

School of Design

Bachelor of Design (Hons.)
OR
Bachelor of Design (Hons.)
With Research

Based on NEP-2020

(Effective from academic session 2024-25)

School of Design Bachelor of Design (4 Years)

Program Outcomes (POC)

Our undergraduate program is aimed at equipping students with skills to:

- Apply critical and analytical skills and methods to the identification, evaluation and resolution of problems
- Engage confidently in self-directed study and research
- Communicate ideas effectively in written, graphic and oral formats
- Operate effectively in multicultural and diverse environments
- Use appropriate technologies
- Recognize and understand the ethical responsibilities of individuals and organizations in society

Program Specific Outcome (PSOC)

Our curriculum across four years will help students gain:

- The ability to solve design problems, including the skills of problem identification, research and information gathering, analysis, generation of alternative solutions, prototyping and user testing, and evaluation of outcomes.
- The ability to describe and respond to clients and contexts that design solutions must address, including recognition of the physical, cognitive, cultural, and social human factors that shape design decisions.
- The ability to create and develop visual form in response to design problems, including understanding principles of visual organization/composition and application.
- An understanding of tools, technologies, and materials, including their roles in creating, producing, and using visual forms. This includes both traditional and digital media.
- Functional knowledge of design history, theory, and criticism, including understanding the similarities, differences, and relationships among the various design specializations.
- By applying a broad knowledge of design across a range of disciplines with in-depth knowledge in at least one area of study
- Through the application of project-based learning, incorporating critical, analytical and methodological skills relevant to the identification and resolution of problems in practical and creative ways
- By applying appropriate methods of research and investigation in addressing problems
- By demonstrating skills and use of technologies to enable the production of designed outcomes appropriate to the relevant discipline
- An understanding of basic business practices, including the ability to organize design projects and to work productively as a member of teams.
- Experiences that encourage familiarity with a broad variety of design work in various specializations and media.
- Understanding field realities by engaging with exposure and projects in the real world.

COURSE OUTCOMES

YEAR 1

Course Code:	DNC101	Course Title:	Design Sketching
Course Outcomes:			

The student at the completion of the course will be able to:

- Fundamentals of sketching
- Understanding of freehand drawing techniques
- Basic understanding of sketching tools
- Understanding of one, two Point Perspective, Shading rendering
- Anatomy drawing

Course Code: DNC102	Course Title: Analytical Drawing
Course Outcomes:	

The student at the completion of the course will be able to:

- Use of Tools- Straight Edge Ruler and set Square
- Understand 2D and 3D forms using freehand construction
- Principles of geometric construction
- Aim is to encourage students to observe and evolve geometric patterns and both micro and macro levels.

Course Code: DNC103	Course Title:	Color & Composition
Course Outcomes:		

The student at the completion of the course will be able to:

- **Understand Elements & Principles of Design**
- **Understand Color Theory**
- **Understand Gestalt Theory**
- Translation of the abstract into 2D Form

Course Code: DNG101	Course Title: Material & Workshop Skills
Course Outcomes:	

The student at the completion of the course will be able to:

- Exploring the use of materials.
- Understand material properties.
- Materials explored will include Plaster of Paris, Wood, Metal Sheet and Polystyrene & Acrylic.
- Use of Hand tools.
- Transform material properties into function.

Course Code: DNS101	Course Title: Creative Thinking
Course Outcomes:	

The student at the completion of the course will be able to:

- Understand the role of creativity and innovation in your own work and in other disciplines.
- Understand the importance of diverse ideas, and to convey that understanding to others.

Course Code: DNC154	Course Title: Digital Sketching
Course Outcomes:	

- 1. Understanding of digital drawing tools
- 2. Basic and advanced Drawing skills
- 3. Understanding of layers and composition

Course Code:	DNC152	Course Title: Design Concerns	
Course Outcomes:			
The student at the completion of the course will be able to:			

- A broad overview of design & creative approaches to problem solving
- Ability to inter-relate concepts

Course Code:	DNC153	Course Title:	Geometry & Form in Space
<u> </u>			

Course Outcomes:

The student at the completion of the course will be able to:

- Change 2D into 3D forms
- introduced to the concept of geometric and organic volumes.
- Properties of basic solids like cube, cone, pyramid, cylinder and prism
- Platonic and Archimedean solids

Course Code:	DNG152	Course Title:	Digital Methods
Course Outsemes			

The student at the completion of the course will be able to:

1. Fundamentals of software, basic knowledge of software like Adobe Photoshop, Adobe InDesign,

Adobe Illustrator.

- 2. Understand and use graphic software tools.
- 3. Understanding of layout and grid fundamentals.

Course Code: DNS151	Course Title: History of Design
Course Outcomes:	

The student at the completion of the course will be able to:

- Understand the history of design as a distinct discipline
- History of design in the West
- History of design in the Indian context

YEAR 2

Course Code: DNC201	Course Title:	Introduction to Typography
Course Outcomes:		

The student at the completion of the course will be able to:

- Fundamental of typographic principles
- Elements of typography like terminology & measurement, history and evolution of type, printing technologies.

Course Code: DNG2012	Course Title: Photography for Documentation
Course Outcomes:	

- Master Visual Storytelling Techniques
- Learn Ethical and Contextual Documentation
- **Enhance Technical and Post-Processing Skills**

Course Code:	DNS202	Course Title:	Display & Exhibition
Course Outcomes:			

- 1. Fundamentals of exhibition design, including spatial planning, storytelling, and creating engaging visitor experiences.
- 2. Generate innovative design concepts tailored to specific themes, audiences, and project
- 3. Design and prototype exhibition layouts, integrating key elements such as graphics, lighting, materials, and interactive features.

Course Title: Illustration Course Code: DNE201 **Course Outcomes:**

The student at the completion of the course will be able to:

- Understand the basic approach to drawing and composition as a means of story-telling or information giving.
- Effectively communicate an idea, explain a concept or tell a story through pictures .

Course Code: DNE203 Course Title: Publication Design & Printing **Course Outcomes:**

The student at the completion of the course will be able to:

- Understand the process of printing.
- Fundamentals of page layout
- **Explore Prints and posters**
- Development of skills and advanced knowledge of publishing software, with emphasis on the maintenance of visual continuity in documents for publication

Course Code: DNE202 Course Title: Form Derivation I Course Outcomes:

The student at the completion of the course will be able to:

- Introduction to principles of form and aesthetics
- Principles of two dimensional form and three dimensional form
- Generating new form and application in product design

Course Code: DNE204 Course Title: Simple Product Design

Course Outcomes:

The student at the completion of the course will be able to:

- Understand form derivation, ergonomics and material studies in the context of tangible products
- Designing simple products that meets user needs.

Course Code: DNC251 Course Title: Digital 3D Modeling Course Outcomes:

The student at the completion of the course will be able to:

- **Understand 3D Software**
- Learn 3D modeling, texturing, lighting, camera, rendering.
- Basic animation- keyframe animation & rendering

Course Code: DNC252/DNG251 Course Title: Interaction Design A/B

Course Outcomes:

- Basic Concepts in Human Computer Interaction.
- Basic Knowledge about principles and method of Interaction design
- Aims at imparting knowledge and furthering research into the domain of designing interactive experiences in media, products and computer design applications.

Course Code: DNS251	Course Title: Field Study I
Course Outcomes:	

- Develop sensitivity to design in our environment
- Develop sensitivity to socio-cultural contexts of design
- Field learnings and experiences in design

Course Code: DNE251	Course Title:	Moving Graphics & Storyboarding
Course Outcomes:	-	

The student at the completion of the course will be able to:

- Understanding storyboarding and planning
- Basics of after Effects/Premiere keyframe concepts and principles.
- **Understand Motion Graphics**.

Course Code: DNE252	Course Title: Form Derivation II			
Course Outcomes:				
The student at the completion of the course will be able to:				
 Introduction to advanced principles of form and aesthetics 				
Principles of form families and house styles				

Generating new form refining existing forms

YEAR 3

Course Code:	DNC301	Course Title:	Digital Illustration
Course Outcomes: Reinforcing Illustration Skills in digital medium.			

The student at the completion of the course will be able to:

- 1. Create illustrations in a digital environment and learn rendering skills.
- 2. Learn use of computers as a medium and as an additional tool for illustrators.
- 3. How to translate hand drawn items into digital products

Course Code:	DNC302/DNG301	Course Title:	Space Design A/B	
Course Outcomes: efficient and economic space design understanding				
The student at the completion of the course will be able to:				

- 1. Understand physical spaces and the importance of designing them to fit human comfort and wellness.
- 2. Importance of space ergonomics and sustainability in space.
- 3. Understand layouts, materials and budgets while working with space.

Course Code: DNP301	Course Title: Field Study II		
Course Outcomes :			
The student at the completion of the course will be able to:			

- Develop sensitivity to design in our environment
- Develop sensitivity to socio-cultural contexts of design
- Field learnings and experiences in design

Course Code:	DNE301	Course Title:	Design for Immersive Media
Course Outcomes			

- 1. Basic understanding of AR / VR and transmedia technologies
- 2. Understanding of hardware and software components of immersive media
- 3. Deliver basic designs for immersive environments

Course Code: DNE302 Course Title: Advanced Prototyping **Course Outcomes**

The student at the completion of the course will be able to:

- 1. Understand methods and ways of prototyping for creating products.
- 2. Understand materials and their usage in prototyping and deciding how best they can be used to simulate a real life product with them.
- 3. Create a prototype that either looks, feels or functions like the original product.

Course Code: DNC351 Course Title: Packaging Design

Course Outcomes

The student at the completion of the course will be able to:

- 1. Understanding of what goes in packaging design.
- 2. Understand the importance of packaging innovation on the lines of creating environmentally friendly and sustainable packaging.
- 3. Ability to create packaging prototypes along with the visual component utilizing graphic design inputs.

Course Code: DNP351 Course Title: Portfolio Building

Course Outcomes

The student at the completion of the course will be able to:

- 1. Learn to present their work effectively and efficiently to prospective clients and employers.
- 2. Learn to organize and present their work, brand themselves and present their work across media.
- 3. Create their own portfolio.

Course Code: DNC352/DNG351 Course Title: Identity Design A/B **Course Outcomes**

The student at the completion of the course will be able to:

- 1. Develop understanding of Brands & Brand Identity Design.
- 2. Understand how to approach and develop branding and collaterals.

