentals of styling. Students learn some of the core requirements of being a stylist, including imagination, research, communication, and collaboration. It acts as a bridge between the history of fashion to understand the factors which lead to the evolution of a certain iconic style and tribes and acts as a studio to recreate it by infusing new ideas.

Course Contents:

1. **Components of Styling**
    - Introduction to fashion styling, role of a stylist and styling kit
    - Understanding components of styling and how to read editorials & advertorials
2. **Style tribes and types**
    - Understanding style tribes and types
    - The styling process
3. **Evolution of style: Eras (India & West)**
    - Cultural, social, political, economic factors and their relation to fashion.
    - Editorial inspired by the fashion of the decade.

Course Outcomes (COs):

CO1: Understanding emergence of a fashion style as a social and cultural phenomenon

CO2: Competence in the role of a stylist; Contextualised understanding of their practice, communication, and collaboration.
CO3: Strength to analyze an informational text about the style history of fashion Researching fashion history independently.
CO4: Demonstration of Creativity, context and archiving visual history
CO5: Fluency fashion styling process, translating fashion history into styling a fashion through style change.
CO6: Demonstrate effective communication of fashion concepts and ideas to diverse audiences through various mediums. the use of clothing, objects and environment as a vehicle for storytelling.

References:
Required Resources:

1. Burns-Tran, S., & Davis, J. B. (2018). *Style Wise*.

Recommended Resources:

1. English, B. (2013). A Cultural History of Fashion in the 20th and 21st Centuries. Bloomsbury.
2. Ruhrberg, K., Honnef, K., Schneckenburger, M., & Fricke, C. (2000). Art of the 20th Century. Publisher information not available.
3. Studio Shoots And Equipment: Studio Kit (Fcs)
    - Ring light -1500
    - 2 Tripod – 1500
    - A camera +prime lens, zoom lens with cam set- 45k plus (optional for now)
    - Plain white and black, cloth for backdrop - 500
    - Reflector set f-797 on amazon.
    - Sourcing Budget

BDES 2nd Year
Semester 4
Visual Communication (BDES FCS 208)

L	T	P
1	1	2

Course Name: Visual Communication **Course Contact Hours: 4**
Course Credit Hours: 4 **Course Code: BDES FCS 208**

Course Objectives:

- Develop Advanced Design Skills: Enhance proficiency in visual design principles, including color theory, typography, layout, and composition, with a focus on their application in fashion communication.
- Analyze Visual Trends: Explore contemporary visual trends in fashion communication, including digital media, social media platforms, and emerging technologies, to inform creative decision-making.
- Audience-Centric Approach: Analyze target audiences, market segments, and consumer behaviors to tailor visual communication strategies that resonate with diverse demographic groups and cultural contexts.

Course Description:

This advanced-level course in Visual Communication for Fashion explores the intersection of visual storytelling. Building upon foundational knowledge in visual communication, students explore the creative and strategic aspects of communicating fashion messages effectively to diverse audiences.

Course Contents:

1. **Introduction to Lifestyle Brands**
    - Research Brand visual language
    - Visual comprehension of lifestyle brands
2. **Type for Visual Communication**
    - Type in fashion media
    - Typesetting in poster designs
3. **Logo Design**
    - Building ethos from communities
    - Styling for communities
4. **Luxury collaboration**
    - Insight into visual communication for collaborations

- Building Visual Identity

Course Outcomes (COs):

CO1 Understanding visual communication within brand identity.
CO2 Strengths to analyze, deconstruct and build luxury brand universes.
CO3 Interpreting design elements and applications for print and digital media.
CO4 Develop brand ethos for communities.
CO5 Students will develop creative problem-solving skills by addressing challenges and opportunities.
CO6 effectively articulates their ideas, concepts, and design choices.

References:
Required Resources:

1. Ryder, C. (2005). Visual Communication in Fashion and Textile Design.

Recommended Resources:

1. Academy, Brand Master. "What Is Lifestyle Branding? (Top Lifestyle Brand Examples)." YouTube, 29 Mar. 2021, https://youtu.be/GPMcnlL-PJI. Bendoni
2. Lee, J. E., Hur, S., & Watkins, B. (2018). Visual communication of luxury fashion brands on social media: Effects of visual complexity and brand familiarity. Journal of Brand Management, 25(5), 449–462. https://doi.org/10.1057/s41262-018-0092-6

BDES 2nd Year
Semester 4
Fashion Photography Studio (BDES FCS 214)

L	T	P
1	1	4

Course Name: Fashion Photography Studio **Course Contact Hours: 4**
Course Credit Hours: 6 **Course Code: BDES FCS 214**

Course Objectives:

- Gain insight into the role of photography in showcasing fashion imagery ,brand storytelling products and concepts.
- Learn essential photography techniques, including efficient digital workflow practices.

Course Description:

This course explores the professional and practical application of fashion photography and related media as they apply to the development of a personal visual style, and an understanding of the fashion image, the industry,required skills and the photographer's creative team.

Course Contents:

1. **Fashion photo shoot series and skills**
    - Historical and contemporary fashion media.
    - Camera, light, and equipment basics
2. **Creative Strategy**
    - Defining aesthetics & building a visual language
    - Understanding and application of the creative design process
3. **Critical texts on fashion theory, imagery, and design**
    - Brand building & business of fashion
    - Ethical outlook & cultural appropriation

Course Outcomes (COs):

CO1: Understanding visual ideas for fashion photography.
CO2: Competence use of relevant equipment's, media, materials, techniques
CO3: Strength to analyze creative strategy for a fashion shoot.
CO4: Demonstration processes and new technology to develop a fashion photo-shoot.

CO5: Fluency proficiency in fashion orientated shots
CO6: Integrating strengths in creative strategy, technical competence, and innovative technology for developing fashion photo shoots.

References:
Required Resources:

1. Sontag, S. (1977). On Photography.
2. Brassai. (1960). Paris by Brassai.
3. Capa, R. (2014). Capa in Color by Robert Capa.

Recommended Resources:

1. https://www.writing.upenn.edu/library/Nochlin-Linda_Why-Have-There-Been-No-Great-Women-Artists.pdf
2. The Fashion Image: Planning and Producing Fashion Photographs and Films-Thomas Werner
3. Studio Shoots And Equipment: Studio Kit (Fcs)
    - Ring light -1500
    - 2 Tripod – 1500
    - A camera +prime lens, zoom lens with cam set- 45k plus (optional for now)
    - Plain white and black, cloth for backdrop - 500
    - Reflector set f-797 in amazon.
    - Sourcing Budget

Specialization: Fashion Design (FD)

BDES Four-Year (8-Semester)

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 3									
BDES FD 213	Fashion Design Studio 3: Creative Process	4	1	1	2	50	40	10	100
BDES FD 215	Fashion Technical Lab 1	4	1	3	2	50	40	10	100
BDES FD 217	Fashion Drawing Studio	4	1	1	4	50	40	10	100
BDES FD 211	Introduction to Fashion History	3	1	2		50	40	10	100
BDES LS 07	Life Skills - Observership	2			4	50	40	10	100
BDES MT 01	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**							
Semester 4									
BDES FD 216	Fashion Design Studio 4: Creative Process	4	1	2	2	50	40	10	100
BDES FD 218	Fashion Technical Lab 2	4	1	1	2	50	40	10	100
BDES FD 220	Fashion Semantics Studio: Visual Communication 1	4	1	2	2	50	40	10	100
BDES FD 212	Fashion Elective - A. Fabric Formation Techniques B.Textile Print Design C. Graphic Design Studio D. Lifestyle Accessories	3	1	2		50	40	10	100
BDES FD 214	Craft Documentation	2			4	50	40	10	100
BDES MT 02	Minor Elective	3	1	2		50	40	10	100
	Total	**20**				50	40	10	100

BDES 2nd Year

Semester 3

Fashion Design Studio 3: Creative Process (BDES FD 213)

L	T	P
1	1	2

Course Name: Fashion Design Studio 3: Creative Process
Course Contact Hours: 3
Course Credit Hours: 4 **Course Code : BDES FD 213**

Course Objectives:

- To demonstrate an understanding of the basics of fashion design practice, process and concepts.
- To demonstrate aesthetic keenness and a curiosity for all new things around studying and observing.
- To demonstrate the ability to identify, classify and execute the skill by exploration and experimentation.
- To demonstrate an awareness of self and an empathetic approach in the acquiring of knowledge from the world.
- To demonstrate the ability to integrate concepts and skills learned in other classes appropriately and meaningfully in one's work by iteration, process ideas, imaginative mock-ups and samples.

Course Description:
Fashion Design Studio 3 is both an introduction to the fundamental creative process of Fashion Design and a continuation of the Design Studios done in First Year Studies.
The course will focus on three fundamental goals:
First, students will begin to identify and understand collaboration, conceptual development, iteration and primary research within the context of Fashion Design and aesthetics. Second, to engage in critical dialogue with the community and the making process, while building students' capacities for investigation, critical thinking, and working across media. Third, To integrate material skills, techniques and concepts from other courses into project work.

Course Content:

1. **My loved outfit**
    - Introduction to the Course, project brief, assessment and assignments submission
    - Fiber to fashion, classification of garments and categories visual mapping of wardrobe, flat sketches
    - Design modification, What is SCAMPER?
2. **Alt that mat**

- Textile material, Fabric testing
- Fiber testing, Fabric ornamentation and manipulation
- Material research
- Material exploration and experimentation

3. **Fashion lens**
    - Introduction to fashion lens, Fashion concept
    - Form/shape generation from the visual board, Design Iterations from idea to 2D
    - Design Illustration on croqui, Technical Sketch 2D to 3D - mock up/ toile.
    - Compilation & Documentation

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the relationship between clothing elements and details with fashion concepts and the development of design ideas from 2D to 3D.
CO2: Research and refer, in order to draw the most essential aspects from information and present it as a cohesive inspirational idea.
CO3: Gain knowledge of how to identify and analyze fibers and fabrics and a working familiarity with different types of fabrics.
CO4: Empathize with the user and use derived information to develop user personas and develop the ability to frame and understand the fashion sensibility of the user.
CO5: Iterate ideas thoughtfully to convey significance, value and attention to detail.
CO6: Integrate **-** to be able to integrate material skills, techniques and concepts from other courses into project work.

References:
Required Resource:

1. Zaman, Z. (2012, January). New Fashion Designer's Sketchbooks. A & C Black.
2. Davies, H. (2013, October). Fashion Designers' Sketchbooks. Laurence King Publishing.
3. Dieffenbacher, F. (2020, December). Fashion Thinking: Creative Approaches to the Design Process. Bloomsbury Visual Arts.

Recommended Resources:

1. Bryant, M. W. (2016, July). Fashion Drawing: Illustration Techniques for Fashion Designers.

BDES 2nd Year
Semester 3
Fashion Technical Lab 1 (BDES FD 215)

L	T	P
1	3	2

Course Name: Fashion Technical Lab 1 **Course Contact Hours: 5**
Course Credit Hours: 4 **Course Code : BDES FD 215**

Course Objectives:

- Understand the components of an upper body garment (Bodice) and a lower body Garment (Skirt)- shape and construction.
- Study the dress form to understand the contours of the body and also to understand the vertical, Horizontal and girth measurements.
- Converting 2d fabric to 3d using the draping method to understand the process of pattern making through this method.
- Demonstrate an awareness and familiarity with a vocabulary of technical knowledge as it connects with the technical aesthetic through design, construction and fabrication.
- Understanding the fit of a garment and manipulating seam lines using TR cutting.

Course Description:

Fashion Technical Studio 1 works collaboratively with the other two core studios. The course builds upon Space and Materiality in a disciplinary context. Form and construction are the two broad topics for Fashion Technical Studio 1. In this course students learn skills such as pattern making, draping, sewing and other means of garment construction in a critical and creative context. These suites of skills are presented as creative design tools to be utilized in open, iterative processes, and as means to realizing and executing solutions to design problems. Different inflections provide students with opportunities to concentrate on specific areas of fashion making. Students will acquire a core skill set on which to develop specializations in junior and senior year.

Course Contents:

1. **Pattern making: Terminology and Technical Details.**
    - Introduction to the Course.
    - What is Pattern Making? Tools used for Pattern Making.
    - Fabric Grain Line and Layout
    - Parts of the machine, Threading and Stitching
    - Making of Pin Cushion

2. **My Lab coat**
    - Use a ready pattern as per body measurements to make a Lab Coat
    - Discuss Steps for construction.
    - Observe the slope on the shoulder line, Armhole curve, sleeve Cap curve, and front and Back neck curve.
    - Layout, seam line and seam allowance marking for fabric cutting.
    - Finish necklines and seams.
    - Understand Darts, Tucks, Pleats and Gathers to give shape and Volume to the garment
3. **Technical Draping and Sleeve Drafting**
    - Draping Front and Back Bodice
    - Draping Front and Back skirt
    - Sleeve draft using the Flat pattern Method
4. **Dart Manipulation and Adding Fullness**
    - Manipulating the waist dart to another dart position
    - Manipulating and Creating two or more darts
    - Creating Asymmetrical darts
    - Manipulating Darts to Seam Lines
    - Creating Style lines
    - Adding Fullness to a Skirt, top and Sleeve
5. **Pattern Reading and Creative Exploration and Construction**
    - Pattern reading for a Skirt, Bodice and Sleeve.
    - Project – Creative Exploration on a Bodice, Skirt and Sleeve Using Added fullness and at least one fashion detail.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Develop an understanding of exploring design concepts through explorative 2D to 3D drafting and construction process.
CO2: Demonstrate an ability to understand the technical pattern making and manipulations to pattern through draping and flat pattern making.
CO3: Ability to read designs and create patterns for the same.
CO4: Demonstrate an awareness of basic garment components and their respective details and effectively document their findings and respond to them in a process journal.
CO5: Develop a vocabulary and understanding of technical garment terms and Construction.
CO6: Demonstrate an ability to manipulate patterns through flat pattern making and draping.

References:
Required Resources:

1. Joseph-Armstrong, H. (2014, January). Patternmaking for Fashion Design
2. Joseph-Armstrong, H., & Ashdown, S. P. (2022, May 5). Draping for Apparel Design. Bloomsbury Publishing USA.
3. Aldrich, W. (2015, January 22). Metric Pattern Cutting for Women's Wear. John Wiley & Sons.

Recommended Resources:

1. https://www.theshapesoffabric.com/
2. https://www.youtube.com/
3. https://www.pinterest.com

BDES 2nd Year
Semester 3
Fashion Drawing Studio (BDES FD 217)

L	T	P
1	1	4

Course Name: Fashion Drawing Studio **Course Contact Hours: 4**

Course Credit Hours: 4 **Course Code: BDES FD 217**

Course Objectives

- The course informs students about connections between their ideas and visualy expressing them in 2D. Drawing, as a medium, enables the students to effectively shape their ideas, communicate and build connections to their design process.
- The course aims to build a foundation in Fashion drawing and develop a unique individual illustration style.
- To build comprehensive analogue Fashion illustration skills to aid in the design ideation process and effectively communicate creative unique fashion concepts.
- To expose the students to different rendering mediums & techniques for illustrating various fabric, trims and textures.
- Develop understanding of fashion terminologies and technical flat drawings.

Course Description:

This course will help students develop their skills in figure drawing and advance towards explorative fashion illustration. Fashion drawing course will create a strong foundation in illustration from a fashion perspective and will propel students in visually expressing their creative ideas.

Students will use drawing as a way of study and observe human anatomy, bodily expression, gesture and mood. The course will advance to learning fashion illustration techniques and stylize the human figures to achieve artistic flair. Students will also learn techniques to illustrate and render clothing accessories,

embellishment and fabrics. At the end of the course students will be able to capture human form in a fashion context by infusing their individual style by manipulating lines, shapes and textures.

Course Content:

Unit	Modules
1	**Introduction to Fashion illustration**

- 8 Head Theory
- Stylized croqui - 11 head theory (Male & Female)
- Drawing gestures
- Exploring Skin rendering techniques and mediums

2	**Study of the features**

- Head and Facial features
- Hair styles
- Hands & Feet
- Exploring rendering techniques

3	**Drawing elements of Fashion**

- Collars, sleeves, cuffs
- Skirts, Pants and Jackets
- Silhouettes, frills , trims and fasteners

4	**Drawing drapery, fabrics and textures**

- Exploring fabric textures
- Illustrating prints, embroideries,
- Study of silhouettes and drapery on the body
- Fashion illustration and details rendering

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1. Develop understanding of creative and technical application of drawing as a tool to communicate fashion concepts and ideas.

CO2. Demonstrate the ability to effectively apply a range of drawing and rendering techniques towards studying fashion, fabrics, apparels and create aesthetic and expressive Fashion illustrations.

CO3. Show fluency in appropriately using Fashion terminologies, illustration and rendering a fashion coqui and drawing fashion flats.

CO4. Show competency in appraising one's own work and trying out variations of techniques to improve drawing ability and develop aesthetic keenness.

CO5. Show strength in observing and capturing the structure and proportions of the human body along with textures and details of fabrics and apparels.

CO6. Develop student's ability to effectively communicate their ideas, thoughts and perspectives.

References:

Required Resources:

1. Drudi, E., & Paci, T. (2002). *Figure Drawing for Fashion*. Pepin Press.
2. The Fundamentals of Figure Drawing, Arcturus Publishing Limited Barber. B. (2006),

Recommended Resources

1. Anna Kiper (2011) *Fashion Illustration.* David &Charles
2. Bina Abling. (2012) *Fashion Sketchbook* . Fairchild Books
3. Drudi, E., & Paci, T. (2021). *Figure Drawing for Men's Fashion*. Promopress.
4. Bryant, M. W. (Year). *Fashion Drawing* (2nd ed.). Laurence King Publishing.
5. Paci, T. (2018). *Colour in Fashion Illustration: Drawing and Painting Techniques*. Promo Press.
6. Tanaka. (2021). *Fashion Illustration Book: The Art of Tanaka (Fashion Illustrations)*. Pie International Co Ltd.