Course Code: DNE351 Course Title: Introduction to Film & Script Writing **Course Outcomes**

The student at the completion of the course will be able to:

- 1. Understanding Of Scriptwriting And Video.
- 2. Creating A Screenplay.
- 3. Write a screenplay for and create and edit a short film.

Course Code: DNE352 Course Title: Complex Product Design

Course Outcomes

- 1. Design technically complex products with sound demonstration of design skills as well as dealing with technical complexity
- 2. Integrate knowledge of manufacturing systems into product design
- 3. Understand market and customer requirements and translate them into a comprehensive design brief

Course Code: DNP401	Course Title:	Internship
Course Outcomes		

- 1. Learn about the industry and its culture.
- 2. Understand teamwork and working with different units of an institution.
- 3. Real time exposure to working in a design studio.

Course Code: [DNC402/DNG401	Course Title:	Social Design A/B
Course Outcomes			

The student at the completion of the course will be able to:

- 1. Understand the importance of participation of each stakeholder in design.
- 2. Create a project based on in-depth analysis via participation of local populace in a rural community.

Course Code: DNC401	Course Title:	Design Management & Entrepreneurship
Course Outcomes		
The student at the completion of the course will be able to:		

- 1. Understand aspects of the business of design.
- 2. Gauge what makes a design profitable. Understand strategies of production and scaling.
- 3. Recognize types of intellectual property and its application and importance in design.

Course Code: DNE401	Course Title: Copy Writing		
Course Outcomes			
The student at the completion of the course will be able to:			

- 1. Understand the importance of copy in executing good design communication
- 2. Support design work with the use of effective copy

Course Code: DNE402	Course Title:	Electricals & Electronics
Course Outcomes		

- 1. To Make Students Understand Critical Non-Ideal Effects In Electronic Devices and Systems And How To Address Such Effects
- 2. Enabling Them To Design And Construct Physical electronic Circuits That Operate As Desired.

Course Code:	DNP451	Course Title:	Design Dissertation	
Course Outcomes				
The student at the completion of the course will be able to:				

- Plan and execute a design project that deals with systems
- Plan and design modular solutions that can be customized

Course Code:	DNC451	Course Title:	Colloquium	
Course Outcomes				
The student at the completion of the course will be able to:				

- Present their Project in a professional manner as is expected in the industry
- Should be able to communicate the salient points of their design process

COURSE ABSTRACTS

FIRST SEMESTER

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	First
Subject: Design					
Course Code: DNC101 Course Title: Design Sketching					
Course Outcomes:					

Course Outcomes:

The student at the completion of the course will be able to:

- Fundamentals of sketching
- Understanding of freehand drawing techniques
- Basic understanding of sketching tools
- Understanding of one, two Point Perspective, Shading rendering
- Anatomy drawing

Credits:	4		Core
Max. Marks:	100	M	n. Passing Marks: 30
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	1-0-3

Unit	Topics	No. of Lectures
ı	Design Sketching Type of pencils and its use, line weight and variation, construction lines, hand movement exercise, grading exercise. Freehand straight lines, smooth curves, ellipses, ellipses in minor axis.	
II	Freehand straight lines, smooth curves, ellipses, ellipses in minor axis,	
III	Perspective sketching- Ground line, station point etc, Above eye level and below eye level, One point perspective and two point perspective Indoor and outdoor perspective drawing, Texture and Pattern, Figure in motion, detailed objects, observing and drawing details of natural and manmade objects, Thumbnail sketches and quick studies.	15
IV	Drawing of objects outdoors. Exercises for improving observation and visual memory. Detailed drawing/Object drawing	15
V	Human Anatomy- Muscle structure, 7.5 head figure, hand, feet, ear, nose	20

Suggested Readings:

- 1. Design Drawing by Francis D.K Ching & Steven P. Juroszek, wiley
- 2. Rendering with pen & Ink by Robert W. Gill, W. Norton & co inc
- 3. Sketching: The basics by Roselien Steur
- 4. Anatomy & Drawing by Victor Perard
- 5. How to Draw: Drawing and Sketching objects and Environments your imagination by Scott Robertson

This course can be opted as an elective by the students of following subjects:		Open for all
		Assignment
	Suggested Continuous Fuglistion Methods	Submissions,
	Suggested Continuous Evaluation Methods:	Class Reviews &
		Presentations

Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.

Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	First
Subject: Design					
Course Code: DNC102 Course Title: Analytical Drawing					
Course Outcomes:					

Course Outcomes:

- Use of Tools- Straight Edge Ruler and set Square
- Understand 2D and 3D forms using freehand construction
- Principles of geometric construction
- Aim is to encourage students to observe and evolve geometric patterns and both micro and macro levels.

Credits: 4	Core	
Max. Marks: 100	N	lin. Passing Marks: 30
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-3

Unit	Topics	No. of Lectures
ı	Use of tools Straight Edge Ruler and set Square, T Squares, Compasses, pencils etc. Construction will include lines, angles, polygons, derivations, curvilinear shapes.includes use of to aid geometric drawing	15
II	Drawing various kinds of straight lines, including those that connect random points. Further assignments involve the analysis of forms and objects into basic construction principles in one's mind and then using that to create an accurate representation on paper.	15
Ш	Depictions of 2D and 3D forms using freehand construction techniques while encouraging them to look at forms in a critical, deconstructive manner.	15
IV	Use of isometric grids and architectonic explorations will help students strengthen their analytical drawing skills further. Introduced to the concept of the Fibonacci series, the golden ratio, divine proportions etc Exploring straight lines with variations in weight. Connecting points in space. Making cubes, ellipses, cylinders & spheres freehand, using analytical methods. Making revolved forms based on a defined side profile (bottles, vessels). Representing thickness and flanges; Adding details like handles, spouts. Isometric grids and architectonic forms. Proportional transformation of form based on grids.	15

Analyzing complex forms into basic geometry and then 'constructing'	
them freehand .	
Additive and subtractive forms in drawing analytically.	

Suggested Readings:

- 1. Design Drawing by Francis D. K. Ching and Steven P. Juroszek, Wiley
- 2. Freehand Drawing For Architects and Interior Designers by Magali Delgado Yanes
- 3. Perspective and Sketching for Designers by Jessica Newman
- 4. Geometry of Design: Studies in Proportion and Composition by Kimberly Elam
- 5. Shell foundations: geometry, analysis, design and construction by N. P. Kurian
- 6 .Geometry of construction by T.B. Nichols and Norman Keep

This course can be opted as an elective by the students of following subjects:	Open for all
Suggested Continuous Evaluation Methods:	Assignment Submissions,
	Class Reviews & Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	First
Subject: Design					
Course Code:	Course Code: DNC103 Course Title: Color & Composition				

Course Outcomes:

- Understand Elements & Principles of Design
- Understand Color Theory
- Understand Gestalt Theory
- Translation of the abstract into 2D Form

Credits: 4		Core	
Max. Marks: 10	00	Min. Passing Marks: 30	
	ectures-Tutorials-Practical ours per week):	L-T-P:	2-0-4

Unit	Topics	No. of Lectures
	Basic dot, transforming to a line, shapes and other two dimensional manifestations like patterns and texture. The emphasis will be on two	
1	dimensional (2D) exploration. Form exploration will include geometric and organic forms though the two will be differentiated and taught to	15
	explore and express abstract concepts with the use of basic forms.	
	Creating patterns & textures using basic forms will also be explored. It	
п	will be important to build sensitivity to use of elements in terms of	20
	shape, number, size, proportion etc. White space as a design tool will be	20
	explored and employed to achieve visual equilibrium. Movement in 2D	

	form is also to be studied through a single representation and through multiple panels.	
III	Color theory (value, shade, hue etc), creation of color variation (additive, subtractive etc), various color wheels and their derivatives (complimentary, triads etc) color scales, color interaction etc.	20
IV	Gestalt theory and its principles-Principle of proximity. Principle of closure, Principle of similarity, Principle of continuity.Principles of perception,Principle of organization, Principle of symmetry, its use in visual communication.	20
v	Composition Principles- Balance, contrast, Emphasis, movement, pattern, rhythm, unity/variety. Rule of third, golden section, golden triangle, golden spiral.	15

Suggested Readings:

- 1. Design Basics by David A. Lauer and Stephen Pentak
- 2. Design Element: Understanding the rules and knowing when to break them by Timothy Samara
- 3. Elements of Design: Form & Color by HK Vyas
- 4. Color, Form and Shape by Birren
- 5. Goethe's Theory of Colors by Johann Wolfgang von Goethe
- 6. Color Interaction with a Three Dimensional Form by HK Vyas
- 7. Color: A Workshop for Artists and Designers by David Hornung

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methods.	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	First
Subject: Design					
Course Code: DNG101 Course Title: Materials & Workshop Skills					
Course Outcomes					

Course Outcomes:

- Exploring the use of materials.
- Understand material properties.
- Materials explored will include Plaster of Paris, Wood, Metal Sheet and Polystyrene & Acrylic.
- Use of Hand tools.
- Transform material properties into function.

Credits: 4	Core
Max. Marks: 100	Min. Passing Marks: 30

Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 1-0-		0-3		
Unit	Тор	Topics		No. of Lectures
ı	Use of hand tools. Material study like wood, plaster of paris, metal sheet, Cement, Polystyrene, Acrylic sheet etc.		15	
11	Exploring the use of materials as per their innate properties and functions derived from them. Materials explored will include Plaster of Paris, Wood, Metal sheet, Polystyrene, Acrylic etc.		15	
III	Theoretical aspects of these materials and explore practical aspects like physical properties, weathering, manipulation etc.		15	
IV	Explore new form and functions using materials in combination and alone.		15	
Suggested Readin	ngs:			
 Plaster of Paris Understanding Exquisite module 	Beginner- Charles Harold Hayward : Techniques from scratch paperback by R wood: A craftsman's guide to wood techr ılar origami by Meenakshi Mukerji igami: Exploring 3D geometric design		Hoadly	
				Open for all

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	First
Subject: Design					
Course Code:	DNS101	Course Title:	Creative Thinking		
	-	-			

Course Outcomes:

- Understand the role of creativity and innovation in your own work and in other disciplines.
- Understand the importance of diverse ideas, and to convey that understanding to others.