7. Szkutnicka, B. (2017). *Technical Drawing for Fashion Second Edition: A Complete Guide*. Laurence King Publishing.
8. Riegelman, N. (2006). 9 Heads: A Guide to Drawing Fashion. Pearson.
9. Old fashion magazines.

BDES 2nd Year
Semester 3
Introduction to Fashion History (BDES FD 211)

L	T	P
1	2	

Course Name: Introduction to Fashion History **Course Contact Hours: 2**
Course Credit Hours: 3 **Course code : BDES FD 211**

Course Objectives:

- Understanding 2000 years of historic fashion and its silhouette development.
- Demonstrate an awareness and familiarity with a vocabulary of historic looks and costume.
- Understanding process of haute couture, its evolution and designers responsible for fashion in the 20th century
- Developing the ability to recreate and decode iconic fashion designers and deliver presentations
- Confidence and know how to research and present fashion history and apply into mood boards style studies and reinvention.

Course Description:

Chronological study of the History of Modern Fashion through the major shift in output of designers from haute couture, which was and still is handcrafted and custom made for each client, to the design of cheaper, limited edition diffusion lines and rapidly manufactured ready-to-wear fashions. We consider silhouette evolution, major designers and the materiality of garments within their historical moment and cultural context. Our exploration of dress accepts its role as a significant, simultaneous expression of individuality and society. By providing a thorough introduction to fashion, it is intended that this course will serve as a catalyst for further explorations in a field that offers limitless opportunities. The course is taught through image based presentations by the faculty and students and discussion based recitation; their presentations become their assignments.

Course Contents:

1. **Historic Fashion from 300-1900 AD**
    - Introduction to the weekly assignment documentation of historic fashion journals. BOOKLETS on Byzantium, medieval
    - Journal BOOKLETS on Renaissance and Tudor fashion 300-1600 fashion and culture study
    - Journal BOOKLETS on 17th century, baroque fashion and culture study

- Journal BOOKLETS on Rococo and French revolution fashion study
- Journal BOOKLETS on Romantic and Victorian fashion and culture study

2. **Twentieth Century Fashion 1 1900-1950**
    - Fashion studies from Belle Epoch ,WW1 1900-1920 through innovative collaging , research and imagery.
    - Fashion studies from 1920-1939 The Roaring Twenties, Glamorous 30s and the great depression through innovative collaging , research and imagery
    - Fashion studies from WW2, Mid century 1940-1959 through innovative collaging ,research and imagery
3. **Project 1 Designer presentation and Recreation 1900-1950**
    - Development of presentation on designers from 1900-1950. Compact timeline poster
    - Practical Recreation of an iconic look of the chosen designer
4. **Twentieth Century Fashion 2 1950-2000**
    - Fashion studies from 1950-1969 The mid century fashion and swinging sixties, through innovative collaging , research and imagery
    - Fashion studies from 1970s, through innovative collaging , research and imagery
    - Fashion studies from 1980s, through innovative collaging , research and imagery
    - Fashion studies from 19, through innovative collaging , research and imagery
5. **Project 2 – DESIGNER PRESENTATION AND RECREATION 1950-2000**
    - Development of presentation on designers from 1900-1950. Compact timeline poster
    - Practical Recreation of an iconic look of the chosen designer

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1 Understanding - Translate and adapt information to a more contemporary understanding and appraisal. Understand key text and major discourses in fashion history with research, mood boards, style studies and presentations.
CO2 Competence - Develop and present a clear designer study projects and recreation. Maintain notes and a journal documenting fashion through the ages through research and illustration.
CO3 Strength **-** Identify significant designers and key garments Identify silhouettes and construction of historical garments.
CO4 Demonstration **-** Advance the development of research and presentation skills. Articulate and assist their ideas in development with the ideas of others in an oral form, through constructive critique and feedback.
CO5 Fluency **-** Develop fluency in the vocabulary of the history of dress
CO 6 Presentation **-** Develop the ability to prepare for and execute presentations in spoken and written form.

References:

Required Resources:

1. Tortora, P. G., & Eubank, K. (2009, June 8). Survey of Historic Costume
2. Seeling. (2000, April 1). Fashion: The Century of Designers 1900-1999

Recommended Resources:

1. Vogue archives website https://archive.vogue.com/
2. Met ny archives website https://www.metmuseum.org/
3. FIT MUSEUM https://www.fitnyc.edu/museum/index.php
4. https://www.youtube.com/
5. https://www.pinterest.com
6. Key moments in fashion, Popular culture,
7. The glorious glamor years
8. An illustrated history of fashion
9. Haute couture (ABRAMS)
10. Fashion - Kyoto museum 18 century to 21st century

BDES 2nd Year
Semester 4
Fashion Design Studio 4: Creative Process (BDES FD 216)

L	T	P
1	2	2

Course Name: Fashion Design Studio 4: Creative Process **Course Contact Hours: 3**
Course Credit Hours: 4 **Course Code : BDES FD 216**

Course Objectives:

- To demonstrate an understanding of the basics of fashion design practice,process and concepts.
- To demonstrate aesthetic keenness and a curiosity for all new things around studying and observing.
- To demonstrate the ability to identify, classify and execute the skill by
- To demonstrate an awareness of self and an empathetic approach in the acquiring of knowledge from the world.
- To demonstrate the ability to integrate concepts and skills learned in other classes appropriately and meaningfully in one's work by iteration, process ideas, imaginative mock-ups and samples.

Course Description:
The aim of Fashion Design Studio 4, allows the students to further develop 2D and 3D skills and practices within the context of the discipline and to build on the skills introduced in Fashion Design Studio 3. As the fourth in a six- course core sequence, they will be moving towards a competency in the application of design and research process whilst seeking appropriate 3D solutions. They will then continue to refine their approaches in regards to primary research and balancing the technical with the aesthetic integrating all the skills learned so far. The course will have 2 projects. The projects are: 1) Mimic & Fashion 2) Imagination within & beyond.

Course Contents:

1. **Mimic & Fashion**
   - Introduction to the Course, project brief, assessment and assignments submission
   - Biomimicry & Fashion + elements of Design
   - Translation 0 to 2D and 2D to 3D
   - Understanding specification
2. **Imagination within & beyond**

- Concept building – fashion concept
- Material story
- Idea abstraction- 2D to 3D
- Understanding technicalities to create pattern
- Toile (2D to 3D)
- Final garment/Photoshoot

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand research, concept proof, design process, discovery, and abstraction.
CO2: Competence in object visualization, translation of visualization to 2D and 2D to 3D.
CO3: Gain Strength in textile material studies, practice & critical process development.
CO4: Learn how to Demonstrate authentic & Contextual ideas, Articulation of fashion concepts, design directions, process Journals, Critical concept development
CO5: Present ideas Fluently Fashion Design Concepts and basics of fashion communication.
CO6: Create designs by integrating learning from different courses to articulate the final design outcome.

References:
Required Resources:

1. Benyus, J. M. (2009, August). Biomimicry. Harper Collins
2. Fletcher. (2008). Sustainable Fashion and Textiles. Earthscan

Recommended Resources:

1. https://biomimicry.org/thenatureoffashion/
2. https://youtu.be/Uhn0xMC8G4o?si=GXI5870dgH19YJwq

BDES 2nd Year
Semester 4
Fashion Technical Lab 2 (BDES FD 218)

L	T	P
1	1	2

Course Name: Fashion Technical Lab 2 **Course Contact Hours: 5**
Course Credit Hours: 4 **Course Code : BDES FD 218**

Course Objectives:

- Understand the components and Technical drafting and construction of a Shirt and a Trouser
- Understanding process of Flat Pattern making and Manipulations to the same to adapt these to create variations
- Understanding standard fit and personal fit.
- Demonstrate an awareness and familiarity with a vocabulary of technical knowledge as it connects with the technical aesthetic through design, construction and fabrication.
- Confidence in pattern – know how to manipulate a flat pattern to create a 3D outcome

Course Description:

In Fashion Technical Studio 2 students continue to expand their suites of fashion making skills, in collaboration with the other two core studios. Form and construction are the two broad topics for Fashion Technical Studio 2. In this course students learn skills such as pattern making, draping, sewing and other means of garment construction in a critical and creative context. These suites of skills are presented as creative design tools to be utilized in open, iterative processes, and as a means to realizing and executing solutions to design problems. Different inflections provide students with opportunities to concentrate on specific areas of fashion making. Students will acquire a core skill set on which to develop specializations in junior and senior year.

Course Contents:

1. **Project 1 – Anatomy of a Shirt**
    - "Introduction to project Anatomy of a Shirt & discussion on components of a Woman's Classic Shirt
    - Drafting of standard 1/4th close fitting bodice blocks closest to their size.
    - Adapting the bodice to create a Shirt draft
    - Drafting the Shirt collar and sleeve
    - 1/4th yardage - Calculating consumption of a shirt using $1/4^{th}$ block.

2. **Technical construction**
    - Making samples of the patch pocket, center front placket, sleeve plackets, cuffs and 2 piece shirt collar.
    - Demo of full scale Layout, seam line and seam allowance marking for fabric cutting.
    - Discussing steps for construction
    - Demo of technical construction of the shirt.
3. **Pattern reading from a visual – Shirt dress**
    - Creating 1/4th scale pattern of the visual.
    - Pattern reading
4. **Project 2- Trouser**
    - Drafting the standard size 1/4th scale Woman's Jean Block. Size 8
    - Making a full scale trouser pattern as per own body measurements
    - Making a muslin test fit to understand and rectify trouser fitting issues
    - Adapting the block to create variations in 1/4th scale
5. **Pattern Reading and Creative Exploration and Construction**
    - Pattern reading for trousers.
    - Project – Creative Exploration of a shirt/dress/ trouser

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1 : Understanding - Develop an understanding of exploring and Transmuting design concepts to 2D drafting and construction process and realizing a 3D outcome.
CO2: Competence- Demonstrate an ability to understand the technical pattern making and manipulations to pattern through flat pattern making. Further develop an understanding of materiality and the usage of different seam finishes
CO3: Strength - Ability to read designs and effectively integrate techniques and create patterns for the same based on conceptual parameters.
CO4: Demonstration - Demonstrate an awareness of basic garment components and their respective details and effectively document their findings and respond to them in a process journal.
CO5: Fluency - Develop a vocabulary and understanding of technical garment terms and Construction.
CO6: Develop the ability to analyze garment fit issues and implement appropriate pattern adjustments and alterations for a variety of body shapes and sizes

References:
Required Resources:

1. Joseph-Armstrong, H. (2014, January 1). Patternmaking for Fashion Design

2. Joseph-Armstrong, H., & Ashdown, S. P. (2022, May 5). Draping for Apparel Design. Bloomsbury Publishing USA
3. Aldrich, W. (2015, January 22). Metric Pattern Cutting for Women's Wear. John Wiley & Sons.
4. Association, R. D. (1999, January 1). Reader's Digest Complete Guide to Sewing
5. Aldrich, W. (2013, March 18). Fabrics and Pattern Cutting. John Wiley & Sons.

Recommended Resources:

1. Wolff, C. (1996, October 1). The Art of Manipulating Fabric. Penguin.
2. https://www.theshapesoffabric.com/
3. https://www.youtube.com/
4. https://www.pinterest.com

BDES 2nd Year
Semester 4
Fashion Semantics Studio: Visual Communication 1 (BDES FD 220)

L	T	P
1	2	2

Course Name: Fashion Semantics Studio: Visual Communication 1 Course Contact Hours: 4
Course Credit Hours: 3 Course Code : BDES FD 220

Course Objectives:

- Students explore visual organization and representational forms and engagement through observational drawing, photography, digital image creation, time-based explorations, and the integration of a variety of media.
- Digital imaging tools continue to include raster and vector software applications such as Photoshop, Illustrator, Procreate to explore 2D and time-based presentations.
- Analog drawing tools continue to include wet and dry media and various substrates.

Course Description:

Through Fashion Visual Communication 02 students continue to advance the concepts begun in the first-year experience and heightened in Fashion Visual Communication 01. The emphasis moves to a more disciplined Fashion focus on how meaning is constructed and communicated through visual media. Students continue to use traditional drawing and digital imaging methods to explore the conceptual, aesthetic and formal qualities that inform how ideas and impressions are expressed on a two-dimensional plane and beyond.

Course Contents:

1. **Introduction to the Course**
    - Visual Research & Interpretation
    - Understanding and exploring visual diaries
2. **Visual Literacy & Digital Experimentation & Storytelling**
    - Creating Mood board, inspiration board, color boards, Client profile board
    - Fabric, texture surface ornamentation board
3. **Digital Shape Explorations + Visual Integration**
    - Silhouette explorations from the desired forms
    - Design developments

- Developing a final range plan
- Stylised fashion illustrations and self expressions
- Compiling of the project

4. **Visualization & Representation**
    - Introduction to men's fashion drawing and proportions
    - Drawing clothing details for Men's wear fashion
    - Material representation. Stylised men's wear illustrations. Observation & Accurate Technical Representation
5. **Drawing technical flats and details**
    - Specification Details
    - Specification Sheet

Course Outcomes (COs): After completing the course, the student shall be able to

CO1: Should be able to generate a broad range of visual communication perspectives in the context of fashion and, incumbent in the scenarios pertaining to the same.
CO2: Should be able to communicate their visual language and produce meaning that is pertinent to the socio-cultural ecosystem and understand how their designs will operate within.
CO3: Should be able to demonstrate methods of visualizations and associated communications in the formats of textual, representational, graphical & digital.
CO4: Should be able to produce a creative body of work that signifies & conveys effectively their artistic, perceptive and creative leanings through a variety of imperative communication mediums.
CO5: Should be able to depict reasonable technical competency over analog & digital mediums necessary to produce potent & understandable expression of meanings.
CO6: Develop an interdisciplinary approach towards visual communication and design.

References:

Required Resources:

1. Gaimster, J. (2011). Visual Research Methods in Fashion (English ed.). Bloomsbury Publishing India Private Limited.
2. Riegelman, N. (2012). 9 Heads (4th ed.). Thames & Hudson.
3. Dawber, M. (2013). Fashion Sketchbook. Batsford.

Recommended Resources:

1. Drudi, E. K., & Paci, T. (2021, Apri). Figure Drawing for Men's Fashion. Promopress
2. Bryant, M. W. (2016, July). Fashion Drawing, Second Edition. Laurence King Publishing

BDES 2nd Year
Semester 4
Fashion Elective (A): Fabric Formation Techniques (BDES FD 212)

L	T	P
1	2	

Course Name: Fabric Formation Techniques **Course Contact Hours: 3**
Course Credit Hours: 3 **Course Code : BDES FD 212**

Course Objectives:

- The main objective of the course is to enable students to explore their potential to experiment, develop and innovate textile ideas for garments and other products.
- These can be incorporated using hand skills, technology or both with keeping in mind current trends.
- Students are encouraged to think beyond the conventional materials to create ideas for experimental & innovative textiles.
- Creatively and critically explore the relationship of Material to End product.

Course Description:

This course will give students an opportunity to explore textiles, from an experimental and creative approach. Incorporating the understanding, knowledge and techniques of embroideries, surface formation, weaving, knitting and crochet, Macramé-Knots, Ply Split Braiding etc., students will be encouraged to create innovative textile ideas for different product types catering to the fashion market segment. Techniques and surfaces to construct new narratives around the potential of textiles which will be constructed from scratch. This Project will interrogate both - the conceptual and formal possibilities of contemporary fashion textile art.

Course Contents:

1. **Knits**
    - Introduction to Crochet and Knitting
    - Understanding Basic Techniques - Crochet & Knitting
    - Creatively Exploring Materials and Techniques
2. **Woven And Non- Woven**
    - Introduction to Weaving
    - Learning Basic Weaves- Plain Weaves, Twill and Derivatives.

- Creatively exploring Materials and techniques: with textiles and non-textiles.
- Introduction to felting and felt craft.

3. **Yarn Craft**
   - Macrame- Knotting Technique
   - Ply Split Braiding
4. **Design Project**
   - Research
   - Design process
   - Design Development
   - Product Realization
   - Portfolio

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand materials and finishes, both textiles and non-textiles to develop ideas.
CO2: Show competence in using hand and machine skills incorporating technology.
CO3: Show strength in ideating and developing experimental and innovative textiles.
CO4: Demonstrate an understanding of different techniques and explorations.
CO5: Fluency in the digital documentation of the process of sampling and design development.
CO6: Demonstrate creativity and an understanding of sustainable practices.

References:
Required Resources:

1. Association, R. D. (1979, January 1). Reader's Digest Complete Guide to Needlework. Reader's Digest
2. Sinclair, R. (2014, November 8). Textiles and Fashion. Elsevier

Recommended Resources:

1. Tholia, A (2013) Understanding Fabrics - A Practical Approach. SARV International
2. Corbman, B. P. (1983, January 1). Textiles - Fibre to Fabric. Gregg Division McGraw-Hill
3. Parker, J. (1996, January 1). All about Wool. Rain City Pub
4. Parker, J. (1992, January 1). All about Silk. Rain City Pub
5. Harris, J. (2011). 5000 Years of Textiles (Reprint ed.). Smithsonian Books, Thames & Hudson.

BDES 2nd Year
Semester 4
Fashion Elective (B): Textile Print Design (BDES FD 212)

L	T	P
1	2	

Course Name: Textile Print Design **Course Contact Hours: 3**
Course Credit Hours: 3 **Course Code : BDES FD 212**

Course Objectives:

- To develop proficiency in printing as a surface design technique for garments and lifestyle products.
- Gain knowledge of the printing processes and techniques.
- Explore printing and dyeing as creative tools to communicate their thoughts and ideas.
- Understand the color mixing theories.