Credits:	2	Core		
Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	2-()-0
	_			

Unit	Topics	No. of Lectures
1	Introduction to design thinking. The five stages of design thinking Stage 1: Empathize—Research Your Users' Needs.	10

II	Stage 2: Define—State Your Users' Needs and Problems. Stage 3: Ideate—Challenge Assumptions and Create Ideas. Stage 4: Prototype—Start to Create Solutions. Stage 5: Test—Try Your Solutions Out. How to improve creative thinking. Random Input; Problem Reversal; Ask Questions; Applied Imagination - Question Summary; Lateral Thinking; Six Thinking Hats; The Discontinuity Principle; Checklists; Brainstorming; Forced Relationships/Analogy; Attribute Listing; Morphological Analysis; Imitation; Mindmapping; Storyboarding; Synectics; Metaphorical thinking; Lotus Blossom Technique.	15		
III	Aids and barriers to creativity.	5		
Suggested Readings:				
2. The 4 lenses of in3. Techniques for Cr	e Thinking : Rod Judkins novation; a power tool for creative thinking : Rowan Gibson eative Thinking; Robert Harris Lobotomy : Tom Monahan			
This course can be o	pted as an elective by the students of following subjects:	Open for all		
Assign Suggested Continuous Evaluation Methods: Class Pres				
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma. Open for all				
Suggested equivalent online courses:				
SWAYAM OR NPTEL COURSE TITLE HERE + LINK				
Further Suggestions:				
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.				

SECOND SEMESTER

Programme/ Class:	Bachelor of Design (4 Years)	Year:	First	Semester:	Second
Subject: Design					
Course Code:	Course Code: DNC 154 Course Digital Sketching				
Course Outcomes					
The student at the	completion of th	e course will be	able to:		
1. Understanding o	f digital drawing t	ools			
2. Basic and advance	ed Drawing skills				
3. Understanding o	f layers and comp	osition			
Credits:	4			Core	
Max. Marks:	Max. Marks: 100 Min. Passing Marks: 30				30
Total No. of I	Total No. of Lectures-Tutorials-Practical				
(in hours per week):				J-3	
Unit Topics No. of Lectu				No. of Lectures	

1	Overview of digital sketching, Basic digital drawing tools and software, Digital drawing basics: ellipses, spheres, etc.; values and tone; colour theory.	15
II	One and two point perspectives, above eye level below eye level, ellipses, spheres, spiral forms, and random curves	15
III	Colour medium explore-pen, watercolour alcohol marker, soft pastel,ink drawing exercise, explore different types of papers.	15
IV	Basic proportion, volume construction, muscle, human anatomy, gesture drawing, line of action, stick figure, light and shade, foreshortening, drapery, rhythm and grace	15

Suggested Readings:

- 1. "The Art of Digital Illustration" by Michael Burns
- 2. "Digital Art Masters" by 3DTotal
- 3. "The Digital Sketchbook" by Steve Whitaker
- 4. "The Sketching Handbook" by Steven Heller- A foundational guide to sketching and drawing.
- 5. "The Art of Sketching" by Dan Gheno: A guide to sketching and drawing for artists and designers.

This course can be opted for as an elective by the students of the following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation iviethous.	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in	On on for all
class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES, ETC.

Programme/		Year:	2nd	Semester:	Second	
Class:	Design (4 Years)					
Subject: Design						
Course Code:	DNG 152	Course Title:	Digital Methods			
Course Outromes						

Course Outcomes

- 1. Fundamentals of software, basic knowledge of software like Adobe Photoshop, Adobe InDesign, Adobe Illustrator.
- 2. Understand and use graphic software tools.
- 3. Understanding of layout and grid fundamentals.

Credits:	4	Skill Enhancement Course
Max. Marks:	100	Min. Passing Marks: 30

	Total No. of Lectures-Tutorials-Practical (in hours per week): L-P-T: 1-0-3		0-3	
Unit	Top	oics		No. of Lectures
I	Introduction to design software: Adobe Creative Cloud (InDesign, Illustrator, Photoshop), Basic design principles1. Introduction to Adobe InDesign, Creating a new document in InDesign, Understanding InDesign's workspace and tools, Basic text and image editing in InDesign, Saving and exporting files in InDesign			15
II	Types of grids: single-column, multi-column, modular, and hierarchical, Grid ratios and proportions, Creating and applying grid systems in design software, Best practices for using grids in design			15
III	Layout Principles: Visual hierarchy symmetry, Contrast and emphasis Applying layout principles in design	s, Movement and		15
IV	Typography in Layout: Typography fundamentals: font selection, sizing, and spacing, Typography in layout: headlines, body text, and captions, Creating and applying typography styles in design software, Best practices for using typography in design			15
Suggested Reading	is:			
· ·	Graphic Design" by Josef Müller-Br	ockmann		
2. The Grid Book" b	, 55	11-11:-		
1	gn of the Printed Page" by Richard Typographic Style" by Robert Bring			
		-	g subjects:	Open for all
This course can be opted as an elective by the students of the following subjects: Suggested Continuous Evaluation Methods:		Assignment Submissions, Class Reviews & Presentations		
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.				Open for all
	Suggested equivalent online courses:			
	SWAYAM OR NPTEL COURSE TITLE HERE + LINK			
Further Suggestion	S:			

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO

OTHER COURSES, ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	Second
Subject: Design					
Course Code: DNC153 Course Title: Geometry & Form in Space					

Course Outcomes:

The student at the completion of the course will be able to:

- Change 2D into 3D forms
- introduced to the concept of geometric and organic volumes.
- Properties of basic solids like cube, cone, pyramid, cylinder and prism
- Platonic and Archimedean solids

Credits: 4	Core	
Max. Marks: 100	Min. Passing Marks: 30	
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	2-0-4

Unit	Topics	No. of Lectures
ı	Introduced to the concept of geometric and organic volumes, how to generate them and further, how to evolve them into new and original 3D forms.	15
П	Solids will be broken into surfaces, edges and apexes to understand inter relations. Properties of basic solids like cube, cone, pyramid, cylinder and prism	15
III	Platonic and Archimedean solids.	15
IV	The concept of 'duals' and truncations will be introduced and analyzed with 3D paper models.	15
V	Categorizing all known and related terms into a structural tree of geometry. Drawing precise straight lines with varying weight. Parallel lines using set-squares. Parallel curved lines, tangential curves, developing patterns using compass. Bi-section of a line with compass, Bisection of angles with compass, Proportionate division of lines with parallel lines. Perpendicular to a straight line, Parallel lines at specified distances, tangent to a circle. Progressive Circles touching each other within angles. Triangle, Square Pentagon, Hexagon and Octagon withset square and T-square with protractor for exterior angle division.	30

Suggested Readings:

- 1. Design Basics by David A. Lauer and Stephen Pentak
- 2. Design Elements: Understanding the rules and knowing when to break them by Timothy Samara
- 3. Universal Principles of Design by William Lidwell, Kritina Holden and Jill Butler, Rockport Publishers
- 4. Elements of Design: Form & Color by HK Vyas
- 5. Color Influencing Form by Roy Osborne
- 6. Color, Form and Space by Birren

This course can be opted as an elective by the students of following subjects:	Open for all
Suggested Continuous Evaluation Methods:	Assignment Submissions, Class Reviews & Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all
Suggested equivalent online courses:	

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	Second	
Subject: Design						
Course Code: DNC152 Course Title: Design Concerns						
Common Outcommon						

Course Outcomes:

The student at the completion of the course will be able to:

- A broad overview of design & creative approaches to problem solving
- Ability to inter-relate concepts

Credits:	4	Core		
Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	2-(0-6
Unit	Tonics			No. of Loctures

Unit	Topics	No. of Lectures
I	A broad overview of design & creative approaches to problem solving	15
II	Study of the rationale behind design which introduces a systematic design process, an overview of the practice of design, the societal impact of design, critical issues and the relationship of design to its socio-cultural environment.	15
III	The aim will be to try and break the hold of conventional educational models and structures and encourage a more left-brain oriented approach to problem solving.	15
IV	Practice empathy in applying a human-centered approach to design techniques, such as user research, user experience, prototyping, and journey mapping	15
V	Project on solving a basic design problem from students' immediate environment, using all steps of the design process	30

Suggested Readings:

- 1- 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization by Vijay Kumar
- 2- Change by Design by Tim Brown
- 3- Design Thinking: Process and Methods Manual by Robert Curedale
- 4- Solving Problems with Design Thinking Ten Stories of What Works by Jeanne Liedtka
- 5- The Art Of Innovation: Success Through Innovation the IDEO Way by Tom Kelley
- 6- The Design Way: Intentional Change in an Unpredictable World by Harold G. Nelson &Erik Stolterman
- 7- The Ten Faces of Innovation by Tom Kelley

	This course can be opted as an elective by the students of following subjects:	Open for all
I		Assignment
	Suggested Continuous Evaluation Methods:	Submissions,
١	Suggested Continuous Evaluation Methods.	Class Reviews &
		Presentations

Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.

Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	First	Semester:	Second	
	Subject: Design					
Course Code:	Course Code: DNS151 Course Title: History of Design					
Course Outcomes:						
History of de	ompletion of the co the history of design esign in the West esign in the Indian of	gn as a distinct disc				
Credits:	2			Core		
Max. Marks:			М	in. Passing Marks:	30	
	Lectures-Tutorials- hours per week):	-Practical	L-T-P:	2-()-0	
Unit		Тор	oics		No. of Lectures	
I	Western Context: The chronology of design movements, from Arts & Crafts movement to postmodern design. Focus on the origins of formal design education in BauHaus. Study of design history through artifact analysis and analysis of services, interactions, policies, institutions and legal and technical systems as well as physical objects and spaces.				15	
II	Exploring the design tradition in India and its uniqueness. Advent of design and design education in India. Links with handicrafts and artisans. Celebrated Indian designers.			15		
Suggested Readings:						
 The India Report by Charles & Ray Eames Elizabeth Cumming and Wendy Kaplan, The Arts and Crafts Movement, London: Thames and Hudson, 1991 Alastair Duncan, Art Nouveau, London: Thames and Hudson, 1994 Alastair Duncan, Art Deco, London: Thames and Hudson, 1988 Peter Dormer, Design Since 1945, London: Thames and Hudson, 1993 Richard Hollis, Graphic Design. A Concise History, London: Thames and Hudson, 1994 						
This course can be op	This course can be opted as an elective by the students of following subjects: Open for all				Open for all	
Assignment Suggested Continuous Evaluation Methods: Class Reviews & Presentations				Submissions, Class Reviews &		
Course prerequisites: class/12th/certificate	•	se, a student must	have had this subje	ect in	Open for all	
Suggested equivalent	online courses:					

THIRD SEMESTER

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Third	
Subject: Design						
Course Code: DNC201 Course Title: Introduction to Typography						
Course Outcomes:	Course Outcomes:					

The student at the completion of the course will be able to:

- Fundamental of typographic principles
- Elements of typography like terminology & measurement, history and evolution of type, printing technologies.

(in hours per week): Unit Topics No. of		No. of Lectures		
Total No. of Lectures-Tutorials-Practical		L-T-P:	1-0-3	
Max. Marks:	100	Min. Passing Marks: 30		
Credits:	4	Core		

Unit	Topics	No. of Lectures
ı	Typeface choice: Kerning, Paragraph indication, Type size, Weight, Type on image/screen, X-height H. Capitalization, Display initials, Line length, Stance, Word emphasis M. Leading, Alignment, Text wraps, Mixing typeface, Hierarchy, Reverse text, Letter/word space, Type distortion.	15
II	Study of Typography, History, Classification, Anatomy and usage of various letterforms. Theoretical and applicable principles of communicating with letterforms. Multilingual Typography. Expressive Typography. Compositions with type.Exploration of three dimensional features of letter forms. Typography in different contexts like Books, Mailers, New media, Posters, Signages, Motion graphics etc. Study of grids and layouts.	15
III	Serifs and Sans-Serifs Types of Serifs . Type designers & Lettering artists.	15
IV	Grids in page layout and composition, Grids for lettering, One letter composition.	15

Suggested Readings:

- Thinking with Type: A Critical Guide for Designers, Writers, Editors, & Students, Ellen Lupton
- The Elements of Typographic Style, Robert Bringhurst 2.
- 3. The Complete Manual of Typography, James Felici
- 4. Stop Stealing Sheep & Find Out How Type Works, Erik Spiekermann
- 5. Typography: Macro + Micro Aesthetics (Fundamentals of typographic design) Willi Kunz, Niggli

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations

Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.

Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

	Bachelor of Design (4 years)	Year:	Second	Semester:	Third	
Subject: Design						
Course Code: DNG 202 Course Title: Photography for Documentation						
Course Outco	Course Outcomes:					

- Master Visual Storytelling Techniques
- Learn Ethical and Contextual Documentation

Credits:	4		Core	
Max. Marks:			Min. Passing Ma	rks: 30
Total	Total No. of Lectures-Tutorials-Practical		-0-3	
Unit	Topics			No. of Lectures
I	Picture framing, camera angles, Tripods and their importance, types of lenses and suitability for subjects, Vantage points. Concept of bokeh and how it may be captured; Effects of light in macro photography, Magnification & reproduction ratios, True Macro Vs Close-Up, Macro Photography with regular lenses, Depth of field and shutter speed experiments, Directional light.			
II	The importance of foreground interest and influences photos, recommended gear and Lighting and lighting equipment for indoor	15		
III	Studio Photography: In a studio setting, considerations, tricks and light study, capturing identity and personality of objects and people.			15
IV	Photography for Narration & Documentation Purposes			10
V	Post Processing: Digital corrections in photography, Digital Dark Room Workflow.			

- 1. Advance Photography by M. Langford
- 2. Applied Depth of Field by Blaker
- 3. Photomacrography: An introduction by W. White
- 4. Visual Aids and Photography in Education by Langford
- 5. Doing Visual Ethnography by Sarah Pink

This course can be opted as an elective by the students of following subjects:	Open for all
Suggested Continuous Evaluation Methods:	Assignment Submissions, Class Reviews & Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Basic of Photography by Dr. Narayan Patidar | Devi Vishwavidyalaya, Indoor

https://onlinecourses.swayam2.ac.in/cec19_ge02/preview

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

	Bachelor of Design (4 Years)	Year:	2nd	Semester:	Third	
Subject: Design						
Course Code: DNS 202 Course Title: Display and Exhibition						
Course Outromos						

Course Outcomes

- 1. Fundamentals of exhibition design, including spatial planning, storytelling, and creating engaging visitor experiences.
- 2. Generate innovative design concepts tailored to specific themes, audiences, and project briefs.
- 3. Design and prototype exhibition layouts, integrating key elements such as graphics, lighting, materials, and interactive features.

Credit	:s: 2	Skill Enhancement Course		ourse
Max. Marks: 100 Min. Passing Marks:		: 30		
Total No. of Lectures-Tutorials-Practical		1.0.7		0-1
	(in hours per week):		U-1	
Unit	Торіс	Topics No. of Lect		
ı	The Design Process: Briefing, Ideation, Research, Concept Development: Narrative and theme building, zoning and layout planning, Storyboarding and Mood Boards, Prototyping Techniques: Digital and Manual			5
II	Designing Visual Elements: Graphics, Signage, Typography, Lighting Design: Functional and Aesthetic Applications, Material Selection: Properties, Sustainability, and Cost, Spatial Planning: Focal Points, Pathways, Accessibility Incorporating Technology: AR/VR, Interactive			5

	Installations	<u> </u>		
	Installations			
111	Building Mockups and 3D Models, Sustainable Design Practices: Eco-Friendly Materials, Reusable Structures, Budgeting and Resource Management in Exhibition Design, Collaboration with Stakeholders: Designers, Fabricators, Clients, Troubleshooting Common Challenges in Exhibition Projects	10		
IV	Creating Presentation Boards: Layouts, Graphics, Storytelling Effective Verbal and Visual Presentation Techniques, Evaluation Criteria: Aesthetics, Functionality, Visitor Experience, Feedback, and Iteration: Improving Based on Critique	10		
Suggested R	eadings:			
1. "Exhibitio	n Design" by David Dernie			
2. "Designin	g Exhibitions" by Giles Velarde			
3. "Exhibit D	esign: High Impact Solutions" by Jimmy Jiao and Chen Ling			
4. "Exhibitio	n in Museums" by Bettina Messias Carbonell			
5. "The Man	ual of Museum Exhibitions," edited by Barry Lord and Maria Piacente			
This course	can be opted for as an elective by the students of the following subjects:	Open for all		
		Assignment		
Suggested C	ontinuous Evaluation Methods:	Submissions,		
Suggested C	ontinuous Evaluation Methous.	Class Reviews 8		
		Presentations		
-	equisites: To study this course, a student must have had this subject in ertificate/diploma.	Open for all		
Suggested e	quivalent online courses:			
SWAYAM OF	NPTEL COURSE TITLE HERE + LINK			
Further Sugg	gestions:			
ANY COLIDSE SPECIEIC OBSERVATION IN TERMS OF OUTCOMES (SUBMISSION / DEVIEW / CONNECTION TO				

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES, ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Third
Subject: Design					
Course Code:	Course Code: DNE201 Course Title: Illustration I				
Course Outcomes:					
 The student at the completion of the course will be able to: Understand the basic approach to drawing and composition as a means of story-telling or information giving. Effectively communicate an idea, explain a concept or tell a story through pictures . 					
Credits:	4			Elective	
Max. Marks:	Max. Marks: 100 Min. Passing Marks: 30				30
	Total No. of Lectures-Tutorials-Practical (in hours per week):			1-0-3	
Unit To		Тор	oics		No. of Lectures

ı	Introduction to traditional Illustration, Introduction to various techniques of illustration.	15
II	Mediums Exploration like Watercolor. Charcoal, pen, Ink, oil pastels, dry Pastels, poster colors etc. Different techniques- wet on wet, underpainting, Gradients and Color Blending, Layering Watercolors, Dry Brush, Lifting Color, Watercolor Blooms etc.	15
111	Live sketching - Environmental Studies, Plants, Our Surroundings , animals, vehicles etc	15
IV	Book illustration, editorial, sequential art, concept art, character development.	15

Suggested Readings:

- 1. Creative illustration by Andrew loomis
- 2. The artist's guide to illustration
- 3. The Illustrators: The British art of illustration 1837-2011
- 4. 100 Great Children's Picture Books by Martin Salisbury
- 5. 4th Auction- Original Comic Art and Illustration
- 6. Illustration Studio- Urban Design Associates
- 7. Illustration: A Theoretical & Contextual Perspective by Alan Male

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Third	
Subject: Design						
Course Code: DNE203 Course Title: Publication Design & Printing						
		·	·	-	·	

Course Outcomes:

- Understand the process of printing.
- Fundamentals of page layout
- Explore Prints and posters
- Development of skills and advanced knowledge of publishing software, with emphasis on the maintenance of visual continuity in documents for publication

	, ,					
Credits: 4		Elective				
Max. Marks:	100	Min. Passing Marks: 30				
	Lectures-Tutorials-Practical hours per week):	L-T-P:	- T-P: 1-0-7			
Unit	Тор	pics	No. of Lecture			

ı	15			
II Combining Type and Images, Grids, Guides, and Aligning Objects				
III	15			
IV	15			
v	All aspects of its design, including the layout, format, selection of fonts, colors etc. should be incorporated into the final prototype	60		
Suggested Readings	:			
 Book Desig On Book Desig 	earch: Methods and Perspectives by Brenda Laurel and Peter Lunenfeld. n By Andre Haslam esign by Richard Hendel g: Editing, Design, Production by Marshall Lee			
	pted as an elective by the students of following subjects:	Open for all		
Assignment Submissions, Class Reviews Presentations				
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma. Open for all				
Suggested equivaler	nt online courses:			
SWAYAM OR NPTEL	COURSE TITLE HERE + LINK			
Further Suggestions:				
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER				

I	ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER
	COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Third
Subject: Design					
Course Code: DNE202 Course Title: Form Derivation I					
Course Outcomes:	-		-		

- Introduction to principles of form and aesthetics
- Principles of two dimensional form and three dimensional form
- Generating new form and application in product design

Credits: 4	Elective		
Max. Marks: 100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-7	

Unit	Topics	No. of Lectures
	How form can be morphed and manipulated using various criteria and methodological tools like radii manipulation, formal transition, edge	15

	treatment etc	
Ш	Explore how new forms can be generated, existing forms can be modified, and explore the transition phases between two distinct forms. Attributes and metaphors that can be given to forms, both in 2D and 3D.	15
III	Sketching to express ideas is essential for this module. And the sketches will be translated to models for some of the assignments.	15
IV	Material Exploration and model making will include Thermocol, MDF, polystyrene and metal wire. The use of color will be explored in the 2D models for this course.	75

Suggested Readings:

- 1. Hannah, Gail Greet; Elements of Design, Princeton Architectural Press
- 2. Byers, Mel; The Design Encyclopedia, Publisher: John Wiley & Sons Publications
- 3. Lidwell, W., Holden, K., and Butler, J., Universal Principles of Design
- 4. Evans, P., and Thomas, M., Exploring the Elements of Design

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methods.	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Third	
Subject: Design						
Course Code: DNE204 Course Title: Simple Product Design						
Course Outcomes						

Course Outcomes:

- Understand form derivation, ergonomics and material studies in the context of tangible products
- Designing simple products that meets user needs.