Course Description:

The program elective focuses on the specialty of Textile design and printing which will be relevant to the design of apparel, accessories, decor products and lifestyle accessories. The course focuses on textile surface decoration with a strategic method of print development and dyeing. Students will learn the skills to extract design motifs and explore a suitable base for the same, with added knowledge of fabrics, fiber, yarn, dyes and colors. It will enable students to develop their own concepts for textile design by inculcating the principles of textile design- scale, color, pattern, repeat, placement and dyeing in correspondence with creative ideas. The course will enable the students to conceptualize and contextualize the textile print design for efficiently representing it.

Course Contents:

1. **Introduction to Textile Design and Prints**
    - Color - Color harmonies
    - Tints, tones and shades
2. **Printing Techniques**
    - Direct printing, discharge printing, Resits and Over printing
    - Types and styles of Printing -Screen printing, Stencil, block printing
    - Tie and dye techniques
    - Traditional Printing techniques
3. **Motifs, Patterns and Designs**

- Repeat Patterns
- Types of motifs

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Develop an understanding of how to comprehend color mixing, evaluate and apply color combinations for diverse products.
CO2: Create original stories and prints, engage in iterative design development
CO3: Identify and distinguish between different printing styles and methods.
CO4: Demonstrate proficiency in printmaking and coloring techniques such as tie & dye, block printing, and stencil.
CO5: Understand fabric structures for effective utilization of print and color according to fabric and fiber qualities.
CO6: Identify and differentiate between the different traditional printing clusters of India.

References:
Required Resources:

1. Handmade in India - by Aditi Ranjan
2. Traditional Indian Handcrafted Textiles: History, Techniques, Processes, Designs (Vol I & II) - by Anjali Karolia
3. Anokhi Museum of Hand printing - Publications - Ajrakh, Balotra, Bagru

Recommended Resources:

1. V&A Patterns - Indian Florals
2. Sourcing ideas for Textile Design - Bloomsbury Publications

BDES 2nd Year
Semester 4
Fashion Elective (C): Graphic Design Studio (BDES FD 212)

L	T	P
1	2	

Course Name: Graphic Design Studio **Course Contact Hours: 3**
Course Credit Hours: 3 **Course Code : BDES FD 212**

Course Objectives:

- To understand the implementation of graphic language in the world of fashion,
- To understand the implication and subsequent Implementation of differential narratives in the world of retail and couture.
- Understanding the relevance of visual design structure using Layout and Composition using different graphic structures.
- An overall understanding of branding concepts in order to conceive, execute, and value a distinctive brand identity and develop visually consistent systems that convey a company's core principles.
- Understanding user needs in the serendipitous manner of visual dialogues by creating visual references in a granular visual narrative structure.
- Using visual mediums to comprehend narrative structures.

Course Description:

The fundamental concepts and practical skills that underpin graphic design will be presented to the second-year fashion design students in this course. The world of fashion will be examined from several angles, including typography, event design layouts, Brand communication, and branding. The course seeks to teach communication methods in the domain of the fashion business while also implementing the principles of visual communication, including a thorough grasp of visual hierarchy. The goal of the course is to comprehend how the various demands of the various fashion markets affect the various customer interactions in the fashion sector.

Course Contents:

1. **Understanding the use and implications of graphic principles in fashion**
    - The importance and understanding of graphic design in the world fashion
    - The inert requirements of Global fashion vs Regional fashion
    - The understanding and insertion of retail vs mass market vs couture fashion requirements.

2. **Recognizing the value of visual communication in service design for the fashion industry**
    - Fashion branding - Events vs labels vs brand.
    - The flow of a fashion event in terms of visual requirements.
    - The importance of Visual Merchandising
    - The importance of Digital Merchandise
    - Understanding user requirements across different fashion domains.
3. **Fashion Campaigns**
    - Understanding Brand positioning.
    - Understanding fashion design for print
    - Understanding digital campaigns and its close relationship with traditional advertising.
    - Visual Narratives vs Narrations

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Develop a comprehensive and in-depth foundation in graphic design principles and techniques.
CO2: Address the multifaceted real-world problems associated with the world of fashion with process-driven visual solutions.
CO3: Implement a graphic language hierarchy through branding and brand identity in the domain of fashion.
CO4: Demonstrate an understanding of the connection between fashion markets, brand positioning, and graphic design elements.
CO5: Incorporate user needs into fashion campaign conception and marketing and understand its applications across different fashion industries.
CO6: Implement compositions guided by principles of visual identity.

References:
Required Resources:

1. Anatomy of a typeface- Alexander Lawson
2. Designing with type : a basic course in typography- James Craig
3. Graphic communications today-Theodore Conover
4. Information architects-Richard Saul Wurman
5. Introduction to two-dimensional design : understanding form and function- John Bowers
6. White space is not your enemy: A beginners guide to communicating visually through graphic web & multimedia design- Kim Golombisky and Rebecca Hagen
7. Brand/story : cases and explorations in Fashion branding

Recommended Resources:

1. Fashion brands : branding style from Armani to Zara
2. Thinking with Type : Ellen Lupton
3. The Futur. (2019, December 31). *What is branding? 4 minute crash course.* [Video]. YouTube. https://www.youtube.com/watch?v=sO4te2QNsHY
4. Mike Nardi. (2023, May 11). *Show your work by Austin Kleon WILL HELP freelancers GET NOTICED!* [Video]. YouTube. https://www.youtube.com/watch?v=o8DEj5V7OO4

BDES 2nd Year
Semester 4
Fashion Elective (D): Lifestyle Accessories (BDES FD 212)

L	T	P
1	2	

Course Name: Lifestyle Accessories **Course Contact Hours: 3**
Course Credit Hours: 3 **Course Code : BDES FD 212**

Course Objectives:

- To sensitize students to basic identification of bags and head-gear. To familiarize them with the terms used to refer to their components.
- Impart knowledge on basic bag and headgear making skills
- To equip students with the skills to create three-dimensional mock-ups using muslin or upcycled material
- To enable students to design and develop lifestyle accessories based on forecast trends and consumer requirements.

Course Description:

This course sensitizes students to basic identification, correct terminology in lifestyle accessories, viz. the bag and headgear category. Further it enables students to get a look and feel of materials, understand the process of selecting the right material for a given type of construction of accessory. Students will hone the skill of combining material and techniques mindfully. Hands-on learning will give students an opportunity to work on finalized ideas with the knowledge of intermediary steps like drafting of patterns, cutting and stitching using textile and non-textile material. Students will explore construction to suit their product concepts.

Course Contents:

1. **Product Understanding, Techniques & Materials Explorations 1**
    - Introduction to Bag Design
    - Measurements and Pattern-making
    - Technicalities in construction
    - Construction of a basic Bag
2. **Product Understanding, Techniques & Materials Explorations 2**
    - Introduction to Head Gear
    - Pattern Making for Headgear
    - Creation of Headgear prototype
3. **Trend-study, Customer Profiling and Design Ideation**

- Study of Demographic, Psychographic customer profile
- Research existing product lacunae
- Design Ideations

4. **Final Project and External Assessment**
    - Realization of Products : Construction and Documentation
    - Compiling Presentation

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Identify the qualitative attributes of Fashion Accessories, with reference to material and techniques.
CO2: Explore skills in product development exploring various combinations of materials and techniques.
CO3: Apply the ability to factor surveyed customer needs and forecast trends to the creative process.
CO4: Demonstrate strength in learning design and development of innovative lifestyle accessories. This includes pattern-making and mock-up construction.
CO5: Construct products based on knowledge acquired for making different types of fashion accessories.
CO6: Display fluency in communication and documentation through CAD sketches, written and visual documentation.

References:
Required Resources:

1. Trend Forecast Magazines : Both physical and online WGSN/ Promostyl
2. Bag Design: A Handbook for Accessories Designers by FASHIONARY

Recommended Resources:

1. 38 Different types of Handbags- Do You Know them All?
2. Pinterest.com

BDES 2nd Year
Semester 4
Craft Documentation (BDES FD 214)

L	T	P
		4

Course Name: Craft Documentation **Course Contact Hours: 2**
Course Credit Hours: 2 **Course Code : BDES FD 214**

Course Objectives:

- To study the historical and cultural significance of the traditional craft, tracing their origins, evolution and influence.
- To document the methods, techniques, tools and equipments of the craft
- To create a motif dairy and make a iteration for product development
- To understand the different kinds of raw materials used for the craft from cultural aspect
- To analyze the current status and know about the government initiatives for the crafts
- To know the conservation and preservation techniques used for the craft

Course Description:

The course is designed to know about the rich and heritage traditional crafts of Maharashtra. The students will be covering various aspects of craft documentation – introduction to craft, documentation techniques, fieldwork and practical experience, cultural context, preservation and promotion, recent developments, government initiatives and hands-on experience to create a collection.

Course Contents:

1. **About traditional craft**
    - Introduction of traditional crafts of Maharashtra
    - Identification of craft for product development
    - Raw materials, Process and tools used in the craft
2. **Documentation of craft**
    - About the documentation process and its importance
    - Documentation tools
    - Digital documentation
3. **Product Development**
    - Preparing a visual diary
    - Iteration for a particular application
    - Product development

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding the unique heritage craft with a deeper learning of cultural connection.
CO2: Competency in communicating with artisans for in depth study and designing a product range.
CO3: Strengthen the students' knowledge about the craft, its process and current status.
CO4: Develop fluency in documentation of traditional craft.
CO5: Application of the traditional techniques for product development to promote the craft.
CO6: Analyze about the government initiatives for the growth of the craft.

References:
Required Resources:

1. Crafts Atlas of India – Jaya Jaitly, Niyogi Books
2. Crafts of India Handmade in India by Aditi Rajan and M. P. Rajan
3. Weaving, spinning and dyeing book. London: Routledge&Kegan Paul.
4. Ikat Textiles of India, Chronicle Books, San Francisco, 1st ed., 1988.
5. Handwoven Fabrics of India, Mapin Publishing Pvt. Ltd., Ahmedabad. 1st ed., 1989.
6. Traditional Indian Textiles, Thames and Hudson, London, 1st ed., 1991.

Recommended Resources:

1. The Sari: Styles, Patterns, History and Techniques, Thames and Hudson, London, 1st ed., 1995.
2. Saris of India: Tradition and Beyond, Martand Singh and Ṛta Kapur
3. https://www.indian-heritage.org/alangaram/textiles/textiles.html
4. https://www.metmuseum.org/toah/hd/intx/hd_intx.htm
5. http://www.india-crafts.com/textile/india-textile.html
6. https://fliphtml5.com/cbxca/pjvv/basic
7. https://issuu.com/ishapimpalkhare/docs/craft_documentation_issuu_
8. https://issuu.com/nazukkeshan/docs/merged

Specialization: Interior Design (ID)

Interior Design
BDES: Four Year (8 - Semesters)

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	Mid Term	End Term	Attendance	Total
Semester 3									
BDES ID 201	Interior Design Studio 3	6	1	3	4	50	40	10	100
BDES ID 203	History of Interior Design and Architecture	3	2	1		50	40	10	100
BDES ID 205	Representation and Analysis	3	1	2		50	40	10	100
BDES ID 209	Design Visualization for ID	3	1	2		50	40	10	100
BDES LS 07	Life Skills - Observership	2			4	50	40	10	100
BDES MT 01	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**							
Semester 4									
BDES ID 210	Interior Design Studio 4 - Creative Process	8	1	3	4	50	40	10	100
BDES ID 204	Introduction to Interior and Architecture Theory	3	2	1		50	40	10	100
BDES ID 212	Material, Methods and Assembly for Interiors	4	1	1	4	50	40	10	100
BDES ID 208	Colour, Light and Surface Interactions	2	1	1		50	40	10	100
BDES MT 02	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**				50	40	10	100

BDES 2nd Year
Semester 3
Interior Design Studio 3 (BDES ID 201)

L	T	P
1	3	4

Course Name: Interior Design Studio 3 **Course Contact Hours: 8**
Course Credit Hours: 8 **Course Code : BDES ID 201**

Course Objectives:

- Developing an understanding about space, form and function.
- Extruding the shapes in the composition thereby translating the 2D into a 3D
- Drawings as per correct measurements to be created.
- Understanding Anthropometry and Ergonomics
- Exploring the qualities of light and shadow

Course Description:
This course is an introduction to an understanding of the relationship between space, form, structure and materials within the context of a space, the end-user and the wider environment. The class is introduced to basic vocabularies, practices and contexts of interior design through a carefully choreographed series of projects. An important aspect of this studio will be the introduction to the idea of space, form and function with emphasis on fundamental form making, addition and subtraction, human scale, movement and circulation, light and shadow. The students will also be introduced to theory and reading supporting the understanding of ideas of space and form.

Course Content:

1. **Space, Form and Function**
    - Introduction to Basics of Interior Design
    - Exploring compositions -2D
    - Representation through sketches
    - Measured Drawings
2. **2D to 3D Translation and Exploration**
    - Extrusions and Iterations
    - Space and Void explorations
    - **Exploring Spatial Design Principles**
    - Understanding Human Body in relation to the space

- Movement and Circulation Studies
- Light and Shadow Studies

3. **Space and Inhabitation - Biomimicry**
    - Habitat Studies
    - Abstraction of concepts
    - Interactions
    - Representation through sketches and models

Course Outcomes:

CO1: The student demonstrates fluency in the language and significance of the basic concepts of scale, form, function, systems, and space making in interior design.

CO2: The student applies the knowledge of space making and the study of basic spatial design strategies within the design process consistently.

CO3: The student will develop and generate multiple space studies and document in iterative drawings various aspects of interior design.

CO4: The student adeptly applies the knowledge of model making and drawing to their own personal design process in multiple ways, demonstrating a nuanced understanding of the subtler aspects inherent in the design process.

CO5: The student will be able to develop iterative drawings and 3D physical models with the basic understanding of Anthropometry and ergonomics.

CO6: The student will be able to demonstrate an introductory knowledge of the relationship between program, space, and light.

References :
Required Resources:

1. Ching, Francis D. K. “Interior Design Illustrated.” Wiley Publications, 3rd edition
2. Ching, Francis D. K. Form, Space, and Order. Wiley Publications, 4th edition - Berger, John (1972).
3. Berger, J. (1972). Ways of seeing. London: British Broadcasting Corporation and Penguin Books.

Recommended Resources:

1. https://archi-monarch.com/relationship-of-form-and-space/
2. https://www.researchgate.net/publication/363158077_Interrelation_of_Form_and_Structure

BDES 2nd Year
Semester 3
History of Interior Design and Architecture (BDES ID 203)

L	T	P
2	1	

Course Name: History of Interior Design and Architecture **Course Contact Hours: 2**
Course Credit Hours: 3 **Course Code : BDES ID 203**

Course Objectives:

- Convey History not as a standalone subject but as a tool, the knowledge of which can Come in useful in later projects and contribute to their growth as designers.
- Understand how personal histories are connected with larger narratives.
- Inform students who built these spaces, why they were built, what were the reasons for their choice of specific geographic locations, what the local needs and requirements were, how the climate determined choice of materials, what birthed different technologies, and influenced the design elements and features.
- Along with Architecture, there will be an added lens of the Humanities for a nuanced understanding of History.

Course Description:

The course is a glocal (global + local) understanding of the built environment from the earliest times to the present. It will help students study and appreciate the built environment within its social, cultural, intellectual, political, geographical, technological, aesthetic and economic contexts and narratives. This is designed not just as a chronological survey but to connect key built environment (Architecture and Interior Design specifically) concepts, thoughts, ideas, movements, materials, technologies around from the world through representative structures that cut across time, civilisations and geographical boundaries.

Course Content:

1 My City – Hometown/ Mumbai focussed

- Mapping built history of Mumbai
- Introduction to Humanities
- Development and Chronology of typologies
- Hometown/ Mumbai through historic buildings

2 My Country - India centric

- Indian Architecture I: Pallavas, Cholas, Pre Mughal
- Indian Architecture II: Mughals
- Indian Architecture III: British and Colonialism
- Vernacular Indian Architecture
- Traditional building techniques in today's times

3 My World - Global Architecture

- World Architecture I: Introduction to River Valley Civilisations and
- Pre-Renaissance
- World Architecture II: Renaissance
- World Architecture III: Post Renaissance
- History of Interior Design

Course Outcomes

CO1: Analyze the built environment of their surroundings within the socio-political and economic context of the time to increase awareness and curiosity.
CO2: Employ methods of mapping and tracing histories effectively.
CO3: Connect historical events to buildings within the Indian context.
CO4: Identify different building typologies and strategies.
CO5: Develop a questioning mindset that goes beyond face value of 'facts' to understand multiple perspectives.
CO6: Create a coherent argument demonstrating how specific elements of historical building forms continue to impact the global level today.

References :

Required Resources:

- Brown, P. 2022. Indian Architecture (Buddhist And Hindu Period). Publisher.
- Brown, P. 2010. Indian Architecture (The Islamic Period). Publisher.

Recommended Resources:

- Basham, A. L.2019. The Wonder That Was India. Publisher
- Pandya, Y. 2023. Concept of space in traditional Indian Architecture. Publisher.
- Jarzombek, M., & Prakash, V. 2017. A Global History of Architecture. Publisher.

BDES 2nd Year
Semester 3
Representation and Analysis (BDES ID 205)

L	T	P
1	1	

Course Name: Representation and Analysis **Course Credit Hours: 3**
Course Contact Hours: 2 **Course code : BDES ID 205**

Course Objectives:

- To build on the idea that representation can convey more than the measurable i.e. subjective/ experiential quality, and how analysis can and must be used as a pre-design investigative tool.
- Emphasis on each student identifying their own skill, practicing and developing it into their own unique way of representation.
- Ability to apply the knowledge and skills developed in this course to other courses in the discipline.