Credits: 4	Elective	
Max. Marks: 100	Min. Passing Marks: 30	
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-7

Unit	Topics	No. of Lectures
I	Users: Identify the user groups that your product will target. Study of ergonomics and human factors. User Survey: You are free to use internet resources for user survey and field work but it is essential to speak to at least a few real users for the purpose of this project.	15
II	Market Survey: What products are available in the niche that you have selected in India and abroad?	15

III	Materials: You are free to use/specify any material for your design, keeping the user in mind Processes: You are free to choose the hand-made or machine-made process, keeping the manufacturing numbers in mind.	15
IV	Model: A finished model is essential for this project. It may be a working prototype if time and workshop permit otherwise a 1:1 block model is to be made.	60
V	User Testing: It is important to try out your concept model with actual target users and document the process through relevant photographs.	15

Suggested Readings:

- Design Research: Methods and Perspectives by Brenda Laurel and Peter Lunenfeld.
- 2. 3. Research Design: Qualitative, Quantitative and Mixed Methods Approaches by CRESWELL.
- 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization by Vijay Kumar.

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

FOURTH SEMESTER

Subject: Design					
Course Code: DNC251 Course Title: Digital 3D Modeling					

Course Outcomes:

The student at the completion of the course will be able to:

- Understand 3D Software
- Learn 3D modeling, texturing, lighting, camera, rendering.
- Basic animation- keyframe animation & rendering

Credits: 4		Core
Max. Marks: 100	M	in. Passing Marks: 30
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-7

Unit	Topics	No. of Lectures
ı	Introduction to software, Modeling with Polygons, using the graphite, working with XRefs, Building simple scenes, Building complex scenes with XRefs, using assets tracking, deforming surfaces & using the mesh modifiers, modeling with patches & NURBS	15
II	3D modeling Product modeling, Object Modeling, Interior etc.	15
Ш	Lighting & Camera -Configuring & Aiming Cameras, camera motion blur, camera depth of field, camera tracking, using basic lights & lighting Techniques, working with advanced lighting, Light Tracing, Radiosity, video post, mental ray lighting etc.	30
IV	Animation - Creating Keyframes, Auto Keyframes, Move & Scale Keyframe on the timeline, Animating with constraints & simple controllers, animation Modifiers & complex controllers, function curves in the track view, motion mixer	30
V	Rendering with V-Ray V-ray light setup, V-ray rendering settings, HDRI Illumination, Fine-tuning shadows, Final render setting etc.	30

Suggested Readings:

- 1. The animator's Survival Kit by Richard Willams
- 2. The Animation Book: A Complete Guide to Animated by Kit Laybourne
- 3. Design for 3D Printing: Scanning, Creating, Editing, Remixing, and Making in Three Dimensions by Bertier Luyt, Samuel N. Bernier, and Tatiana Reinhard

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

1- Animations by Dr. Abhishek Kumar, Banaras Hindu University(BHU), Varanasi

https://onlinecourses.swayam2.ac.in/cec20 cs08/preview

2-Graphics & Animation Development by Er. Shano Solanki, National Institute of Technical Teacher Training &

Research, Chandigarh.

https://onlinecourses.swayam2.ac.in/ntr22_ed11/preview

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Fourth	
Subject: Design						
Course Code: DNC252/DNG251 Course Title: Interaction Design A/B						
	_					

Course Outcomes:

- Basic Concepts in Human Computer Interaction.
- Basic Knowledge about principles and method of Interaction design
- Aims at imparting knowledge and furthering research into the domain of designing interactive experiences in media, products and computer design applications.

Credits: 4/4	Core	
Max. Marks: 100	М	in. Passing Marks: 30
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-7

(III	i nours per week):	
Unit	Topics	No. of Lectures
I	Design Fundamentals This course provides an introduction to visual communication principles and design processes. User Centered Design Students will explore topics and processes of interaction design through the lens of human physiology and behavior. Projects will be developed to allow students to strengthen collaborative and design skillswhile integrating people's needs into the design process. Interactions, Media, Senses 1. Designing interactions for the physical, cognitive and social environments of the user. 2. Medias and co-evolution of technology Understanding design in the context of digital, time based products with data storage, connectivity, sensors, actuators and multi-modal displays. 3. Study of how people perceive, understand, use and experience interactive objects and spaces.	30
П	Design methodology for complex products, services and events: Design of integrated systems, products for future use, products to be used in groups, devices used in public places, design of multi-modal interfaces, expressive interfaces, products that enrich user experience	30
III	The course takes an interdisciplinary approach drawing upon product design, visual communication, information architecture, cognitive psychology and computer science. The focus is on working collaboratively in groups to solve design problems.	30

	Interaction Medias				
	1. Introduction to time media, video, audio, games				
IV	2. Storytelling in an interactive medium	30			
	3. Design of multi-modal, sound and conversational interfaces				
	4. Building interactive installations and exhibition spaces				
Suggested Read	ngs:				
1.Beebe, James;	Rapid Assessment Process; Rowman & Littlefield (2001)				
2. Beyer, Hugh; F	Ioltzblatt, Karen; Contextual Design: Defining Customer Centered Systems; Mo	organ Kaufmann			
(1997)					
	T.; Redish, Janice C.; User and Task Analysis for Interface Design; Wiley (1998)				
	V. Penn; Quick Ethnography; Altamira Press (2002)	000)			
·	5. Cooper, Alan; Reimann, Robert; About Face 2.0 the Essentials of Interaction Design; Wiley (2003)				
This course can b	pe opted as an elective by the students of following subjects:	Open for all			
		Assignment			
Currented Couti	susus Fusiuskias Makhada	Submissions,			
Suggested Contil	nuous Evaluation Methods:	Class Reviews &			
		Presentations			
Course prerequis	Course prerequisites: To study this course, a student must have had this subject in				
Class/12th/certificate/diploma.					
Suggested equiv	alent online courses:				
SWAYAM OR NP	EL COURSE TITLE HERE + LINK				

_	Bachelor of Design (4 Years)	Year:	Second	Semester:	Second
Subject: Design					
Course Code:	DNS251	Course Title:	Field Study I		

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER

Course Outcomes : To help students look at folk art or an informal economic activity in a holistic context and understand how representation is an important mirror of society and culture.

The student at the completion of the course will be able to:

Further Suggestions:

COURSES ETC.

- 1. Successfully work upon and build a research methodology.
- 2. Understand cultural, social, economic and material aspects of art forms and informal income generating
- 3. Understand documentation and build a cohesive document on completion of the study.

Credits:	2	Core		
Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical L-T-P: 0-0 (in hours per week):)-2		
Unit	Topics			No. of Lectures
Ī	This project comprises a documentation of a			

This project comprises a documentation of a subject pertaining to design, craft, culture, and related themes. The course aims to present any design research topic within a comprehensive framework, elucidating its pivotal role as a reflective lens on society and culture. The investigation is expected to encompass the cultural, social, economic, and material dimensions inherent in the chosen topic. The course additionally emphasizes the structuring of research endeavors and their articulation in a cohesive

manner. The ultimate deliverable is envisaged in the form of	a tangible
report, booklet, brochure, or equivalent format.	
Suggested Readings:	
1. Crafting Indian Scripts by Jaya Jaitly and Subrata Bhowmick	
2. Handmade In India By Aditi Ranjan And M.P. Ranjan	
3. The Artistry of Handwork by Jaya Jaitly	
This course can be opted as an elective by the students of following subject	Open for all
Suggested Continuous Evaluation Methods:	Assignment
	Submissions,
	Class Reviews &
	Presentations

Suggested equivalent online courses:

class/12th/certificate/diploma.

Folk And Minor Art In India By Prof. Shatarupa Thakurta Roy, IIT Kanpur https://onlinecourses.nptel.ac.in/noc19_hs61/preview

Course prerequisites: To study this course, a student must have had this subject in

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Fourth
Subject: Design					
Course Code: DNE251 Course Title: Moving Graphics & Storyboarding					
Course Outcomes:					

Open for all

The student at the completion of the course will be able to:

- Understanding storyboarding and planning
- Basics of after Effects/Premiere keyframe concepts and principles.
- **Understand Motion Graphics**.

Credits: 4	Elective		
Max. Marks: 100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-5	

Unit	Topics	No. of Lectures
I	Introduction to storyboarding as an essential tool for planning motion graphics and animation forms a part of the course. Students need to be introduced to basic components of storyboards, Rule of Thirds, Foreground, Middle Ground and Background, Developing Drawing Skills, Shot Angles etc need to be explored.	30
II	Introduction of Adobe Aftereffect, Interface like tools, file, etc	30
Ш	Fundamental Principles of motion graphics	30

Suggested Readings:

- 1. After Effects apprentice: Real world skills for the Aspiring Motion Graphics artist (Apprentice Series); Chris & Trish Meyer
- 2. Animated Storytelling: Simple Steps For Creating Animation Motion Graphics: Liz Blazer
- 3. Type in Motion: Innovations in Digital Graphics by Jeff Bellantoni & Matt Woolman.

1. 4. The Art of the Storyboard: Storyboarding for Film, TV, and Animation; John Hart			
5. Professional Storyboarding: Rules of Thumb; Sergio Paez and Anson Jew			
This course can be opted as an elective by the students of following subjects:	Open for all		
	Assignment		
Suggested Continuous Evaluation Mothods:	Submissions,		
Suggested Continuous Evaluation Methods:	Class Reviews &		
	Presentations		
Course prerequisites: To study this course, a student must have had this subject in	Onen for all		
class/12th/certificate/diploma.	Open for all		
Suggested equivalent online courses:			
SWAYAM OR NPTEL COURSE TITLE HERE + LINK			
Further Suggestions:			
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER			
COURSES ETC.			

COURSES ETC.					
Programme/ Class:	Bachelor of Design (4 years)	Year:	Second	Semester:	Fourth
		Subject:	Design		
Course Code:	DNE252	Course Title:	Form Derivation II		
Course Outcomes:					
The student at the co	ompletion of the co	ourse will be able t	to:		
 Introduction 	to advanced princ	iples of form and a	esthetics		
· ·	form families and	•			
Generating r	new form refining e	xisting forms			
Credits:	4		Elective		
Max. Marks:	100		Min. Passing Marks: 30		
	Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 1-0-5)-5
Unit		Тој	pics		No. of Lectures
I	Form as sculpture, to incorporate intangible attributes; Form as emotion 15				15
II	Understanding of house styles and key form characteristics; Form as branding				
III	Form families and house styles			30	
IV	Use of advance modeling materials and skills to generate high fidelity form models 30			30	
Suggested Readings:					
1. Gail Greet Hanna	h, Elements of Des	ign. Princeton Arc	hitectural Press		

- 1. Gail Greet Hannah, Elements of Design, Princeton Architectural Press
- 2. Elam, Kimberly; Geometry of Design: Studies in Proportion and Composition, PrincetonArchitectural Press
- 3. Hall, Edward Twitchell; The Hidden Dimension, Publisher: Anchor Bachelard, Gaston; Jolas, Maria (Translator); The Poetics of Space, Publisher: BeaconPress; Reprint edition, 1994

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methous.	Class Reviews &
	Presentations

Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all
Suggested equivalent online courses:	
SWAYAM OR NPTEL COURSE TITLE HERE + LINK	
Fronth on Compaction of	

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

FIFTH SEMESTER

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	First
Subject: Design					
Course Code: DNC301 Course Title: Digital Illustration					

Course Outcomes : Reinforcing Illustration Skills in digital medium.

The student at the completion of the course will be able to:

- 1. Create illustrations in a digital environment and learn rendering skills.
- 2. Learn use of computers as a medium and as an additional tool for illustrators.
- 3. How to translate hand drawn items into digital products

Credits:	4	Core		
Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	0-0)-6
Unit	Тор	pics		No. of Lectures

Unit	Topics	No. of Lectures
I	Introduction to Illustration tools, their interface, Creating a document, adjusting format, area. Understanding the basics concepts of digital illustration vis a vis manual illustration.	
II	Digital Geometry, introduction to and usage of tools to create and transform shapes. Creating Vectors: linear and curved, editing vectors, pattern creation,	
III	Using colours and text to optimize illustrations. Creating colour palettes, working with CMYK and RGB modes	
IV	Types of illustration styles, Flat illustrations, illustrations with gradients, adding volume, tracing elements, working with layers.	

Suggested Readings:

- 1. Digital Illustration Fundamentals: Vector, Raster, Waveform, Newmedia With Dicf, Daef And Asnmf; Wallace Jackson; Apress
- 2. Digital Illustration: A Masterclass In Digital Image-Making; Lawrence Zeegen; RotoVIsion
- 3. Perspective Sketching: Freehand And Digital Drawing Techniques For Artists & Designers; Jorge Paricio; Rockport Publishers; III Edition

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all
Suggested equivalent online courses:	

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	First
Subject: Design					
Course Code: DNC302/DNG301 Course Title: Space Design A/B					
Course Outcomes: efficient and economic space design understanding					
The student at the completion of the course will be able to:					
1. Understand physical spaces and the importance of designing them to fit human comfort and wellness					

- Understand physical spaces and the importance of designing them to fit human comfort and wellness.
- 2. Importance of space ergonomics and sustainability in space.

3. Understand layouts, materials and budgets while working with space.

Credits:	4/4	Core		
Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	1-0-7	
Unit	Тор	oics		No. of Lectures
ı	Introduction to space, functions of space, defining the style of space, knowing and understanding the space and rising. Analyzing the physical and visual space and its previous conditions and influences. Understanding budgeting.			2
II	What is a functional space? Understanding layouts, making space flexible, space distribution, understanding users and objects in space. Creating moodboards, ideas and elevations. Understanding use of materials, finishes and specifications			4
III	Concept of materiality and colours, D saving, sustainability of space, under designing of healthy spaces for welln	4		
IV	Planning and equipping the space, visibility and communication, temporary and permanent spaces within the space, economic valuation of space			3
V	Object selection, furniture selection architectural spaces; signs, information			2

Suggested Readings:

- 1. Towards A New Architecture, Le Corbusier
- 2. Sketchup For Interior Design: 3d VIsualizing, Designing, And Space Planning, Lydia Cline
- 3. Space Planning Basics, Mark Karlen

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

https://onlinecourses.nptel.ac.in/noc22_ar01/preview

Further Suggestions:

Programme/ Class:	Bachelor of	Year:	Third	Semester:	Eirct
Programme/ Class.	Design (4 Years)	Teal.	Tilliu	Semester.	FIISC
		Subject: I	Design		
Course Code:	DNP304	Course Title:	Field Study II		
Course Outcomes : h	elp students look a	t folk art or an info	rmal economic act	ivity in a holistic co	ntext and
understand how repr					
The student at the co	•				
1. Successfully work upon and build a research methodology.					
2. Understand cultur	al, social, economic	and material aspe	cts of art forms and	d informal income	generating
activities.				6.1	
3. Understand docum		a cohesive docum	ent on completion	-	
Credits:				Core	
Max. Marks:	100		M	in. Passing Marks:	30
	Lectures-Tutorials	-Practical	L-T-P:	0-0	0-4
(ir	hours per week):				-
Unit		Тор	oics		No. of Lectures
	This project is a do	ocumentation of a	design, craft, cultur	e etc_related	
			y design research to		
	•	• •	important mirror c	•	
culture. The study should include cultural, social, economic and material					
l I	aspects of the selected topic. The course is also about structuring				
	research and putt	ing it across in a co	herent manner. The	e final output	
	should be in the fo	orm of a tangible re	port, booklet, brod	chure etc.	
Suggested Readings:					
1. Crafting Indian Scr	ipts by Jaya Jaitly a	nd Subrata Bhowm	ick		
2. Handmade In India	a By Aditi Ranjan Ar	nd M.P. Ranjan			
3. The Artistry of Har	ndwork by Jaya Jaitl	У			
This course can be or	oted as an elective	by the students of	following subjects:		Open for all
					Assignment
	-				Submissions,
Suggested Continuou	is Evaluation Metho	oas:			Class Reviews &
					Presentations
Course prerequisites	: To study this cours	se, a student must	have had this subje	ct in	
Class/12th/certificate/diploma.					
Suggested equivalent online courses:					
Folk And Minor Art In India By Prof. Shatarupa Thakurta Roy, IIT Kanpur					
https://onlinecourses.nptel.ac.in/noc19_hs61/preview					
Further Suggestions:					
ANY COURSE SPECIFI	ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER				
COURSES ETC.					

Duoguous so / Class.	Bachelor of Design (4 Years)	Year:	Third	Semester:	First
Subject: Design					

Course Code:	DNE301 Course Tit	le: Design for Immers	sive Media			
Course Outcomes						
The student at the c	ompletion of the course will be at	ole to:				
1. Basic understandi	ng of AR / VR and transmedia tech	nologies				
2. Understanding of	hardware and software componen	ts of immersive medi	a			
	ns for immersive environments					
Credits:	4		Elective			
Max. Marks:	Max. Marks: 100 Min. Passing Marks: 30					
	Lectures-Tutorials-Practical	L-T-P:	1-	0-5		
(in	hours per week):					
Unit		Topics		No. of Lectures		
	History & Development of Imme	rsive Media. Multime	dia narratives.			
1	Social Media and online reading	•	_	5		
-	watching revolution. Audio imme	·	•			
	Content marketing and immersiv					
	Understanding AR / VR /MR , stereoscopic displays, motion tracking					
hardware, input devices and computing platforms, VR applications,				5		
	•	ift and google cardboard. Web VR.				
	Case studies.					
III	Scope of usage of immersive med	utomotive,	5			
	healthcare, tourism and real esta	te.				
IV	Design Project for immersive media			75		
Suggested Readings:						
1. Immersive Longfo	rm Storytelling: Media, Technology	, Audience By David D	owling			
2. Cases On Immersiv	e VIrtual Reality Techniques (Adva	nces In Multimedia Ai	nd Interactive Tech	nologies) By		
Kenneth C C Yang						
_	ality; Tony Parisi; O'Reilly Media, II					
This course can be op	ted as an elective by the students	of following subjects:		Open for all		
				Assignment		
Suggested Continuou	s Evaluation Methods:			Submissions,		
				Class Reviews &		
				Presentations		
Course prerequisites: To study this course, a student must have had this subject in Open for all				Open for all		
class/12th/certificate	/diploma.			·		
Suggested equivalent						
	iction on Multiple Platforms By Kris		Jamia Millia Islamia	a .		
	s.swayam2.ac.in/cec20_ge32/previ	ew				
Further Suggestions:						
	C OBSERVATION IN TERMS OF OUT	COMES/SUBMISSION,	/REVIEW/CONNEC	TION TO OTHER		
COURSES ETC.						

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	First
Subject: Design					
Course Code:	DNE302	Course Title:	Advanced Prototy	oing	
Course Outcomes					

- 1. Understand methods and ways of prototyping for creating products.
- 2. Understand materials and their usage in prototyping and deciding how best they can be used to simulate a real life product with them.
- 3. Create a prototype that either looks, feels or functions like the original product.