Course Description:

In this course, the student will develop competence with fundamental analog and digital drawing, as well as analytical and representational tools to be utilized throughout the interior design process. The students will be introduced to techniques through demonstration, and they will be expected to develop proficiency in these through application to the real-world documentation of a selected interior space.

Course Content:

1. Project A

- Introduction to course
- Understanding 3d forms in plan, section and elevation (in analogue medium)
- How to construct Isometric/Axonometric Drawings?
- How to construct perspective drawings?

2. Project B

- Digital Work- 2D Representation (AutoCAD Tutorial)
- Developing drawings for the given picture of Interior Space

3.Project C

- Conceptual development and integrative representation using all the above skills.

Course Outcomes

CO1: Increased level of awareness and curiosity of the built environment of their surroundings, within the socio-political economic context of the time.

CO2: Competence: Methods of mapping and tracing of histories (CO2)

CO3: Strength: Making connections within the Indian context between historical events and building(s) (CO3)

CO4: Strength: Familiarity with building typologies and strategies (CO4)

CO5: Competence: Development of a questioning bent of mind going beyond face value of 'facts' CO5: towards multiple points of view (CO5)

CO6: Fluency: In creating a cogent argument on how certain elements of historical building form have an impact at a global level till today (CO6)

References :

Required Resources:

- Ching, F. D. K. 2023. Architectural Graphics. Publisher.
- Obermeyer, T.1993, Architectural Drafting, Residential and Commercial. Publisher.

Recommended Resources:

- Ching, F. D. K. 2019. Design Drawing. Publisher.
- Ching, F. D. K. 2018. Interior Design Illustrated. Publisher.

BDES 2nd Year
Semester 3
Design Visualization for ID (BDES ID 209)

L	T	P
1	2	

Course Name: Design Visualization for ID **Course Contact Hours: 2**
Course Credit Hours: 3 **Course code : BDES ID 209**

Course Objectives:

- Obtain meaningful insights to comprehend the relations between cities - architecture - interior - humans and translate this information into basic lines and geometries.
- Generate ideas and execute them in a physical sense of drawings or models or mood boards through reflective observations, abstract conceptualization and active experimentation
- To gain an understanding of baseline techniques while being equipped with skill sets that will be relevant and applicable in Design Studios in the following semesters.
- Identify one's own skill, further practicing and developing it into one's own unique way of representation, but also being able to adapt other methods to different situations.
- To draw upon a number of visualization techniques learned to produce an end result, which is more than the sum of its parts, and displays a degree of sophistication in comprehension and communication.

Course Description:

In this course, the student will develop competence with fundamental digital detailed drawings and visual representations as analytical and representational tools to be utilized throughout the interior design process. The students will undergo the process of designing elements of a space and learn to produce details and interior representational drawings for the same. The students will be introduced to techniques through demonstration, and they will be expected to develop proficiency in these through application to the real-world documentation of a selected interior space.

Course Content:

Unit Module

1 . Introduction to Design Visualization

- Design representation and rendering techniques
- Types of media used for visualization

2 .3D to 2D Visualizations

- Paper modeling techniques
- Hand rendering and visualization methods

3 . Schematic Mapping and Diagramming

- Introduction to reading site drawings and Analysis
- Information mapping and visualization techniques for site

4 .2D to 3D Visualizations

- Translating 2D analogue and digital drawings to digital renders
- 3D visualizations using multi platforms like AutoCAD, Illustrator and

5 . Photoshop

- Introduction to 3D modeling platform Coohom

Course Outcomes

CO1: Define effectively and confidently use digital drawing as an explorative and experimental tool in the process of a design project.
CO2: Analyze critically and communicate clearly using the components of interior architecture design in multiple ways that show an understanding of more subtle aspects through representational drawings.
CO3: Understand, critically arrive at details that resonate the design aesthetics and function.
CO4: Apply knowledge of digital software (AutoCAD, Sketch-up etc.) and build on drawing skills from Rep and Analysis (Drawing/Imaging, Time) using Adobe CS programs, Procreate, Sketchbook etc. within the design process consistently, but often in a basic and routine way.
CO5: Execute proficiency in translating design concepts into visually compelling representations through the integration of advanced digital rendering techniques and principles of composition, lighting, and materiality.
CO6: Identify and effectively communicate spatial concepts and design intentions through a variety of media, including but not limited to 2D plans, sections, elevations, and 3D models, demonstrating a nuanced understanding of scale, proportion, and spatial hierarchy.

References :

Required Resources:

- Farrelly, L. 2017. Basics Architecture 01: Representational Techniques. Publisher.
- Ching, F. D. K. 2015. Architecture: Form, Space, & Order (3rd ed.). Publisher.

Recommended Resources:

- Plunkett, D. 2014. Drawing for Interior Design. Publisher.

BDES 2nd Year
Semester 4

Interior Design Studio 4 - Creative Process (BDES ID 210)

L	T	P
1	2	6

Course Name: Interior Design Studio 4 - Creative Process **Course Contact Hours: 2**
Course Credit Hours: 6 **Course code : BDES ID 210**

Course Objectives:

- The module aims to develop an advanced understanding about space, form and function.
- The module mains to introduce students to developing project brief and program plans
- To effectively translating briefs and user requirements to tangible spaces
- To innovate and devlop simple design solution to interior design problems
- To apply technical interior design knowledge for designing Living spaces and using visual and spatial principles to communicate the desired spatial and experiential qualities

Course Description:
In this course the students will be introduced to the design of Living Spaces. The students will develop understanding and application of basic spatial design principles and processes in the context of interior design and Interior styling. The students will develop the ability to articulate and tackle an Interior Design problem and issues in context of human factors anthropometrics, Standard clearances, proxemics and territoriality using a design process, intervention and innovative design solutions and apply principles and function of aesthetics in design.

Course Content:
Unit Module

1. **Pre Design**

- Understanding Design Process
- Understanding Residential interiors
- Design research and space analysis for interior spaces
- Understanding zoning, bubble diagram and adjacency in interior spaces

2. **Site and Programming**

- Site and location analysis
- Understanding of program and function chart

3. **Design development and application**

- Concept development and ideation
- Design development
- 3D visualisation

4. **Post Design**

- Translating ideas into working drawings
- 2D/3D visual representation of final drawings
- Physical model production

Course Outcomes

CO1: Apply and Ideate deep, comprehensive understanding of theoretical, technical and conceptual principles & processes to develop effective interior living spaces

CO2: Observe research, document to formulate design briefs/proposals for the given interior project

CO3: Plan, manage, source, select compatible furnishings, material and finishes and conceptualize in order to design functional spaces for the given design brief and demonstrate this through 2D/3D mediums

CO4: Communicate information clearly & effectively to demonstrate proficiency in professional presentations using manual and/or digital media to produce a set of interior drawings.

CO5: Actively participate and demonstrate divergent thinking, proactiveness, curiosity, commitment, and self-motivation in work done, an ability to go beyond the brief while working independently and collaboratively.

CO6: Upon successful completion of the course, students will be equipped with the skills to critically analyze contemporary interior design trends and practices, enabling them to adapt and innovate within evolving design landscapes while adhering to industry standards and regulations.

References :

Required Resources:

Books:

1. Lupton, E. 2010. Thinking with Type. Publisher.
2. Norman, D. 2015. The Design of Everyday Things. Publisher.

Recommended Resources:

1. Preece, J., Rogers, Y., & Sharp, H.2019. Interaction Design: Beyond Human-Computer Interaction. Publisher.

2. Hara, K. 2015. Designing Design. Publisher.

BDES 2nd Year
Semester 4
Introduction to Interior and Architecture Theory (BDES ID 204)

L	T	P
2	1	

Course Name: Introduction to Interior and Architecture Theory **Course Credit Hours: 3**
Course Contact Hours: 2 **Course Code: BDES ID 204**

Course Objectives:

- Provide students with a comprehensive understanding of the major themes and developments in architectural theory over the past century, emphasizing the integration of theory with both historical analysis and contemporary design practices.
- Familiarize students with key concepts and themes in interior design theory from the last two decades, highlighting the evolving nature of the discipline and its theoretical foundations.
- Illustrate the practical relevance of theoretical concepts to architectural design and practice by analyzing the works of influential contemporary architects and thinkers, emphasizing how theory informs and shapes design decisions.
- Develop students' literacy in architectural theory by emphasizing written and verbal communication skills, enabling them to articulate theoretical concepts effectively in various intellectual, professional, and communicative contexts. Additionally, ensure equal emphasis on interior theory and its relevance within the Indian context, while also recognizing the influence of new media on shaping architectural discourse and public opinion.

Course Description:

Why a course exclusively on theory? In many professional schools, theory often gets collapsed into a "history/theory" amalgamation, one that fails to take into account the way by which theory informs not just a historical analysis of built and unbuilt forms, but also the technology and design of architecture. Theory must be provocative; and must integrate with, and illuminate, practice. Being conversant in design theory is a critical skill that manifests in all aspects of the discipline—from conception to experimentation to execution.

While the discourse on architecture is vast and more refined, literature on interior design as an independent discipline is still in its nascent stage and in need of theoretical framing. The intent of this

course is to treat architectural and interior theory together as a discipline unto itself, without attempting to partition the two as distinct disciplines; taking pains to ensure that students understand why and how theory matters to the study of architecture, interior design, and general questions of spatial construction

Course Content:

1. **Analysis**
    - Analysis of a written text and studying its influences
2. **Presenting personal viewpoint -**
    - Presenting a personal viewpoint of a particular facet of well-known movements
3. **Impact of Media -**
    - Addressing, acknowledging and delving into agenda and impact of Media on development of architecture theory through seminal works

Course Outcomes

CO1: Introduction of major themes of Architectural theory of the past hundred years, through examples of theoretical texts taught in conjunction with examples of built and unbuilt projects from the same time period, culminating in the basic familiarity of architecture theorists within a chronological time frame of post Industrialisation

CO2: Introduce major themes identified by interior design theorists in the last two decades, through theoretical texts along with examples to contextualize these.

C**O3:** Demonstrate the utility of understanding theoretical concepts as an integral part of the verall discipline of architectural design and practice, through work of influential contemporary architects and thinkers.

CO4: Foster literacy in the written and spoken aspects of architectural theory by emphasizing the utility of theoretical discourse in a variety of intellectual, professional, and communicative contexts. Equal familiarity with interior theory and the Indian context. Awareness of the role of new Media and the impact it has in shaping opinion.

References :

Required Resources:

- Ching, F. D. K. 2015. Architecture: Form, Space, and Order. Publisher.
- Evans, R. 2000. The Projective Cast: Architecture and Its Three Geometries. Publisher.
- Koolhaas, R.1997. Delirious New York: A Retroactive Manifesto for Manhattan. Publisher.

Recommended Resources:

- Colomina, B. 1996. Privacy and Publicity: Modern Architecture as Mass Media. Publisher.

- Tschumi, B. 1996 Architecture and Disjunction. Publisher.
- Le Corbusier. 2014. Towards a New Architecture. Publisher.

BDES 2nd Year
Semester 4
Materiality and Assembly for Interiors (BDES ID 206)

L	T	P
1	2	

Course Name: Materiality and Assembly for Interiors **Course Credit Hours: 3**
Course Contact Hours: 2 **Course Code : BDES ID 206**

Course Objectives:

- Gaining more knowledge about materials used in an interior space
- Awareness about joining techniques and methods
- Ability to maintain balance between functionality and aesthetics

Course Description:

This class will provide an introductory understanding of the nature of materials and their direct application in creating space.

"Can materials play a more diverse and important role in Interior Design?" Hence, this studio attempts to identify the role of different materials and the possibilities of binding/ joining/ combining/ blending them using appropriate joinery techniques.

Indian traditional craft practices have already established a certain way specific materials can be used, joined etc. Through this studio students should be sensitised to those practices, which they can either recreate to fit into contemporary spaces or reinvent to be more suitable to contemporary spaces.

Through a design process, students will challenge their preconceived notions of a specific material and its conversion into a built form. Through their individual explorations they should be able to tackle the question we began with- "Can materials play a more diverse and important role in Interior Design?"

Course Content:

Unit Modules

1. Spatial Systems

- Introduction to course
- Binding of two materials
- Ideating on interior system
- Working on models

2 .Modular Display System

- Explore the concept of Modularity
- Ideating display systems
- Working on mode

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Emphasis on joinery and detail is a key aspect of this project.
CO2: Ability to experiment with materials
CO3: Understanding the right use of materials in a particular context
CO4: Understanding about Spatial system and its Correlation with space
CO5: Competence in Techniques of construction

References :

Required Resources

- Farrelly, L 2012. Materials and Interior Design. Publisher.
- Ballast, D. K. 2010. Interior Detailing: Concept to Construction. Publisher.
- Postell, J., & Gesimondo, N. 2011. Materiality and Interior Construction. Publisher.

Recommended Resources:

- Detail in Contemporary Kitchen Design" by Virginia McLeod
- "Detail in Contemporary Bathroom Design" by Virginia McLeod
- Journal of Interior Design
- Interior Design: Journal of the Interior Design Educators Council
- Construction and Building Materials (for insights into construction materials)

BDES 2nd Year
Semester 4
Colour, Light and Surface Interactions (BDES ID 208)

L	T	P
1	1	

Course Name: Colour, Light and Surface Interactions **Course Credit Hours: 2**
Course Contact Hours: 2 **Course code : BDES ID 208**

Course Objectives:

- The purpose of this lesson plan is to study the concept of interaction and experimentation of visible light with various materials and how the result contributes to the essence of a space, preferably interiors.
- Students are already familiar with the idea of mood lighting with different colors as it has been covered in the previous semester.
- This lesson plan builds on this awareness. The approach is going to be hands-on as Hands-on experimentation gives students both the freedom and responsibility to learn through real experience, rather than through simply reading.

Course Description:

Light and materials are inseparably connected; indeed they actually determine each other: neither is visible to the human eye until the two come together. For this reason, great architects have always also allowed themselves to be directed by the light in the choice of their building materials. They use light to draw out contrasts between different materials and they use materials that allow them to create a very specific distribution of light in a room. Materials are key to understanding light in architecture because they directly affect the quantity and the quality of the light. Two qualities of materials – their finish and their color – are most important in this regard.

Course Content

Unit Modules

1. Introduction to Light

- Types of light
- Introduction to visible spectrum of light
- Introduction to Transparency, Translucency opacity Color of the objects and light Introduction concepts of Specular/Diffuse Transmission & Specular/diffuse Reflection

2. Surface quality of various materials – Texture

- Introduction to the concept of Visual Texture v/s Tactile Structure
- Classification of materials based on their light reflectance and light absorption tendencies.
- Working on models

Course Outcomes (COs):
After completing the course, the student shall be able to:

CO1: Understand reflection, transmission, diffusion, color perception, and light-material interactions.
CO2: Apply principles of light interaction: Explain and utilize reflection, transmission, and diffusion to choose appropriate materials and lighting techniques in interior design.
CO3: Demonstrate the ability to enhance both aesthetics and functionality in interior spaces through strategic use of color and light.
CO4: Evaluate critically contemporary design trends, considering cultural, technological, and aesthetic influences to inform design decisions.
CO5: Analyze lighting systems: Develop skills to evaluate various lighting systems for different rooms and conditions, incorporating factors such as natural light, energy efficiency, and user comfort.
CO6: Demonstrate creativity in arranging spaces, employing diverse lighting solutions and color schemes to create visually appealing and mood-enhancing environments tailored to specific needs.

References :
Required Resources:

- Gordon, G., & Cuttle, T. 2015. Interior Lighting for Designers. Publisher.
- Karlen, C. 2003. Lighting by Design. Publisher.
- Bowers, M.2017. Lighting Design Basics. Publisher.

Recommended Resources:
- https://finishlibrary.steelcase.com/ https://scienceprimer.com/specular-diffuse-reflection http://thedaylightsite.com/light-and-materials/
- https://materialdistrict.com/material/ https://iva.velux.com/competitions/international-velux-award/posts/light-and-materials https://studiomcleod.com/light-as-a-building-material

Specialization: Product Design (PD)

BDES : 4 year programme

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 3									
BDES PD 211	Product Design Studio 3: Creative Process	6	1	2	4	50	40	10	100
BDES PD 213	Product Prototyping: Concept to Creation	4	1	1	2	50	40	10	100
BDES PD 205	Process and Digital Representation	3	1		4	50	40	10	100
BDES PD 209	History of Product Design	2	1	1		50	40	10	100
BDES LS 07	Life Skills - Observership	2	1	1		50	40	10	100
BDES MT 01	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**							
Semester 4									
BDES PD 214	Product Design Studio 4: Creative Process	6	1	2	4	50	40	10	100
BDES PD 204	Material Fabrication Processes	3	1	1	2	50	40	10	100
BDES PD 206	Digitized Industrial Design	3	1	1	2	50	40	10	100
BDES PD 210	Introduction to Product Design Studies	2	1	1		50	40	10	100
BDES PD 212	Research and Development Methods - PD	3	1	1	2	50	40	10	100
BDES MT 02	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**						10	100

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	Mid Term	End Term	Attendance	Total
Semester 5									
BDES PD 301	Product Design Studio 5	5	1	2	4	50	40	10	100
BDES PD 311	Human Factors, Ergonomics And Interfaces	4	1	1	4	50	40	10	100
BDES PD 313	Innovative Design Technology	4	1	2	2	50	40	10	100
BDES PD 315	User Research	2	1	1		50	40	10	100
BDES MT 03	Minor Elective	3	1	1	2	50	40	10	100
BDES LS 05	Apprenticeship	2			4	50	40	10	100
	TOTAL	**20**							
Semester 6									
BDES PD 302	Product Design Studio 6	6	3	2	2	50	40	10	100
BDES PD 304	Design for Production	4	2	1	1	50	40	10	100
BDES PD 306	Design Seminar 4	2	1	1		50	40	10	100
BDES PD 308	Digital Portfolio Design	3	1	1	1	50	40	10	100
BDES PD 310	Experience Driven design	3	1	1	1	50	40	10	100
BDES MT 02	Minor Elective	2	1	1		50	40	10	100
IT 03	Internship	2			4				
	Total	**22**							

Semester 7									
BDES PD 401	Product Design Studio 7	6	1	1	2	50	40	10	100
BDES PD 403	User Centric Service Design	3	1	1	1	50	40	10	100
BDES PD 405	Design Thinking for Services	3	1	1	1	50	40	10	100
BDES PD 407	Product Interface Development	4	2	1	1	50	40	10	100
BDES MT 02	Minor Elective	4	2	2		50	40	10	100
	TOTAL	**20**							

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	Mid Term	End Term	Attendance	Total
Semester 8									
BDES PD 402	Product Design Studio 8 - Capstone (Explore)	6		1	5	50	40	10	100
BDES PD 404	Product Design Studio 8 - Capstone (Execution)	6		1	5	50	40	10	100
BDES PD 406	Research Writing and Capstone Documentation	4		1	3	50	40	10	100
BDES PD 408	Professional Practice and Ethics - PD	4		2	2	50	40	10	100
	Total	**20**							

BDES 2nd Year
Semester 3
Product Design Studio 3: Creative Process (BDES PD 211)

L	T	P
1	1	2

Course Name: Product Design Studio 3: Creative Process

Course Contact Hours: 3
Course Credit Hours : 4
Course code : BDES PD 211

Course Objectives:

- Acquire knowledge of various stages of product design, including research, ideation, prototyping, and iteration.
- Apply acquired knowledge to navigate through each stage of the design process effectively, demonstrating proficiency in conceptualizing and refining product designs.
- Develop skills to articulate design concepts and decisions clearly and efficiently, both verbally and visually, to stakeholders and peers.
- Foster empathy towards end-users through user research and iterative design processes, ensuring that designs address real user needs and preferences.
- Enhance creative problem-solving abilities by approaching design challenges with innovation, flexibility, and adaptability.
- Successfully complete a simple product design project from inception to presentation, integrating learned skills and principles into the final deliverable.

Course Description:

- Design Studio 1 is aimed at giving students their first experience of designing a product. This course will not only help them understand the Product Design Process, but also provide an opportunity to use the understanding for solving a real life problem through creativity.
- At the end of this course students will have knowledge and experience of various stages of designing a product and also the way to communicate their final design in an efficient and clear manner.
- Empathy and creative problem solving are the two core skills that this course will focus on, using a simple product design project.

Course Contents:

1. Design Overview

- Creativity
- Problem identification
- Design methods

2. SPD – Intervention area and ideations

- User Research
- Ideation and conceptualization

3. Final concept with CAD details

- Final concept Design details
- Packaging
- Technical drawing
- Mock-up and final prototype

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding of the importance of design research and information synthesis.
CO2: Understanding of the overall design process including structured ideation and conceptualization process.
CO3: Competence in problem identification and creative problem solving.
CO4: Strength in creativity and empathy.
CO5: Demonstrate structured approach towards product design projects.
CO6: Fluency in communication and documentation of product design process.

References:

Required Resources:

1. Norman, D. A. (2014). The Design of Everyday Things. Basic Books
2. Kumar. V(2012)101 Design Methods: A Structured Approach for Driving Innovation in Your Organization" WIley Press

Recommended Resources:

1. Knapp, J (2023)"Sprint: How to Solve Big Problems and Test New Ideas in Just Five Days" Bharat Publications

BDES 2nd Year
Semester 3
Product Prototyping: Concept to Creation (BDES PD 213)

L	T	P
1	1	2

Course Name: Product Prototyping: Concept to Creation
Course Contact Hours: 4
Course Credit Hours: 4
Course code : BDES PD 213

Course Objectives:

- Prototyping for products will be integrated with PD Design Studio 1 / Research, Design & Development with various project touch points.
- Focus is on hands-on, full-scale and scaled making, choosing an appropriate modeling method for the intended purpose, experimentation versus planning, trial & error, process documentation, and an introduction to rapid-prototyping and outsourced fabrication.
- Course work is done in construction classrooms like workshops, makerspace.

Course Description:

- Models, Mockups & Prototypes aims to educate students in shop etiquette, culture and to instruct appropriate and safe use of hand / power tools / machines in construction classrooms.
- This course supports the design build process in core studios throughout the entire program sequence.

Course Contents:

1. **Introduction to MMP (Mock-ups & Process)**
    - Introduction to MMP course - Course learning outcomes + Design process overview.
    - Understanding scale & proportions.
    - Explore & identify new materials.
    - Introduction to the concept of material manipulation.
2. **Introduction to Prototypes (Processes & Application)**
    - Prototyping Process & Case Study.
    - Introduction to Joineries, Mechanism & Moving parts.
    - Material alternatives & application.
3. **Introduction to Product Design Models, Product Replica**
    - Scale Rapid Prototyping, Digital library of materials.

- Making techniques, Mixed Materials.
- Product Replica, 3D Physical Models.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1 : Understanding tool usage techniques and best practice methodology in a shop environment.
CO2 : Develop safe shop usage.
CO3 : Create full scale models.
CO4 : Build Scaled models.
CO5 : Apply experimentation in modeling material.
CO6 : Solutions for in class demonstrations and integrated project work.

References:

Required Resources:

1. Hallgrimsson, B (2012), Prototyping and Modelmaking for Product Design, Laurence King Publishing
2. Friend, M (2014), Making Scale Models, The Crowood Press Ltd
3. Neat, D (2008), Model Making Materials and Methods, The Crowood Press Ltd
4. Akaoka, E., Ginn, T., & Vertegaal, R. (2010, January). DisplayObjects: prototyping functional physical interfaces on 3d styrofoam, paper or cardboard models. In Proceedings of the fourth international conference on Tangible, embedded, and embodied interaction (pp. 49-56).

Recommended Resources

1. Crawford, Matthew B., Shop Class as Soulcraft: An Inquiry into the Value of Work. New York, NY: Penguin Press, 2009. Print.
2. Sennett, Richard. The Craftsman . Yale University Press, 2008. Print.

BDES 2nd year
Semester 3
Process and Digital Representation (BDES PD 205)

L	T	P
1	1	2

Course Name: Process and Digital Representation
Course Contact Hours: 3
Course Credit Hours: 4
Course code: BDES PD 205

Course Objectives:

- The objective of this course is to equip students with the essential skills in process drawing and digital presentation tailored specifically for product design.
- By mastering traditional drawing techniques and digital tools, students will effectively communicate and visualize product concepts, fostering creativity and professional competency in the field of product design.

Course Description:

- In this course, students merge traditional drawing techniques with digital presentation methods tailored for product design.
- Through hands-on practice, they develop skills in sketching, rendering, and digital illustration using digital tools.
- Emphasis is placed on visual communication and presentation of product concepts in professional contexts.

Course Contents:

1. **Introduction to Process Drawing**
    - Line weights, various types of sketching ellipses, circles, triangles, squares, Rectangles, all 2d shape
    - 1 point, 2 point & 3-point perspectives
2. **Analytical Sketching**
    - Perspective analytical sketching, creating central axis line, wireframe volume, lines, identifying form line and development.
    - Introduction to light and shadow.
3. **Object Drawing & Rendering**
    - Object observation drawing

- Marker sketching
- Digital rendering

4. Construction, Free hand sketching & Proportions

- Construction lines, volume generation
- Radii manipulation
- Construction drawing with light & shadow Proportions.

5. Representation & Exercises

- Digital representation
- Studio sketching
- Composition and layout understanding

Course Outcomes

CO1: Show Understanding of different kinds of product construction sketches/drawings in 2D and 3D on physical sketchbook and digitally.

CO2: Show competency in preparing various techniques of product sketching with iterations and final construction drawing with proportion.

CO3: Build up aptitude strength with knowledge-based skill development with level of confidence.

CO4: Students shall be able to demonstrate the work assignment with fluency.

References:

Required Resources:

1. Eissen, K. (2009). Sketching: Drawing Techniques for Product Designers. BIS Publishers .
2. Sjölen , K. (2013). Design Sketching: Including an Extensive Collection of Inspiring Sketches by 24 Students at Umeå Institute of Design. Design Sketching

Recommended Resources:

1. Carl Liu, Innovative product design practice 01, 2007, Ben BISPublisher, Sketching step-by-step+showcase,

BDES 2nd year
Semester 3
History of Product Design (BDES PD 209)

L	T	P
1	1	

Course Name: History of Product Design
Course Contact Hours: 2
Course Credit: 2
Course code: BDES PD 209

Course Objectives:

- To provide historic grounding to the students about the history of design.
- Studying various design movements, their manifestos, products, manufacturing processes and the socio-political context.
- To be familiar with the icons of the product design industry.
- To understand the progression of technology in the product design industry.

Course Description:

- History can be broken down in HIS-STORY. Without knowing the past, it is difficult to understand the present and build on a future.
- Product design has a rich history of movements which coincided with the social, cultural, and political movements leading to invention and innovation.
- History of design as a course looks at studying the rich history of the design movements, iconic designers, their context and the products which took birth in the past and have impacted the present and the future.

Course Contents:

1. Product Design: Industrial Revolution

- History of Product Design
- Biomimicry
- Ancient Engineering
- Industrial Revolution (Industry 1.0 to 4.0) Power, Materials, Manufacturing and Technology

2. Design Movements

- Understanding the socio-political context

- Iconic products
- Geography
- Iconic designers
- Design style

3. Iconic Designers

- Understanding their design philosophy
- Studying their key works

4. Application of Design movement and Styles

- Applying Design styles to make products

Course Outcomes (COs):

CO1: Understanding the role of Iconic Design movements, Manifestos in the design context

CO2: Understanding the impact of Social-Political-Economic-cultural events on design

CO3: Understanding the work and design mindset of iconic product designers.

CO4: Demonstrate skills to translate complex information into simpler outcomes

CO5: Fluency in secondary research

CO6: Develop tangible solutions based on historical design and art movements

References

Required Resources:

1. Molotch, H. (2003). Where Stuff Comes From: How Toasters, Toilets, Cars, Computers and Many Other Things Come To Be As They Are. Routledge.

Recommended Resources:

1. Selikoff, S. (2020). The COMPLETE BOOK of Product Design, Development, Manufacturing, and Sales. Product Development Academy

BDES 2nd Year
Semester 4
Product Design Studio 4: Creative Process (BDES PD 214)

L	T	P
1	1	2

Course Name: Product Design Studio 4: Creative Process
Course Contact Hours: 4
Course Credit Hours: 4
Course code: BDES PD 214

Course Objectives:

- The theme of this Design studio for Second year students is ‘form and meaning’.
- The course is about making them realize and understand the relation between product forms and the intended perception or emotional reaction.
- The course also aims to introduce the students to a few ways and methods of coming up with new and interesting 3D forms in general and for some products.
- They utilize their mockup and model making skills to make and express their forms in the best possible way, apart from sketching etc.

Course Description:

- The theme of this second Design studio is ‘form and meaning’. The course is about making them realize and understand the relation between product forms and the intended perception or emotional reaction.
- The course also aims to introduce the students to a few ways and methods of coming up with new and interesting 3D forms in general and for some products.
- They utilize their mockup and model making skills to make and express their forms in the best possible way, apart from sketching etc.

Course Contents:

1. Form Understanding

- Analyzing 3D forms and
- Merging forms into one

2. Nature Inspiration study

- Ideation, conceptualization

3. Form Refinement

- Model making
- Posters, presentation

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding form and perception.
CO2: Competence in evaluating form quality.
CO3: Strength in form ideations
CO4: Demonstration of Sketching 3D forms
CO5: Demonstration of craftsmanship in model making.
CO6: Fluency in form design process

References:
Required Resources:

1. Norman, Don (2005), Emotional Design, Basic Books, United States
2. Gail Greet Hannah (2002), Elements of Design, Princeton Architectural Press
3. Sonagra, B, Dabhi, B (2020), Nature of Form for Designers, UDLAB products

Recommended Resources:

1. 1000 New Eco Designs and Where to Find Them by Proctor, Rebecca
   ISBN: 9781856695855, Publication Date: 2009
2. Biomimicry: Innovation Inspired by Nature by Benyus, Janine M.
   ISBN: 9780688160999, Publication Date: 1997
3. Lewens, Tim. Organisms and Artifacts: Design in nature and elsewhere. Cambridge, MA: MIT Press, 2004.
4. McHarg, Ian L. Design with Nature. Garden City, NY: John Wiley &Sons, 1992.

BDES 2nd Year
Semester 4
Digitized Industrial Design (BDES PD 206)

L	T	P
1	1	2

Course Name: Digitized Industrial Design
Course Contact Hours: 5
Course Credit Hours: 4
Course code: BDES PD 206

Course Objectives:

- Understand Technical Drawings of products.
- Understand Solid modeling and organic Surface modeling.
- Better communication between the design and engineering or testing teams.

Course Description:

- Digitized Industrial Design introduces two-dimensional and three-dimensional graphic software for sketching, modeling, testing, rendering, and design control drawing.
- The student will be exposed to CAD software's three-dimensional creation of works/ objects.

Course Contents:

1. **Technical drawing**
   - Understanding of technical and Engineering Drawings, their usage and importance
   - Be able to know different types of projections like Isometric Projections, Orthographic Projections
   - Knowledge of different angles of Projection
   - Be able to create technical drawings on their own.
2. **Solid modeling**
   - Understanding different tools to make solid models.
   - Understand extrusion and extrusion cut.
   - Apply chamfer, bevel, filet.
   - Be able to make solid models using Fusion 360
3. **Sheet Metal**
   - Understand different products made of sheet metal.
   - Learn different techniques to create various sheet products with different materials.
4. **Surface Modeling**
   - Understand Bezier curves. NURBS
   - Learn visual representation of an object's exterior and its contours.
   - Be able to make free forms.

- Applying surface blending techniques

5. Rendering

- Understand the technique of rendering.
- render a product with different materials.
- Applying textures to different materials
- Set up the light source and be able to generate good quality renders in different backgrounds/environments.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Ability to read technical drawings, measure objects, and create technical drawings.
CO2: Understandinding of solid modeling tools & processes.
CO3: Learn sheet metal modeling
CO4: Learn Part Modelling and Assembly
CO5: Understand Surface Modelling and ability to generate complex surfaces (CLASS A and B) and forms
CO6: Understanding Material rendering and Implementing different materials to products for generating realistic digital renders

References:

Required Resources:

1. Software: Autodesk Fusion 360
2. Books AS UNDER:
    a. Cline, L. S. (2018). Fusion 360 for Makers. Make: Community. ISBN: 9781680453553.
    b. Verma, S. G. (2017). Autodesk Fusion 360 Book. CADCAMCAE Works. ISBN: 9781988722191.
    c. Di Marco, G. (2018). Simplified Complexity: Method for Advanced NURBS Modeling with Rhinoceros. Le Penseur. ISBN: 88895315454.

Recommended Resources:

1. Fusion 360 - 23 Tips Beginners Must Learn
2. Fusion 360 Tutorial for Absolute Beginners (2020)
3. Fusion 360 Crash Course: Create your own designs for 3d printing!
4. Rhino Product Design Tutorials - YouTube
5. Rhino Basics to Advance in Hindi - YouTube

BDES 2nd year
Semester 4
Material Fabrication Processes (BDES PD 204)

L	T	P
1	1	2

Course Name: Material Fabrication Processes
Course Contact Hours: 3
Course Credit Hours: 4
Course code: BDES PD 204

Course Objectives:

- Material Fabrication Processes introduces basic knowledge of materials and processes commonly used by product designers and manufacturers at various scales of production.
- This course informs the core studio sequence by providing a foundation for understanding properties of materials, how a product is put together and how it can be made better, safer, and more sustainable.
- Assignments will be both individual and team based and will include a number of visuals for better understanding.

Course Description:

- Materials & Manufacturing Processes introduces basic knowledge of materials and processes commonly used by product designers and manufacturers at various scales of production.
- This course informs the core studio sequence by providing a foundation for understanding properties of materials, how a product is put together and how it can be made better, safer, and more sustainable.
- Assignments will be both individual and team based and will include a number of visuals for better understanding.

Course Contents:

1. Introduction to the course.

- Importance of understanding manufacturing processes (Designers Life in the industry).
- How is it relevant to a product designer?
- At what stage is this relevant?
- What are expectations from students?
- Introduction - Documentary on manufacturing
- Introduction to Paper, Paper Industry, Printing and Packaging.

- Demonstrate properties using paper
- Introduction to Classification of Materials
- Introduction to Wood, understanding the different types, applications.

2. Understanding the making and manufacturing processes w.r.t Wood products / toys / furniture

- Accessories
- Wood Cube, wood working
- Introduction to Molds + Type
- Introduction to surface finishes.

3. Understanding the making and manufacturing processes w.r.t Polymers

- Introduction to Polymers + Applications
- Manufacturing processes.
- Introduction to Metals + Applications
- Manufacturing processes.