Credits: 4		Elective	
Max. Marks: 100	M	Min. Passing Marks: 30	
Total No. of Lectures-Tutorials-Practical (in hours per week):	L-T-P:	1-0-5	

Unit	Topics	No. of Lectures
I	Prototyping Basics; Understanding different kinds of models and their applications	3
II	Principles and choices for model making, workflow, space, tools. Understanding materials for prototyping such as paper, foam, polystyrene, thermoplastics, polyurethane, clay, wood	5
III	Modeling Concepts, Types Of Prototypes, Prototyping Cycles, Soft Prototypes, 3d Quick Models, Paper And Quick Mock Up Models, Principle Models	5
IV	Understanding realistic finishes in prototyping through the use of putty and fillers, coatings, plating, paints etc.	2

Suggested Readings:

- 1. Prototype To Product; Alan Cohen
- 2. Prototyping and Modelmaking for Product Design, Bjarki Hallgrimsson; Laurence King Publishing Ltd

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mothods:	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

Electronics equipment integration and Prototype building By Prof. N.V.Chalapathi Rao, IISc Bangalore https://onlinecourses.nptel.ac.in/noc22_ee25/preview

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

SIXTH SEMESTER

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	Second
Subject: Design					
Course Code:	DNC351	Course Title:	Packaging Design		
Course Outcomes					

- 1. Understanding of what goes in packaging design.
- 2. Understand the importance of packaging innovation on the lines of creating environmentally friendly and sustainable packaging.
- 3. Ability to create packaging prototypes along with the visual component utilizing graphic design inputs.

Credits: 4	1	Core	
Max. Marks: 1	100	Min. Passing Marks: 30	
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	1-0-5

Unit	Topics	No. of Lectures
-	What is packaging, packaging types, packaging dynamics, Brand manifestation & product differentiation,	2
II	Concept Creation, Structural Generation And VIsual Component Of Packaging, Packaging Study And Analysis, Structural Design, cartons, bottles, tubes, can, tubs & jars, blister packs, gift packs, innovative forms.	6
III	Typography & graphic selection, surface graphics, information layout and hierarchy, language, photography, illustrations and colours, finishes and effects	6
IV	Packaging sustainability, environmental considerations	1

Suggested Readings:

- 1. What is packaging design, Giles Calver, RotoVision SA, 2004
- 2. Packaging Design by Bill Stewart; Laurence King Publishing
- 3. Packaging Design Strategy by Bill Stewart; CRC Press

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Fugluation Mathada	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	Second
Subject: Design					
Course Code:	DNP351	Course Title:	Portfolio Building		

Course Outcomes

- 1. Learn to present their work effectively and efficiently to prospective clients and employers.
- 2. Learn to organize and present their work, brand themselves and present their work across media.
- 3. Create their own portfolio.

Credits: 6	Core
Max. Marks: 100	Min. Passing Marks: 30

Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	0-0-4			
Unit	Topics No. of Lo			No. of Lectures		
ı	Compilation of all work done so far the abilities comprehensively in an approof otherwise. Course should include efficiency projects, studio photography of final a consistent visual and narrative styles.					
Suggested Readings:						
2. Drawing for Produce Publishing	 My Graphic DNA; Portfolio Design & Self- Promotion; by Wang Shaoqiang; Promopress Drawing for Product Designers (Portfolio Skills: Product Design) by Kevin Henry; Laurence King Publishing 					
This course can be opted as an elective by the students of following subjects:				Open for all		
Suggested Continuous Evaluation Methods:			Assignment Submissions, Class Reviews & Presentations			
Course prerequisites: class/12th/certificate	Open for all					
Suggested equivalent online courses:						
Further Suggestions:						
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.				TON TO OTHER		

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	Second
Subject: Design					
Course Code:	DNC352/DNG351	Course Title:	Identity Design A/	В	
Course Outcomes					

- 1. Develop understanding of Brands & Brand Identity Design.
- 2. Understand how to approach and develop branding and collaterals.

Credits:	4/4	Core		
Max. Marks:	100	М	30	
10000101	Lectures-Tutorials-Practical hours per week):	L-T-P:	0-7	
Unit	Тор	pics		No. of Lectures
I	What is Branding and why is it important?			2
II	II Costing of Branding, Planning & Timescales			
III	Immersion & Discovery, Brand Purpose, Understanding your audience, Brand Brief			4
IV	Design road map, Logo's role in identity, finding your type, brand colors, custom iconography			4

	_				
v	Business Stationery, Packaging Design & Print	2			
Suggested Readings:					
1. Branding and Prod	uct Design; An Integrated Perspective; Monika Hestad				
2. Designing Brand Id	lentity: An Essential Guide for the Whole Branding Team by Alina Whee	eler;			
John Wiley & Sons					
3. Logo Design Love:	A Guide to Creating Iconic Brand Identities; David Airey; New Riders; 2	010			
This course can be op	This course can be opted as an elective by the students of following subjects: Open for all				
		Assignment			
Suggested Continuou	is Evaluation Mothods	Submissions,			
Suggested Continuou	ıs Evaluation Methods:	Class Reviews &			
		Presentations			
Course prerequisites:	: To study this course, a student must have had this subject in				
class/12th/certificate	Open for all				
Suggested equivalent	t online courses:				
Brand Management I	Brand Management By Preeti Krishnan Lyndem, Indian Institute Of Management				
Bangalorehttps://onl	Bangalorehttps://onlinecourses.swayam2.ac.in/imb19_mg04/preview				

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	Second	
Subject: Design						
Course Code: DNE351 Course Title: Introduction to Film & Script Writing						
Course Outcomes						

Course Outcomes

Further Suggestions:

- 1. Understanding Of Scriptwriting And Video.
- 2. Creating A Screenplay.
- 3. Write a screenplay for and create and edit a short film.

Cup dita.	4	Floative		
Credits:	4	Elective		
Max. Marks:	100	Min. Passing Marks: 30		
	Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 1-0)-5	
Unit	Тор	oics		No. of Lectures
I	Basic Storytelling, What makes a good story well told, division into three acts, The world of the story, Objective & subjective drama			3
Ш	Screenwriting tools, Protagonist and objective, conflict, obstacles, premise and opening, theme, unity, exposition, characterization, development of story, preparation and aftermath, plausibility, dialogue, visuals			3
III	Dramatic scenes, Rewriting, Dramatic Irony, Elements of the future and advertising, Stage Vs. Screen			3
IV	Planning the project, Previsualization & storyboarding, choosing videotape format, Choosing equipment & camera, Lighting and art direction, Production sound			3
V	Editing hardware, Sound editing and simple compositions, Rotoscoping ar	3		

Suggested Readings: 1. Digital Filmmaking By Mike Figgis; Faber & Faber 2. Screenplay: The Foundations Of Screenwriting By Syd Field; Rhus 3. The tools for screenwriting; David Howard & Edward Marbley; St. Martin's Press, 1993 This course can be opted as an elective by the students of following subjects: Open for all Assignment Submissions, Suggested Continuous Evaluation Methods: Class Reviews & Presentations Course prerequisites: To study this course, a student must have had this subject in Open for all class/12th/certificate/diploma. Suggested equivalent online courses: **Further Suggestions:** ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Third	Semester:	Second	
Subject: Design						
Course Code: DNE352 Course Title: Complex Product Design						
Course Outcomes	-	-				

Course Outcomes

Suggested Readings:

Credits: 4

COURSES ETC.

The student at the completion of the course will be able to:

1. Design technically complex products with sound demonstration of design skills as well as dealing with technical complexity

Elective

- 2. Integrate knowledge of manufacturing systems into product design
- 3. Understand market and customer requirements and translate them into a comprehensive design brief

Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	1-0-5	
Unit	Тор	oics		No. of Lectures
I	Introduction to Product Design and Development, Product Design Steps and Product Analysis, Profit Consideration, Value Engineering (History, Concept and Definitions), Value Engineering vs. Cost Cutting.			2
II	Creative Thinking, Problem Identification and VEJP, Types of Product Functions, Functional Analysis, Functional Analysis System Technique.			2
III	Function-Cost Relationship – I, Function-Cost Relationship - II, VE Applications in Product Design, VE Tools and Techniques – I, VE Tools and Techniques – II, Behavioral Roadblocks			3
IV	Industrial Design and Product Design, Types of products ID as per ICSID and WIPO, Product Conceptualisation, Physical simulation of a small system			4
V	Gumstix, Beagle, Raqsberrypi, Arduino, Kit application. Adaption for I/O, Application of CAD tools (dessault, Siemens. Autodesk, McNeil), specifics of Design for production scale-up, Connectors and wiring, Integration and Validation			4

1. Lawrence D. Miles; "Techniques of Value Analysis and Engineering", 2nd Edition, McGraw-Hill Book Company, Inc. New York. 2. Larry W. Zimmerman, Glen D. Hart; "Value Engineering", Reprint 1999, CBS Publishers and Distributors, New 3. A. K. Chitale and R. C. Gupta, "Product Design and Manufacturing", 3rd Edition, Prentice-Hall of India. This course can be opted as an elective by the students of following subjects: Open for all Assignment Submissions, Suggested Continuous Evaluation Methods: Class Reviews & Presentations Course prerequisites: To study this course, a student must have had this subject in Open for all class/12th/certificate/diploma. Suggested equivalent online courses: Product Design Using Value Engineering By Prof.Inderdeep Singh, IIT Roorkee https://onlinecourses.nptel.ac.in/noc19_me51/preview Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

SEVENTH SEMESTER

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	First	
		Subject: I	Design			
Course Code:	DNP401	Course Title:				
Course Outcomes						
The student at the completion of the course will be able to: 1. Learn about the industry and its culture. 2. Understand teamwork and working with different units of an institution. 3. Real time exposure to working in a design studio.						
Credits:	6		Core			
Max. Marks:	100		Min. Passing Marks: 30			
1010111101101	Lectures-Tutorials- hours per week):	Practical	L-T-P: 0-0-6			
Unit		Тог	pics		No. of Lectures	
During the internship students should learn the real world skills to be able to develop an individual career plan, create a resume and successfully interview for a job, demonstrate employability skills; including safely and competently working in a design department or design firm. Students will be required to maintain a work log and write a final report.						
Suggested Readings:						
Suggested Readings:						

Open for all

This course can be opted as an elective by the students of following subjects:

	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methous.	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all
Suggested equivalent online courses:	
Further Suggestions:	
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNEC	TION TO OTHER
COURSES ETC.	