Course Outcomes (COs): After completing the course, the student shall be able to-

CO1: Understand materials and processes frequently used by product designers.
CO2: Apply the knowledge for manufacturing
CO3: Analyze the relationship between material and manufacturing

References:

Required Resources

1. Thompson, R. (2007). Manufacturing Processes for Design Professionals.Thames & Hudson
2. Lesko, J. (2008). Industrial Design: Materials and Manufacturing Guide.John Wiley & Sons Inc

Recommended Resources

1. Hudson, J. (2011). Process: 50 Product Designs from Concept to Manufacture. Laurence King Publishing
2. Lefteri, C. (2007). Making It: Manufacturing Techniques for Product Design. Laurence King Publishing

BDES 2nd year
Semester 4
Product Design Studio 4: Creative Process (BDES PD 214)

L	T	P
1	1	

Course Name: Product Design Studio 4: Creative Process
Course Contact Hours: 2
Course Credit Hours: 2
Course code : BDES PD 214

Course Objectives:

- Students will gain a foundational understanding of the key principles and elements of design, including balance, contrast, rhythm, and proportion.
- Students will explore the historical development of design, understanding its evolution and the cultural, social, and technological factors that have influenced it.
- Through analyzing and critiquing various design works, students will develop critical thinking skills to evaluate design choices and their impact on users and society.
- Students will engage in hands-on design projects to apply theoretical concepts, develop practical design skills, and build a design portfolio.
- Students will be introduced to essential design software tools and technologies used in the industry, gaining proficiency in their use for design creation and presentation. Students will learn the principles of user-centered design, focusing on designing products, services, and experiences that meet user needs and enhance user satisfaction. Students will explore the ethical considerations and responsibilities of designers, considering the environmental, social, and cultural impacts of design decisions. Students will learn how to collaborate effectively with others in a design team, understanding the roles and responsibilities of different team members and the importance of communication and teamwork in the design process.
- Students will develop a vocabulary and language to articulate and communicate design concepts, ideas, and solutions effectively.
- These objectives aim to provide students with a comprehensive introduction to the field of design studies, equipping them with the knowledge, skills, and abilities needed to succeed in further studies and careers in design.

Course Description:

- Product Design is often thought of as an isolated practice of innovating / designing an object. However, the relationship between design and society is far more reciprocal.

- This class critically examines the exchange between the designed objects and the world they create; you will debate on the culture that they create and user behavior they manipulate.
- They will also ideate on the scenarios and experiences that can be enhanced. Our work together will lead to new questions and innovative ways of thinking about our material and immaterial worlds.
- It will enhance your personal understanding of design, as well as your professional development.

Course Contents:

1. Product Design: Industrial Revolution
- Stone age to Industrial revolution
- Design movements until modernism
- Iconic products through the ages
- Design manifestos - read them in class and discuss

2. Design Manifestos
- Sustainable design rules and designers
- Society 5.0
- Design and gender - Class discussion based on reading material

3. Introduction to design ethics
- Design ethics
- Speculative Design

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding of design movements, design manifestos, cultural implication of design
CO2: Apply research and critical writing
CO3: Apply analytical thinking
CO4: Combine translation of thoughts into tangible outcomes
CO5: Create outcomes in self design style

References:
Required Resources:

1. Mankiw, N.G. (2013), Macroeconomics, 8th edition, Worth Publishers

Recommended Resources:

1. Jones, C.I. and Vollrath, D. (2013), Introduction to Economic Growth, third edition, Norton
2. Romer, D. (2012), Advanced macroeconomics, fourth edition, McGraw Hill
3. Other readings (including, for instance, relevant journal articles) will be informed or perhaps made available prior to each lecture should the need arise.

BDES 3rd year

Semester 5

Product Design Studio 5 (BDES PD 301)

L	T	P
2	1	2

Course Name: Product Design Studio 5
Course Contact Hours: 5
Course Credit Hours: 5
Course code: BDES PD 301

Course Objectives:

- Digital and Analog fabrication techniques.
- Understanding brand language and deriving Ideal Visual Language.
- Exploration of materials and manufacturing constraints
- Perfecting each students' ability to physically prototype
- Digital Documentation of design + Animations skills

Course Description:

- Design Studio 3 offers opportunities for students to learn and apply digital fabrication techniques, to better understand the process that goes into taking their designs from Initial Conception to Prototyping.
- Students will work individually towards understanding a brand's design language, its core values and principles to design a brand extension, and adequately understand fundamental innovation and incremental change as they apply the digital fabrication techniques to their designs to make 3D Printed Prototypes.

Course Contents:

1. Research and Initial Morphogenesis

- Brand Research
- Market study
- Doodling
- Ritual Study

2. Concept Generation

- Explorative sketching
- Digital Explorations

3. Plan of Action

- 3D Modeling
- Prototype planning and technical drawing
- Fabrication techniques
- Animation/storyboarding

4. Execution

- Flash forge simulations
- Prototyping
- Assembly
- Documentation

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: STRENGTH in fundamentals of visual communication (both traditional and digital mediums), the theory of proportions and the basics of storyboarding.
CO2: Show COMPETENCE in comprehensive research, exploration and appropriate implementation of research to achieve the perfect balance of aesthetics and feasibility.
CO3: STRENGTH of the capabilities and benefits of digital fabrication & manufacturing processes (laser cutter, CNC, 3D printing and/or scanning).
CO4: UNDERSTAND the difference between fundamental innovation and incremental change.
CO5: UNDERSTAND and articulate the relationship of manufacturing/fabrication processes.

References:

Required Resources:

1. Riley, E. E. (2019). The art of digital fabrication: STEAM projects for the makerspace and art studio. Constructing Modern Knowledge Press.
2. Aranda, S. (2017). 3D printing failures. Independently published.

Recommended Resources:

1. Redwood, B. (2017). The 3D printing handbook: Technologies, design and applications. 3D Hubs.
2. Smyth, C. (2017). Functional design for 3D printing: Designing printed things for everyday use. Independently published.
3. Luyt, B., Bernier, S. N., & Reinhard, T. (2015). Design for 3D printing: Scanning, creating, editing, remixing, and making in three dimensions. Maker Media, Inc.

BDES 3rd year

Semester 5

User Centric Design and Interaction (BDES PD 307)

L	T	P
1	1	2

Course Name: User Centric Design and Interaction
Course Contact Hours: 4
Course Credit Hours: 4
Course code: BDES PD 307

Course Objectives:

- The key objective of this course is to provide students with a detailed understanding of the HF/E principles and apply them in evaluating the designs and crafting effective user centric interventions.
- The course demonstrates an understanding of the basic concepts and techniques related to human factors in Design.
- The course emphasizes teaching how the HF/E principles can be used while designing the product interactions following the user centered design process.

Course Description:

- User Centric Design and Interaction introduces basic understanding of design principles related to physical and cognitive ergonomics, etc.
- This course provides the experience with user research and testing needed to enter Design Studio 4/other user-friendly environment.
- A seminar-based course, a portion of the assignments will be done hands-on through modeling, rigging, and constructing testing props and mechanisms.

Course Contents:

1. Fundamentals of Human Factors in design

- Definition and need for human factors
- Ergonomics and design: ergonomics-Design relationship; ergonomics in the design process
- Types of ergonomics: Physical, cognitive and organizational (case examples)
- Application of ergonomics: products, work systems and processes
- Design for ergonomics: HMI in work system
- HCD process, interaction design and user experience
- Design of ergonomic requirements: functionality, security, accessibility, and usability

2. HF/E in products: HMI: Physical interactions

- Basic understanding of anatomy, posture, and body mechanics, Anthropometry and human variability Biomechanical aspects (strength, handedness, posture, force)
- Design considerations: designing tools and equipment, handle design.
- Case examples: Protective equipment (safety shoes, helmets, protective gloves, eye protection and spectacles, hearing protection)
- Anthropometric principles in workspace and equipment design Design of work areas and workstations

3. Assessment and Design of physical environment and work areas

- Temperature, lighting and noise
- Assessment of thermal conditions and comfort
- Assessment and principles of Lighting requirements
- Noise control strategies

4. HF/E in products/Digital interactions: HMI: Human cognition

- Basics of cognitive ergonomics
- Understanding users: what is cognition? Cognitive frameworks: mental model, conceptual model
- Basics of Human cognition: Information processing: sensation, attention, perception and memory, Decision making and problem solving Psychology of every day actions
- Human Information processing: 5 SENSES (visual tactile, multimodal information processing)

5. Cognition and Design

- Introduction to Controls and displays, visual displays, Hicks law, Fitts law
- Multimodal interfaces: speech, gesture, touch screen
- Cognitive design principles: affordance, stereotypes, visibility, feedback,
- Constraints, consistency and mapping
- Decision making and cognitive task analysis (task analysis, cognitive task
- Analysis, hierarchical task analysis)
- Cognitive aspects and design
- Design guidelines: gestalt, visual structure, colour, memory, recognition and Recall

6. Emotions and Interactions

- Affective aspects, interfaces and emotions, persuasive technologies persuasive technologies
- Heuristic evaluation
- Cognitive biases

7. Human Machine Interaction, Human error and safety

- Human error and equipment design
- Cognitive workload
- Psychological aspects of human error
- GOMS

- Prevention of error in Human machine interaction
- Accident and safety

8. **Usability Testing**

- Purpose of Usability testing
- Types of Usability evaluation methods: formative and summative
- Principles of good usability testing
- Usability testing overview: Usability test plan content
- Protocol related activities: interviews, pre-test, post-test, think aloud
- Usability evaluation methods: cognitive walkthrough, heuristics review, expert review

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the fundamentals of human factors by which one can identify and apply HF/E principles and methods to better understand issues affecting people.
CO2: Competence in the ability to comprehend and apply relevant principles of anthropometry to identify issues and opportunities affecting user experience, health, safety, performance and/or productivity.
CO3: Competence in the ability to recognize and apply cognitive design principles while designing product interactions.
CO4: Demonstration of application of relevant knowledge of cognitive, social and/or emotional factors in design to improve people's experience, health, safety, performance and/or productivity.
CO5: Demonstrate the usability testing process and conduct the usability testing for the products designed.
CO6: Fluency in the ability to evaluate the human factor issues in the user interactions with the product and propose user centric design interventions to improve the quality of life.

References:

Required Resources

1. Pheasant, Stephen, & Haslegrave, C. (2006). Body space, Anthropometry, Ergonomics and the Design of work (3rd ed.). CRC Press.
2. Kroemer, K. (1997). Fitting the task to the man: A textbook of occupational ergonomics. Taylor and Francis.
3. Bridger, R. S. (2018). Introduction to human factors and ergonomics, 4th Edition. CRC Press, Taylor & Francis Group, Boca Raton, FL.

Recommended Resources:

1. Lehto, M. R., & Buck, J. R. (Year). Introduction to human factors and ergonomics for engineers. Publisher.
2. Salvendy, G. (Ed.). (2012). Handbook of Human Factors and Ergonomics (4th ed.). Wiley.

3. Tacca, M. C., & Cahen, A. (Year). Linking perception and cognition. Publisher.
4. Soares, M. M., & Rebelo, F. (Year). Ergonomics in design: Methods and techniques. Publisher.

BDES 3rd year

Semester 5

Research and Development Practices (BDES PD 303)

L	T	P
1	1	2

Course Name: Research and Development Practices
Course Contact Hours:3
Course Credit Hours: 4
Course code : BDES PD 303

Course Objectives:

- To develop understanding of the framework of research process
    - Problem recognizing / framing.
    - Data collection
    - Synthesize
    - Analyze
- Understand & learn various methods of research, Secondary and Primary.
- Learn to choose the appropriate method of research based on the design brief.
- Be aware of the ethical principles of research, ethical challenges, and approval processes.
- Learn ideation techniques to convert research findings into ideas.

Course Description:

- Research forms the basis of any good design. Every designer needs to know tools which help them to understand the environment of their product and the users better.
- A better understanding leads to deeper insights into finding new opportunities to make better products/services.
- This course is designed to equip students with theory and practical aspects of design research.
- They will be exposed to a variety of research methods along with the sensibility to understand the context of using these tools.
- The aim of this course is to make the students understand the importance of a research process while practicing it.
- The course also aims at getting the students to write an academic paper so they can communicate their learnings and discoveries.

Course Contents:

1. Introduction to Research

- Importance of research
- Types of research
- Areas of research

2. Secondary research

- Planning of research
- Literature review
- Secondary research
- Market research
- Stakeholder mapping
- Citation and referencing
- Presenting of secondary research

3. Primary Research

- Quantitative research techniques
- Qualitative research techniques
- Affinity mapping
- Insight creation

4. Development

- Highlighting opportunity areas
- Quantitative ideation
- Idea selection Funnel

5. Communication

- Representing their research journey and insights into presentation highlighting opportunities and ideas
- Converting their work into conference and research papers.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the importance of research and its application at various stages of the design process.
CO2: Competency in Secondary research Skills and hypothesis formation.
CO3: Strength in Primary Research Skills and Insight generation.
CO4: Demonstrate the ability to successfully convert insights into ideas and narrowing ideas down to actionable solutions.
CO5: Fluency in communicating their findings and process via presentation or research paper writing or Ideations.

References:

Required Resources:

1. Hanington, B., & Martin, B. (2012). Universal Methods of Design. 1610581997.

Recommended Resources:

1. https://medium.com/designstrat/exploratory-design-research-interview-dc51398c6354
2. http://designresearchtechniques.com/#/

1 MIT Press. (2003). Design research: Methods and perspectives (ISBN: 0262122634).

2 Koskinen, I., Zimmerman, J., Binder, T., Redstrom, J., & Wensveen, S. (2011). Design research through practice: From the lab, field, and showroom. ISBN 0123855020

BDES 3rd year

Semester 5

Product Technology Lab (BDES PD 309)

L	T	P
2	1	2

Course Name: Product Technology Lab
Course Contact Hours: 4
Course Credit Hours: 5
Course code: BDES PD 309

Course Objectives:

- Products Design is no longer about static furniture and basic home appliances, the products heavily use multiple sensors and companion mobile applications
- IOT based smart devices to provide a better user experience.
- This course is designed to start building an understanding of electric connections among different electrical components then move to understanding how to use microcontrollers, electronic components used inside a product and their connections.

Course Description:

- The course focuses on understanding and applying the fundamentals of electronic components and circuits to create functional prototypes.
- The course aims to introduce the various principles of Internet of Things (IoT), including a multi-layer framework for ideation and developing prototypes which solve a particular problem.
- The data from the solution then will be plotted on an online platform using the Internet.

Course Contents:

1. **Simple Product without microcontroller**
   - Understanding AC & DC current, usage, storage & limitations.
   - Electrical components and their connections read & draw Schematic Diagram build a simple product.
2. **Build a Smart Device using multiple sensors and a microcontroller.**
   - Understand what a microcontroller is and how it works.
   - Write code to program a microcontroller.d
   - Introduction to sensors
   - Decision making based on the input from multiple sensors
   - Basics of Human-machine interaction.

3. Internet of things (IoT) based products

- Understand IoT
- Introduction to networking using Bluetooth / wifi.
- Connect to laptop / mobile phone.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the functionality of individual electronic components for prototyping and overcoming fear of the same.
CO2: Interpreting and implementing schematic diagrams for prototype development
CO3: Articulating the programming logic and implementing the same using Arduino Programming
CO4: Evaluating the components and selecting appropriate ones to prototype.
CO5: Testing the prototype for the intended purpose and reiterating the design based on output.

References:

Required Resources:

1. Monk, S. (Year). Programming Arduino: Getting Started with Sketches. Publisher.
2. Bell, C. (Year). MicroPython for the Internet of Things. Publisher.

Recommended Resources:

1. Margolis, M., & Jepson, B. (Year). Arduino Cookbook. O'Reilly.

BDES 3rd year
Semester 5
Design Seminar 3 (BDES PD 305)

L	T	P
1	1	

Course Name: Design Seminar 3
Course Contact Hours: 2
Course Credit Hours: 2
Course Code: BDES PD 305

Course Objectives:

- This course aims to equip participants with the essential skills needed for successful new product development in today's competitive market.
- By focusing on efficient prior research, participants will learn how to gather and interpret crucial information about user requirements, market trends, and future prospects.
- The course also emphasizes the development of critical thinking abilities to assess opportunities and analyze scope, ensuring that new product development decisions are grounded in sound judgment.
- Moreover, participants will become proficient in analyzing market potential and determining the viability of new product concepts, enabling them to make informed strategic decisions.
- Additionally, the course seeks to cultivate an entrepreneurial mindset by exploring cutting-edge methods and tactics for effective new product creation, empowering participants to drive innovation and growth in their organizations.
- Learn how to efficiently do prior research to get knowledge and comprehend user requirements, market trends, and future prospects.
- Develop critical thinking abilities to assess and analyze opportunities and scope to ensure that new product development decisions are well-informed.
- Become proficient in analyzing market potential and determining the viability of new product concepts.

Course Description:

- The intended objective of this course is to offer students an adequate understanding of the new product development process while emphasizing the value of behavioral assessments and critical thinking.

- Students will learn substantial knowledge about the essential components of innovation, creativity, and consumer demands through an in-depth investigation of the new product development process.
- By concentrating on the importance of behavioral assessments (through the user's perspective) and critical thinking in understanding the needs of NPD, the course departs from the standard approach.
- Students will gain a profound grasp of the elements that affect consumer decision-making by exploring topics like attitude, insight, needs, and consumption habits.

Course Contents:

1. Introduction to Research for New Product Development
- A discussion of the new product development process;
- The significance of creativity and innovation in product development.
- Identifying scope and opportunities and aligning them with consumer's needs

2. Critical Thinking and Decision Making
- Enhancing critical thinking skills for effective problem-solving
- Evaluating risks and rewards in product development
- Decision-making models (techniques) and strategies

3. Qualitative Research Framework: Design and Execution
- Introduction to qualitative research methods for NPD
- Conducting interviews and focus groups
- Analyzing qualitative data and extracting insights
- Introducing the Six Path Framework of scope identification of a NPD

4. Introduction and understanding the Dimensions of Different Prepositions and Relevance & Need of Future Product
- User's Perspective, Social Dimension, Business Viability
- Forecasting the technology for NPD
- Introduction of Model of Forecasting

Course Outcomes: After completing the course, the student shall be able to:

CO1: Understanding the process of developing a new product, including its crucial elements, innovation, creativity, and consumer expectations.
CO2: Using behavioral assessments and critical thinking to analyze attitudes, perceptions, needs, and consumption patterns to understand how consumers make decisions.
CO3: Gaining foundational knowledge in conducting prior research to compile relevant data and insights for determining consumer wants and assessing market potential.
CO4: Applying theoretical knowledge and practical skills to accurately recognise, explain, and interpret consumer insights.
CO5: Improving observation, comprehension, and articulation skills to comprehend and respond to consumer insights and anticipate future product needs.