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	First
Subject: Design					
Course Code:	DNC402/DNG401	Course Title:	Social Design A/B		
Course Outcomes		-	_		

- 1. Understand the importance of participation of each stakeholder in design.
- 2. Create a project based on in-depth analysis via participation of local populace in a rural community.

Credits:	4/4	Core		
Max. Marks:	100	Min. Passing Marks: 30		
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	1-0-7	
Unit	Topics			No. of Lectures
	Participatory Rural Appraisal and Community Based Participatory			4

Unit	Topics	No. of Lectures
I	4	
II	6	
Creation and execution of participatory toolkits and other research tools; Data collection and analysis in participatory design		5
IV		

Suggested Readings:

- 1. Participatory Rural Appraisal: Principles, Methods and Application; N. Narayanasamy;
- 2. Community-Based Participatory Research for Health: From Process to Outcomes; Meredith Minkler and Nina Wallerstein; 2003
- 3. Participatory Design for Learning: Perspectives from Practice and Research; Betsy DiSalvo, Elizabeth Bonsignore, Carl DiSalvo, Jason Yip; 2017

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Methods:	Submissions,
Suggested Continuous Evaluation Methous.	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all
Suggested equivalent online courses:	

Development Research Methods By Prof. Rajshree Bedamatta, IIT Guwahati

https://onlinecourses.nptel.ac.in/noc19_hs59/preview

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	First	
Subject: Design						
Course Code: DNC401 Course Title: Design Management & Entrepreneurship						
Course Outcomes						

Course Outcomes

The student at the completion of the course will be able to:

- 1. Understand aspects of the business of design.
- 2. Gauge what makes a design profitable. Understand strategies of production and scaling.
- 3. Recognize types of intellectual property and its application and importance in design.

Credits:	4	Core		
Max. Marks:	100	M	in. Passing Marks:	30
Total No. of Lectures-Tutorials-Practical (in hours per week):		L-T-P:	2-0-4	
Unit	Topics		No. of Lectures	
I	Introduction To Design Management. Design Thinking. What Is Design Thinking? How Design Thinking Is About More Than Style			5
П	Customer Profiling &; Value Mapping; Identifying Challenges &; Gathering Data; Making Sense Of Your Data.			8
	Designing & Design Control – Prototyping; Understanding Customers &			
III	Making Choices; Finding The Right Business Model, Testing & Creating			8

Customer Co Creation & Learning Launch; Leading Growth & Innovation

Intellectual Property, Definition; Copyright, Patent & Trademarks; Other

2

Suggested Readings:

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IV

1. Design Management: Using Design To Build Brand Value And Corporate Innovation - Brigitte Borja De Mozota

Designs, Trade Secrets, Traditional Knowledge & Traditional Cultural

2. The Fundamentals Of Design Management – Kathryn Best

Expression)

In Your Organization

3. Design Thinking: Integrating Innovation, Customer Experience, And Brand Value - Thomas Lockwood

Alignment; Measuring & Monitoring; Reinventing.

Iprs (Geographical Indications, Plant Varieties,

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Funluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	First	
Subject: Design						
Course Code:	DNE 401	Course Title:	Copy Writing			
Course Outcomes	Course Outcomes					
The student at the co	ompletion of the co	ourse will be able t	:0:			
1. Understand the im	portance of copy ir	executing good d	esign communication	on		
2. Support design wo	rk with the use of e	effective copy				
Credits:	4			Elective		
Max. Marks:	100		M	in. Passing Marks:	30	
Total No. of	Lectures-Tutorials-	-Practical				
(in	hours per week):		L-T-P:	2-0	-0-0	
Unit		Topics			No. of Lectures	
ı	1	Elements Of Copywriting; Aim, Features, Strategy, Benefits, Audience,			6	
11		Reaction Creating Marketing Communications Messages; Basics Of Strategy			8	
"	Development, Cre	Development, Creative Thinking And Marketing Communications Tools				
Ш	Understanding the process; understanding what works; Creation Of Advertising Messages For Both Print And Electronic Media			8		
IV	Utilizing your copywriting skills, Creating your own copy			,	8	
Suggested Readings:						
1. Writing And Script	A Very Short Introd	luction And Andres	w Rohinson			
2. The Copywriter's H	· ·			lls By Robert W. Bly	,	
3. The Adweek Copy	•		• .,			
This course can be op				·	Open for all	
This course can be op	rea as an elective i	by the students of	ionowing subjects.		Assignment	
					Submissions,	
Suggested Continuou	is Evaluation Metho	ods:			Class Reviews &	
				Presentations		
Course prerequisites:	Course prerequisites: To study this course, a student must have had this subject in					
Open for all						
Suggested equivalent online courses:						
SWAYAM OR NPTEL COURSE TITLE HERE + LINK						
Further Suggestions:						
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER			ION TO OTHER			

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	First
Subject: Design Course Code: DNE402 Course Title: Electricals & Electronics					
				ronics	
Course Outcomes					

COURSES ETC.

- 1. To Make Students Understand Critical Non-Ideal Effects In Electronic Devices and Systems And How To Address Such Effects
- 2. Enabling Them To Design And Construct Physical electronic Circuits That Operate As Desired.

Credits:	4	Elective		
Max. Marks:	100	Min. Passing Marks:		30
	Lectures-Tutorials-Practical hours per week):	L-T-P:	2-()-2
Unit	Тор	oics		No. of Lectures
I	Basic definitions of Charge, Voltage, (Current, Power, End	ergy	4
П	Resistor(R), Ohm's Law, Ideal Source Current Sources, Energy transfer, resi		ce Of Voltage And	10
III	Circuit Laws, Series And Parallel Con and Power,	nections, Analysis (Of Circuits, Utility	10
IV	_	Capacitors, Magnetic Fields, and Transformers, Capacitance in space, Magnetic field, Magnetic circuit, Transfer Action		
V	Delivery of a design project using learnings from the course			
Suggested Readings:				
SONS, INC. 2002	CTRONICS, Understanding Electronics Charles Taylor; Global Media; 2007	Using Basic Physic	s; Ralph Morrison,	JOHN WILEY &
	•	following subjects:		Open for all
This course can be opted as an elective by the students of following subjects: Suggested Continuous Evaluation Methods:				Assignment Submissions, Class Reviews & Presentations
Course prerequisites: class/12th/certificate	Open for all			
Suggested equivalent online courses:				
SWAYAM OR NPTEL COURSE TITLE HERE + LINK				
Further Suggestions:				
ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.				

EIGHTH SEMESTER

Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	First
	Subject: Design				
Course Code:	Course Code: DNP451 Course Title: Design Dissertation				
Course Outcomes					
Plan and exe					
Credits:	18			Core	
Max. Marks:	100		М	in. Passing Marks: 3	30
Total No. of Lectures-Tutorials-Practical (in hours per week): L-T-P: 0-0-22			-22		
Unit To			oics		No. of Lectures

	The Design Thesis Project is meant to be a final execution of the Design	
	Process under the guidance of academic & professional mentors. It is a	
	demonstration of both, the understanding of inputs received during 7	
	semesters of education and also, the preparedness to independently	
	execute design projects.	
	Procedure	
ı	→ Submission of Thesis Project Proposal to SOD Design Mentor	330
	→ Approval of Thesis Project Proposal by SOD	
	→ Commencement of Thesis Project (Approximately 4 months)	
	→ 1st Compulsory Guide Visit (Within 4-6 weeks of Project Start)	
	→ Submission of 3 copies of Project Documentation to SOD	
	→ Intimation of Colloquium Date by SOD	
	→ Colloquium Jury	

Suggested Readings:

- 1. 101 Design Methods: A Structured Approach for Driving Innovation in Your Organization by Vijay Kumar
- 2. Design Thinking: Process and Methods Manual by Robert Curedale
- 3. Solving Problems with Design Thinking Ten Stories of What Works by Jeanne Liedtka
- 4. The Design Way: Intentional Change in an Unpredictable World by Harold G. Nelson & Erik Stolterman

This course can be opted as an elective by the students of following subjects:	Open for all
	Assignment
Suggested Continuous Evaluation Mathaday	Submissions,
Suggested Continuous Evaluation Methods:	Class Reviews &
	Presentations
Course prerequisites: To study this course, a student must have had this subject in class/12th/certificate/diploma.	Open for all

Suggested equivalent online courses:

SWAYAM OR NPTEL COURSE TITLE HERE + LINK

Further Suggestions:

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER COURSES ETC.

Carrier Outage					
Course Code:	DNC451	Course Title:	Colloquium		
Subject: Design					
Programme/ Class:	Bachelor of Design (4 Years)	Year:	Fourth	Semester:	Second

Course Outcomes

- Present their Project in a professional manner as is expected in the industry
- Should be able to communicate the salient points of their design process

Credits:	4	Core	
Max. Marks:	100	Min. Passing Marks: 30	
	Lectures-Tutorials-Practical hours per week):	L-T-P:	0-0-4

Unit	Topics	No. of Lectures
	A formal presentation of the Thesis Project in the form of an exhibit: may	
	be in the form of a series of panels, supported by a slide presentation	
1	and verbal presentation. Should be able to pick the salient points of the	60
	design process that are crucial in communicating the project to a panel,	
	and represent them in the most effective way. Students will also answer	

questions in a Viva Voce.		
Suggested Readings:	·	
1. Anderson, Chris. TED Talks: The official TED guide to public speaking: Tips and tricks f	or giving unforgettable	
speeches and presentations. Hachette UK		
2. Van Emden, Joan, and Lucinda Becker. Presentation skills for students. Macmillan Into	ernational Higher	
Education		
3. Mandel, Steve. Effective presentation skills. Crisp Publications		
This course can be opted as an elective by the students of following subjects:	Open for all	
	Assignment	
Suggested Continuous Evaluation Mathada	Submissions,	
Suggested Continuous Evaluation Methods:	Class Reviews &	
	Presentations	
Course prerequisites: To study this course, a student must have had this subject in		
class/12th/certificate/diploma.	Open for all	
Suggested equivalent online courses:		
SWAYAM OR NPTEL COURSE TITLE HERE + LINK		
Further Suggestions:		

ANY COURSE SPECIFIC OBSERVATION IN TERMS OF OUTCOMES/SUBMISSION/REVIEW/CONNECTION TO OTHER

COURSES ETC.