CO6: Evaluating the effectiveness of strategies used in understanding consumer behavior and developing new products.

References:

Required Resources:

1. Soares, M. M., & Rebelo, F. (Year). Ergonomics in design: Methods and techniques. Publisher.

Recommended Resources:

Additional /Reference Material –Advanced Learners

1. https://drive.google.com/drive/u/0/folders/1dHj8NUpVaxN7oLu2G8RiwyVmGl-vTPIx
2. Assignments/ Practice question Papers with solution -Slow Learners
3. https://docs.google.com/presentation/u/0/d/1teTNouranaDzKZ7naRToWvo-annLrmBK/edit?usp=slides_home&ths=true&rtpof=true
4. https://docs.google.com/presentation/d/1_fFddq_C9aEx0htsvEDNbyKFGp1ooOXz/edit#slide=id.p1
5. https://docs.google.com/presentation/d/1ArmfCk6cJTc1-1KwraRh63gTPxDhyH1c/edit#slide=id.p1
6. https://docs.google.com/presentation/d/1RftqAWwVsf0IAz3hAQPshw8IwRBn6D7u/edit#slide=id.p1

Additional Web sources:

1. https://www.indeed.com/career-advice/career-development/critical-thinking-examples
2. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4797036/
3. https://www.youtube.com/watch?v=iRMsd-X_e-0

BDES 3rd year

Semester 6

Product Design Studio 6 (BDES PD 302)

L	T	P
2	2	4

Course Name: Product Design Studio 6
Course Contact Hours: 4
Course Credit Hours: 8
Course code : BDES PD 302

Course Objectives:

- Introduction to product design process.
- Exploring and understanding empathy.
- Exposure to design research and research synthesis.
- Experiencing structured ideation process.
- Model making.

Course Description:

- The past courses, more specifically Design Studios (1+2+3), have developed a great understanding of the design process in the students.
- They are very capable of approaching and solving design problems.
- However, large organizations have well set, very detailed product development processes - called the New Product Development (NPD).
- This Design Studio intends to simulate the real-life industry scenario and help understand the role of designers in planning, designing, developing, and delivering products to the market.

Course Contents:

1. Design research

- Market research, product research
- User research, research synthesis

2. Ideation, conceptualisation

- Ideation, conceptualisation

3. Design detailing and delivery

- Model making
- Posters, presentation

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding of the importance of design research and information synthesis.
CO2: Understanding of the overall design process including structured ideation and conceptualization process.
CO3: Competence in problem identification and creative problem solving.
CO4: Demonstrate structured approach towards product design projects.
CO5: Fluency in communication and documentation of product design process.

References:

Required Resources

1. Norman, D. (2013). *The Design of Everyday Things.* Basic Books.
2. De Bono, E. (2010). *Simplicity.* Penguin.

Recommended Resources:

1. Brown, T. (2009). *Change by Design.* HarperCollins Publishers.

BDES 3rd year

Semester 6

Design for Production (BDES PD 304)

L	T	P
1	2	2

Course Name : Design for Production
Course Contact Hours:4
Course Credit Hours: 5
Course code : BDES PD 304

Course Objectives:

- Balance desirability and feasibility of product design
- Understand factors affecting and contributing to DFM
- Assembly, part design, joineries etc.
- Product and Manufacturing Cost cutting.
- Sustainability through DFM

Course Description:

- Design for production course is aimed at increasing their ability to convert or refine their product concepts to a more feasible level from a manufacturing point of view.
- The aim of course also goes a little beyond and tries to empower them to look at the product details from sustainability point of view, improving the reparability, durability, nature friendliness etc.
- While the content of the course is little technical for undergraduate design students, the execution and tasks are aimed at making it a very relevant, enjoyable, and useful course as part of their curriculum.

Course Contents:

1. **Introduction to DFM**
   - Overview of materials and manufacturing process
   - Introduction Surface decorative technique
   - Introduction to DFM- factor affecting, contributing to good DFM
2. **Tear down activities**
   - Simple product tear down- Understanding assembly of components
   - Moderate complex product tear down- Understanding joineries and joining technique, material combination

- Complex product tear down- cost cutting, no. of parts, change of mfg. process
- Complex product tear down- Design of mating parts, assembly fit and tolerance.

3. DFM of students project

- Analysis of product for mfg. constrain
- Modification required in CAD model for assembly
- Working on material and Mfg. process selection
- Working on joineries
- Working on cost cutting
- Working on surface decoration technique

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Ability to Balance desirability and feasibility of product design
CO2: Ability to identify factors affecting and contributing to DFM
CO3: Assembly, part design, joineries, sustainable alternatives etc.
CO4: Tear down analysis of products.
CO5: Application of DFM to design project.

References:

Required Resources:

1. Thompson, Rob. (2007) Manufacturing Processes for Design Professionals. New York: Thames & Hudson. Print.
2. Hudson, Jennifer. (2011) Process: 50 Product Designs from Concept to Manufacture, 2nd edition, Laurence King. Print

Recommended Resources:

1. K. G. Swift, J. D. Booker (2013) Manufacturing Process Selection Handbook. print

BDES 3rd year

Semester 6

Digital Portfolio Design (BDES PD 308)

L	T	P
1	1	2

Course Name: Digital Portfolio Design
Course Contact Hour: 3
Course Credit Hours: 4
Course Code: BDES PD 308

Course Objective:

- The Digital Portfolio Design course in product design aims to equip students with the skills to curate and present their design work effectively.
- It focuses on creating presentations to enhance storytelling.
- Students learn to communicate their design process, technical proficiency, and UX principles through visually compelling portfolios, fostering professionalism and presentation skills for diverse contexts.

Course Description:

- The Digital Portfolio Design course in product design teaches students how to craft compelling portfolios using presentations and multimedia elements. Emphasizing effective storytelling, students learn to communicate their design process, technical skills, and UX principles.
- Through hands-on training, they develop proficiency in software tools and presentation techniques, enhancing their ability to showcase their work professionally in various contexts.

Course Contents:

1. Introduction to Portfolio

- Introduction to the Idea of Portfolio
- Introduction and revision of Typography
- Writing about you.

2. Design systems

- Design systems for project presentation + Design Trends + Layouts
- Photography Workshop for Students

3. Execution

- Redesign of Projects from past semester

- Execution of the projects
- Execution of the Web page / Behance
- Execution Continues

4. Visualization & Execution

- Data Visualization + Infographic
- Execution of the Web page / Behance

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding of different kinds of product construction sketches/drawings in 2D and 3D on physical sketchbook and digitally.

CO2: Competency in preparing various techniques of product sketching with iterations and final construction drawing with proportion.

CO3: Build up aptitude strength with knowledge based skill development with level of confidence.

CO4: Students shall be able to demonstrate the work assignment with fluency.

References:

Required Resources:

1. Tumolo, L. (2019). How to Create a Portfolio and Get Hired, Second Edition: A Guide for Graphic Designers and Illustrators. Laurence King Publishing.

Recommended Resources:

1. Petty, D. (2020). That Portfolio Book. Ebook
2. https://www.behance.net/
3. https://issuu.com/

BDES 3rd year
Semester 6
Experience Driven design (BDES PD 310)

L	T	P
1	1	2

Course Name: Experience Driven design
Course Contact Hours: 4
Course Credits Hours: 4
Course Code: BDES PD 310

Course Objective:
Introduce students to -

- Heuristic evaluation - Understanding how to conduct a heuristic evaluation of any website or application.
- Business to customer - Design their own/or improve on an existing B2C application.
- Complex UX (enterprise, B2B or Financial products) - Understand how Enterprise UX works and design a B2B, Enterprise or Financial product.

Course Description:

- The Experience Design course empowers students with the knowledge, skills, and ethical understanding necessary to create considerate and impactful user experiences that transcend conventional design boundaries while keeping inclusive needs accessible to users.
- The course is an industry-based approach to solving UX problems and will focus on 2 core projects one, a B2C simple project and the second one being a Complex Ux project (B2B, Enterprise or Finance)

Course Contents:

1. Understanding the UX process and power of Observation

- Understanding the use of observation and how it can be used for UX research
- Understanding heuristics and the application of the same.
- Understanding the ux process

2. Application into a real-world project (Simple)

- Applying the understanding through a learning by doing/repetition & reviews for a simple B2C project
- Micro vs macro interactions

3. Application into a real-world project (Complex)

- Applying the understanding through a learning by doing/repetition & reviews for a complex (enterprise, B2B, SaaS, financial product)

Course Outcomes (COs): After completing the course, the student shall be able to

CO1: Understanding: The concept of observation and how it can be used in UX research
CO2: Heuristic Evaluation: Principles of conducting a heuristic evaluation
CO3: Ability to build a B2C & Enterprise UX project from scratch.
CO4: Understanding of the UX process through learning by doing.

References:

Required Resources:

1. "The Design of Everyday Things" by Don Norman (2013)
   ISBN-13: 978-0465050659
2. "About Face: The Essentials of Interaction Design" by Alan Cooper, Robert Reimann, and David Cronin (2014)
   ISBN-13: 978-1118766576

Recommended Resources:

1. "Lean UX: Designing Great Products with Agile Teams" by Jeff Gothelf and Josh Seiden (2016)
   ISBN-13: 978-1491953600
2. "100 Things Every Designer Needs to Know About People" by Susan Weinschenk (2011)
   ISBN-13: 978-0321767530
3. "Hooked: How to Build Habit-Forming Products" by Nir Eyal (2014)
   ISBN-13: 978-1591847786
4. Nielsen Norman Group: Provides valuable insights, articles, and research on UX design.Website: https://www.nngroup.com/
5. Smashing Magazine: Offers a plethora of articles and resources on web design, including UX/UI topics. Website: https://www.smashingmagazine.com/

Specialization: Strategic Design and Management

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 3									
BDES SDM 201	Creative Visualization	3	1	1	2	50	40	10	100
BDES SDM 213	Strategic Marketing	6	2	2	4	50	40	10	100
BDES SDM 207	Trends and Forecasting	4	2	2	1	50	40	10	100
BDES SDM 211	Digital Prototyping	2	1	1	2	50	40	10	100
BDES LS 07	Life Skills - Observership	2			4	50	40	10	100
BDES MT 01	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**							
Semester 4									
BDES SDM 214	Service Research Methodology - Tools & Techniques	4	1	1	4	50	40	10	100
BDES SDM 216	Service and Experience Design - SDM	6	1	1	4	50	40	10	100
BDES SDM 208	Folklores driven Strategies	3	1	1	2	50	40	10	100
BDES SDM 212	UX Design	4	1	1	2	50	40	10	100
BDES MT 02	Minor Elective	3	1	1	2	50	40	10	100
	Total	**20**				50	40	10	100

Course Code	Course	Credits	Periods			Evaluation Scheme			
			Lecture (L)	Tutorial (T)	Practicals (P)	MId Term	End Term	Attendance	Total
Semester 5									
BDES SDM 311	Strategic Management	3	1	1	2	50	40	10	100
BDES SDM 313	Innovation - Discussion	4	1	1	4	50	40	10	100
BDES SDM 305	Basics of Financial Management for Design	3	2	1		50	40	10	100
BDES SDM 315	Consumer Psychology	3	2	1		50	40	10	100

BDES SDM 317	Designing with AI	2	1		2	50	40	10	100
BDES MT 03	Minor Elective	3	1	1	2	50	40	10	100
?????	Apprenticeship	2	1	1		50	40	10	100
	TOTAL	**20**							
Semester 6									
BDES SDM 302	Entrepreneurial Blueprinting	4	2	1	2	50	40	10	100
BDES SDM 304	Strategic Innovation	4	2	1	2	50	40	10	100
BDES SDM 306	User experience Design - SDM	4	2	1	2	50	40	10	100
BDES SDM 308	Strategic Planning and Implementation	3	2	1		50	40	10	100
BDES SDM 310	Portfolio & Dynamic Media	3	1	1		50	40	10	100
BDES MT 02	Minor Elective	2	1	1		50	40	10	100
	Total	**20**							

Course Code	**Course**	**Credits**	**Periods**			**Evaluation Scheme**			
			Lecture (L)	**Tutorial (T)**	**Practicals (P)**	**MId Term**	**End Term**	**Attendance**	**Total**
Semester 7									
BDES SDM 401	Future Focused Design	4	2	1	2	50	40	10	100
BDES SDM 403	ESG Impact and Redesign	4	2	1		50	40	10	
BDES SDM 405	Applied AI	3	2	1		50	40	10	100
BDES SDM 407	Workshops and Toolkits	3	2	1		50	40	10	100
BDES SDM 409	User Interface Design	2	1		1	50	40	10	100
BDES LS 05	Life Skills	2			4	50	40	10	100
BDES MT 02	Minor Elective	4	2	2					100
	TOTAL	**22**							
Semester 8									
BDES SDM 402	Capstone Project Exploration - SDM	6		1	10	50	40	10	100

BDES SDM 404	Capstone Project Execution - SDM	6		1	6	50	40	10	100
BDES SDM 406	Research Writing and Thesis book	4		1	4				
BDES SDM 408	Capstone Display	4		1	2	50	40	10	100
	Total	**20**							

BDES SDM
Semester 3
Creative Visualization (BDES SDM 201)

L	T	P
1	1	2

Course Name: Creative Visualization **Course Contact Hours: 3**
Course Credit Hours: 4 **Course Code : BDES SDM 201**

Course Objectives:

- This course will help the students to create and visualize an idea from scratch to its final execution.
- Explore and understand the factors of basic typography, color and composition which makes Creative Visualisation easy
- It will get a student into a practice to follow a systematic process of making scribbles and generating ideas for a given task leading to its execution digitally.

Course Description:
In this course, students will learn/ explore/ study about Fundamentals of Creative Visualisation. Understanding what is creativity, graphic design, typography, color and composition. These would be applied to different creatives. All this will be taught with a blend of theory, practice /class discussion + hands on work.

Course Contents:
1.Introduction to Creative Visualization

- What is creativity
- Understanding the Process
- What is Graphic Design and knowing about famous graphic designers

2. Learning the Basics of Design

- Learning about the basics of design – Typography, Colour and Composition
- The process and its application

3. Understanding the process to create a creative

- What kind of process goes into making any creative
- It's understanding and application
- Evaluating good and bad design

4. Team Work & Working Individually

- Experiences with peers
- Developing presentation skills

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the entire process of Creative Visualisation.
CO2: Understand graphic design and basic principles of design.
CO3: Demonstrate composition in any creative produced using graphic design principles
CO4: Create Ideations for different briefs for different formats
CO5: Develop strong pitching & presentation skills
CO6: Demonstrate working in a team and as an individual

References:

Required Resources:

1. Tufte, E. R. (2001). The Visual Display of Quantitative Information. Cheshire, CT: Graphics Press.

Recommended Resources:

1. Tufte, E. R. (1990). Envisioning Information (ISBN 978-1930824140). Cheshire, CT: Graphics Press

BDES 2nd Year
Semester 3
Strategic Marketing (BDES SDM 213)

L	T	P
2	2	4

Course Name: Strategic Marketing **Course Contact Hours: 4**
Course Credit Hours: 8 **Course Code : BDES SDM 213**

Course Objectives:

To introduce basic concepts of Marketing such as Marketing Mix, SWOT, Ansoff Matrix, Kano Model, PLC, etc

- To build an understanding of the principles of Marketing, PR, and Branding
- To make students aware of the roles and responsibilities of the Marketing function in the business
- To help the learner in developing skills in creating marketing strategies and finding areas of engagement for a designer

Course Description:

Marketing Strategies is the first "business" related subject that the students of Strategic Design Management are exposed to. This course therefore introduces students to Marketing Concepts and builds an understanding of the roles of marketing and branding managers.

Course Contents:

1. Introduction to Marketing

- Marketing of the 21st Century
- Marketing Mix
- Understanding Customer, Customer segments, Needs, Wants and Desires, Target Customer

2. Value Identification

- Understanding Value, Value Proposition, Value Chain
- Understanding Market, Market Research, Market Intelligence
- Sector – Industry - Competition
- Framework and Tools of a marketing manager

3. Value Creation

- Introduction to Product Development
- Marketing strategy for new and existing products
- Introduction to Branding

- Branding concepts – Brand positioning, Brand Image, Brand Prism, Brand Audit

4. Value Communication

- Brand Communication
- Sales Promotion
- Advertising
- Public Relations

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Demonstrate knowledge of Marketing Principles that drive marketing activities in organizations.

CO2: Fluency in target Market Identification and understanding the needs and preferences of different customer segments.

CO3: Develop of Marketing Strategies by leveraging their knowledge of target markets, product and brand positioning, pricing strategies, and distribution channels

CO4: Evaluate and select appropriate communication channels for different target markets.

CO5: Apply Marketing Concepts in real-world scenarios

CO6: Gain competency in presenting solutions backed by good reasoning

References:

Required Resources:

1. Kotler, P., & Armstrong, G. (n.d.). Principles of Marketing (12th ed.). Pearson Publication.

Recommended Resources:

1. Easy, M. (2009). *Fashion Marketing* (3rd ed.). Wiley Blackwell Publishing.

BDES 2nd Year
Semester 3
Trends and Forecasting (BDES SDM 207)

L	T	P
2	2	1

Course Name: Trends and Forecasting **Course Contact Hours: 4**
Course Credit Hours: 5 **Course Code : BDES SDM 207**

Course Objectives:

- The course focuses on making the students understand the basics of Trends and Forecasting and its relevance to all the industries.
- It helps students to understand Trend to develop a successful business Strategy or outcome

Course Description:

Explore emerging design trends and forecasting methodologies in this dynamic undergraduate course. Analyze market shifts, consumer behaviors, and cultural influences to anticipate future design directions. Develop skills in trend research, analysis, and application to stay ahead in the ever-evolving world of Business.

Course Contents:

1.Introduction to Trend & Forecasting

- What is trend and forecasting?
- Why is it important?
- Methods of Trend forecasting.
- Steps of trend forecasting.
- The right questions to ask as a trend Forecaster

2. Fundamentals of Forecasting

- Methods of forecasting(brief introduction to qualitative and quantitative methods)
- Basic Research Methodologies
- Trend Analysis (previous, present and future)
- Stages of identifying a trend.

3. Relevance of Trend in Strategic Design Management

- Strategic Design Management.
- Business Forecasting and its steps.
- Case study Discussion and analysis
- Introduction to Mind mapping and Evidence Wall.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the theory of Trend and Forecasting and its relevance in business
CO2: Understand different methods of forecasting
CO3:Analyze trends to draw insights
CO4: Apply trends to business to create new scenarios and opportunities
CO5: Demonstrate Pitching and information visualization skills
CO6: Exhibit mature communication skills

References:

Required Resources:

1. Raymond, M. (2010). The Trend Forecaster's Handbook. Laurence King Publishing.
2. Trend Hunters Forecasting Report

Recommended Resources:

1. Wunderman & Thomson. Trend Forecast Report.
2. Vejlgaard, H. (2008). Anatomy of a Trend. McGraw Hill

BDES 2nd Year
Semester 3
Digital Prototyping (BDES SDM 211)

L	T	P
1	1	2

Course Name: Digital Prototyping **Course Contact Hours: 3**
Course Credit Hours: 4 **Course Code : BDES SDM 211**

Course Objectives:

- Understand the basics of computer hardware and software.
- Understand different methods of creating a prototype of a User interface for digital screens.
- Understand the basics of Audio and Video editing.
- Better communication between designers and programmers.

Course Description:
User experience (UX) design consists of creating the backend process for websites, thereby giving relevant experience to the users. The course focuses on right from understanding the basics of websites to creating a portfolio website with relevant tools.

Course Contents:
1.Introduction to HCI and UI Prototyping

- Understanding human computer interaction
- User Journey and Information Architecture
- Low-Fi Prototype (Paper and Digital)
- High-Fi Prototype

2. Introduction to Audio & Video Editing

- Understand story & timeline
- Video Editing Tools
- Animation & Transitions
- Audio Recording & Audio Editing

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understanding the Digital Screens, sizes, ratios, pixels, RGB vs CMYK, Pixel-density.
CO2: Understanding Human-Computer Interaction(HCI).
CO3:Deconstructing a webpage or mobile application to evaluate the different UI elements.
CO4: Design a prototype of the website or mobile application.
CO5: Create a Pitch video for an existing or hypothetical Service or business.

CO6: Exhibit mature communication skills

References:

Required Resources:

1. Interaction Design Foundation. (n.d.). The Encyclopedia of Human-Computer Interaction, 2nd Ed. Retrieved from https://www.interaction-design.org/literature/book/the-encyclopedia-of-human-computer-interaction-2nd-ed

Recommended Resources:

1. UXmatters. (n.d.). Visual-design principles and UX design best practices. Retrieved from https://www.uxmatters.com/mt/archives/2022/08/visual-design-principles-and-ux-design-best-practices.php
2. Laws of UX. (n.d.). Retrieved from https://lawsofux.com/

BDES 2nd Year
Semester 4
Service Research Methodology - Tools & Techniques (BDES SDM 214)

L	T	P
1	1	4

Course Name: Service Research Methodology - Tools & Techniques
Course Credit Hours: 4 **Course Code : BDES SDM 214**

Course Objectives:

- Introduction to design tools
- To build the skills of problem framing, research planning, execution and synthesis in the students.
- To help the students make choices in selection of one research method over another.

Course Description:
Research is the basis for any innovation. This course is designed to dive into various research methods which help to understand the market, the product and the user in depth. This intern helps to generate insights which form the basis of any product or service strategy.

Course Contents:
1. Introduction to Research

- Traditional Research Vs. Design Research
- Double Diamond Method

2. Secondary Research

- Research Planning
- Research Tool

3. Primary Research

- Contextual Research Planning
- Quantitative Research
- Qualitative Research

4. Data Analysis

- Affinity Mapping
- Findings & observations
- Inferences & Insights

5. Report writing

- Concept filtering and finalizing
- Creating professional reports

6. Review

- Presenting ideas to the mentor
- Feedback from the mentor

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the research process and its importance.
CO2: Gain competence in research planning and selecting the right tool
CO3: Demonstrate strength in conducting secondary research and primary research
CO4: Demonstrate documentation of research
CO5: Develop of ideas based on insights
CO6: Gain fluency in converting research to insights.

References:

Required Resources:

1. Portigal, S. (2013). Interviewing Users: How to Uncover Compelling Insights. Rosenfeld Media.

Recommended Resources:

1. Martin, B., & Hanington, B. (2012). Universal Methods of Design: 100 Ways to Research Complex Problems, Develop Innovative Ideas, and Design Effective Solutions. Rockport Publishers

BDES 2nd Year
Semester 4
Service and Experience Design - SDM (BDES SDM 216)

L	T	P
1	1	2

Course Name: Service and Experience Design - SDM **Course Contact Hours: 2.5**
Course Credit Hours: 4 **Course Code : BDES SDM 216**

Course Objectives:

- The course equips students with essential quantitative skills and analytical thinking crucial for modern business.
- Divided into two parts, it covers business quants, financial analysis, and decision modeling, alongside statistics and basic data analytics concepts. Students gain proficiency in problem-solving and data interpretation, preparing them for real-world challenges
- Through collaborative learning and ethical considerations, they develop communication skills and responsibility in applying quantitative methods.
- The course aims to mold proficient, ethical business professionals capable of thriving in data driven environments.

Course Description:

'Strategic Reasoning' is a contemporary course designed to allow students to practice formulating numerical strategies by learning and applying quantitative concepts used in business and data analysis. The course has been divided in two parts:
I. Business Quants & Logical Thinking
II. Statistics & basic concepts of Data Analytics

Course Contents:

1. Introduction to Strategic Reasoning

- Introduction
- Applications of strategic reasoning

2. Application in Business

- Financial Application
- Partnerships & Strategies

3. Data Analysis

- Basics of Data in Business
- Analytics - Central Tendencies
- Analytics - Dispersion

- Time Series & Forecasting

4. Business Models

- Business Model Canvas.
- Reviewing Existing Models
- Understanding values involved in making a life decision.

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Demonstrate application of Mathematical and Statistical Techniques.

CO2: Develop critical thinking skills to assess data, identify patterns, and draw relevant conclusions for business scenarios.

CO3: Utilize logical reasoning and quantitative methods to solve complex business problems, including those related to finance and data analysis.

CO4: Interpret and analyze data effectively using statistical techniques

CO5: Develop the ability to make evidence-based decisions by analyzing data, assessing risks, and considering various factors impacting business outcomes.

References:

Required Resources:

1. Dikshit, Dr. A., & Jain, Dr. J. K. (2019). Business Mathematics. Himalaya Publishing House.

Recommended Resources:

1. Kapoor, V. K. (2011). *Introductory Business Mathematics*. Sultan Chand & Sons

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BDES 2nd Year
Semester 4
Service and Experience Design (BDES SDM 206)

L	T	P
1	1	4

Course Name: Service and Experience Design **Course Contact Hours: 3**
Course Credit Hours: 6 **Course Code : BDES SDM 206**

Course Objectives:

- To introduce the fundamentals of services such as service economy, service sectors etc & to explain the importance of service design.
- To introduce the various tools & framework & process required for service design.
- To build competency in solving service design challenges and identify new service opportunities.

Course Description:
The course is designed to introduce the subject of and to explain the importance of service design to the learners. Learners will learn various tools, frameworks and processes required for service design. Through design research they will discover service design challenges and identify new service design opportunities. This course will also contribute to the holistic understanding of the UI/UX industry.

Course Contents:

1. Understanding if there's need for a Service

- Introduction
- Elements of Service Design
- Case studies
- Stakeholder Understanding
- Identify Projects
- Service Blueprints.

2. Creating a Service

- Research Analysts
- Ideation
- Development
- Testing
- Prototyping
- Pitch

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Gain an understanding of the service sector & the importance of learning service design.

CO2: Gain competency in identifying different opportunities in improving an existing service or introducing new service innovations.
CO3: Gain competency in analyzing different interactions in a service ecosystem by means of different tools such as service blueprint and stakeholder interactions.
CO4: Demonstrate fluency in understanding of service design process and application of different tools to improve innovative services.
CO5: Showcase strength in planning and executing new ideas by means of iterative prototyping.

References:
Required Resources:

1. Macintyre, M. (2011). Service Design and Delivery. Springer International Publishing.
2. Penin, L. (2018). An Introduction to Service Design: Designing the Invisible. Bloomsbury Visual Arts.

Recommended Resources:

1. Meroni, A., & Sangiorgi, D. (2011). Designing for Services. Routledge
2. Smith, A., Osterwalder, A., Bernarda, G., Papadakos, T., & Pigneur, Y. (2014). Value Proposition Design: How to Create Products and Services Customers Want. Wiley

BDES 2nd Year
Semester 4
Folklore driven Strategies (BDES SDM 208)

L	T	P
1	1	2

Course Name: Folklore driven Strategies **Course Contact Hours: 3**
Course Credit Hours: 3 **Course code : BDES SDM 208**

Course Objectives:

- To introduce students to the realm of folk tales and storytelling through reading, writing, conceptualization, drawing & observational and practical exploration of the styles of folklore across India.
- To reinforce the treasure of Folklore at the core of culture and design across our country.
- To bridge generations through modern means.
- To envision and design a vibrant new India for tomorrow by delving into the wide range of stories, morals and mythologies stored in these tales & traditions.

Course Description:
This 15 week elective program is designed to introduce students to the realm of folk tales and storytelling through writing, conceptualization, drawing & observational and practical exploration of the styles of folklore across India. Folklore is at the core of culture and design across our country. It helps us engage multiple generations simultaneously while bridging them as well. By delving into the wide range of stories, morals and mythologies stored in these age old tales, we can envision and design a vibrant new India for tomorrow.

Course Contents:
1. Introduction to Folklore and Storytelling in India

- Introduction to Folklore and Storytelling Across India
- The North
- The West & Central
- The East
- The South
- Urban Folklore and the Future of Storytelling

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Understand the Societal Structures of the past through storytelling & communication

CO2: Understand the Idea Validation Process
CO3: Show strength in Human interaction and Behavior analysis
CO4: Demonstrate of contextualization of Ideas using storyboarding
CO5: Gain fluency in materializing of Design Concepts and writing skills
CO6: Fluency in materializing of Design Concepts and writing skills

References:

Required Resources:

1. Collins, W., et al. (2018). Graphic Design and Print Production Fundamentals. BCcampus
2. Savage, A. (2019). Every Tool's A Hammer. Atria Books.

Recommended Resources:

1. Kandinsky, W. (2013). Point & Line To Plane. Martino Fine Books.(available in Library)
2. Kandinsky, W. (2019). Concerning The Spiritual In Art. Digireads.com. (available in Library)
3. Pranay. (2020). BUDDHA: Spirituality For Leadership & Success [Paperback]. Fingerprint Publishing.(available in Library)
4. Singh, K. (2019). Folk Theatres of North India: Contestation, Amalgamation and Transference. Routledge.(available in Library)
5. Ramanujan, A.K. (1994). *Folktales from India*. Pantheon.

BDES 2nd Year
Semester 4
UX Design (BDES SDM 212)

L	T	P
1	1	2

Course Name: UX Design **Course Contact Hours: 4**
Course Credit Hours: 4 **Course code : BDES SDM 212**

Course Objectives:

- In-depth understanding of advanced principles of UX design for digital interfaces, human-computer interaction (HCI), and human-centered design.
- Understand key stakeholders including users, vendors, partners, investors, government and regulatory bodies, and other stakeholders.
- Conduct comprehensive research and investigation into the complex information architecture for B2C models.
- Direct the research and investigation into the B2B structure exploring business opportunities around the business ecosystem.

Course Description:

User experience design is the process of creating engaging and enjoyable experiences between users and the products and services they use. This course will explore the advanced principles of UX design for digital interfaces, human-computer interaction (HCI), and human-centered design. It also covers in-depth knowledge of usability testing, information flow, along with detailed study of B2C, B2B models and hands-on user experience (UX) techniques.

Students will learn how to design and develop complex interactive projects, undertaking comprehensive research and will conduct an extensive investigation into the interface, mechanism, controls, and aims of user experience. They will be provided with the tools to conceive, plan, and develop an interactive system, and they will become aware of the importance of their role in the development of interactive media.

Course Contents:

1. **Understanding Heuristic Evaluation**

- Introduction to Heuristic Evaluation
- Importance of early issue identification
- Match between system and the real world
- An aesthetic and minimalist design

2. Understanding Information Architecture in detail

- Introduction to Information Architecture
- Facilitating information retrieval and understanding
- Hierarchy, Structure, and Content Organization, Taxonomy, Classification, and Search Functionality

3. Advanced Topics in Information Architecture

- Reducing cognitive load through consistent labelling
- Analysing a successful implementation of information architecture
- MID TERM
-

4. B2C UX Design

- User-Centric Approach and Intuitive Interfaces
- Understanding B2C consumer needs and preferences
- Personalization, Feedback, and E-Commerce Considerations
- Accessibility, Analytics, and Customer Support Integration
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4. B2B UX Design

- System Design, Complex User Ecosystem and Understanding Business Goals
- Navigating a complex B2B user ecosystem
- Aligning UX with broader organisational strategies
- Information Density, Task Efficiency, and Scalability

5. Review and Improvisation

Course Outcomes (COs): By the successful completion of this course, students will be able to:

CO1: Demonstrate a comprehensive knowledge of heuristic principles and apply them to digital products in diverse contexts to improve the usability and user experience of digital interfaces.

CO2: Analyse key stakeholders including primary users, vendors, partners, investors, government and regulatory bodies, ensuring a holistic understanding of the ecosystem in which UX design operates.

CO3: Develop understanding of advanced concepts in UX design, including accessibility and equity-focused design to create inclusive, and engaging experiences.

CO4: Proficient in conducting comprehensive research and investigation to establish effective information architectures tailored for complex structures.

CO5: Demonstrate understanding of user behaviours, preferences, and optimizing digital interfaces to enhance user engagement and satisfaction in consumer-focused environments for B2C.

CO6: Execute strategic insight into B2B structures gaining insights into the business ecosystem to further explore potential business opportunities, foster partnerships, and understand the intricacies of designing user experiences within a business-to-business context.

References:

Required Resources

- The Design of Everyday Things by Don Norman
- Lean UX by Jeff Gothelf and Josh Seiden

Recommended Resources

- These will be shared on Google classroom.

BDES 2nd Year
Semester 4
Introduction to Strategic Design Studies (BDES SDM 210)

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Course Name: Introduction to Strategic Design Studies **Course Contact Hours: 3**

Course Credit Hours: 3 **Course code : BDES SDM 210**

Course Objectives:

- Strategic Design Studies focus on ideological contexts set by design thinkers and commentators.
- Examines how these ideologies help designers engage with everyday dilemmas.
- Encourages students to create their own design manifestos.
- Guides students to use these manifestos to inform future design and strategic initiatives.

Course Description:

Design Ideologies and Manifestos is a dynamic exploration of the ideological landscapes established by influential design thinkers and commentators. This course delves into the nuanced dilemmas encountered by emerging designers in their creative journey, such as the tension between excessiveness and minimalism, the imperative for environmentally friendly practices versus sustainability, the trade-off between affordability and durability, and the choice between permanence and ephemerality. Through a series of thought-provoking examples and case studies, students engage deeply with these dilemmas to formulate their own design manifestos. By critically analyzing the ideologies at play and synthesizing their personal design philosophies, students are empowered to shape their future design endeavors and strategic initiatives. Through a blend of theoretical exploration, practical application, and reflective discourse, this course serves as a catalyst for students to navigate the complex intersections of design theory and practice, ultimately fostering the emergence of innovative and socially conscious designers.

Course Contents:

1. Manifesto Building

- Deconstruction of iconic manifestos
- What goes into a manifesto? What is the need for manifestos?
- How do manifestos impact the design world?
- Building a personal manifesto

2. Mission, Vision, and Strategy

- Understanding of mission and vision statements
- Importance of strategy building through mission and vision

- Analysis of statements by organizations
- Goal-defining and goal-achieving strategies for companies
- Building mission and vision statements
- Understanding project-building through organizational goals

Course Outcomes (COs): After completing the course, the student shall be able to:

CO1: Gain an understanding the Societal Structures of the past through storytelling & communication

CO2: Gain an understanding of the Idea Validation Process

CO3: Gain competence in Flow Visualization and Social interaction

CO4: Gain fluency in Human interaction and Behavior analysis

CO5: Demonstrate understanding of contextualization of Ideas using storyboarding

CO6: Demonstrate fluency in materializing of Design Concepts and writing skills

References:

Required Resources:

1. Covey, S. R., & Garland, K. (2003). First Things First. Pocket Books.
2. Mau, B. (1998). Incomplete Manifesto for Growth. [Self-published].

Recommended Resources:

1. Rams, D. (2021). Ten Principles for Good Design. Prestel.
2. Hanna, K. (n.d.). The Riot Grrrl Manifesto- https://designmanifestos.org/kathleen-hanna-the-riot-grrrl-manifesto.