

### **Shri Vaishnav Institute of Architecture**

## **B.** Des in Product Design

#### **SEMESTER VI**

#### **BDES PD 601 - DESIGN STUDIO**

					EACHII EME/W				EXA	AMINATION S	СНЕМЕ		ζS
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Sr. No.	Course Code	Course Typology	Course Name	L	Т	S	CREDIT	End Sem University Exam (50% or 40%)	Two Term Exam (20%)	Teachers Assessment* (20%or 30%)	End Sem University Exam (50%)	Teachers Assessment* (50%)	TOTAL
1	BDES PD 601	STUDIO	DESIGN STUDIO 5	0	0	8	8	0	0	0	200	200	400

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

### **Course Educational Objectives (CEOs):**

**CEO 1-** Student will follow the process based product design. Develop a range of products.

## **Course Outcomes (COs):**

- **CO 1-** Learning on design process along with the understanding on form and its functionality.
- **CO 2-** Ability to create innovative designed range of products by following the design processes.
- CO 3- Understanding on how range is created of product having same category

## **Syllabus**

#### UNIT – I

DESIGN THINKING- Consolidation of fundamentals of form based design & lateral thinking will be emphasized. Considerable research will be involved to recognize the virtue of design processes. The objectives are to encourage students to extend their viewpoint beyond conventional solutions, to create a deep sense of details and materials.

24HRS

#### UNIT - II

DESIGN RESEARCH -Qualitative and qualitative research methodology, Questionnaire design, validation, repeatability testing, psychophysical scales. **24HRS** 

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Controller of Examination Shri Vaishnav Vidyapeeth Vishwavidyalaya,Indore Joint Registrar Shri Vaishnav Vidyapeeth Vishwavidyalaya,Indore

<sup>\*</sup>Teacher Assessment shall be based following components: Quiz/Assignment/ Project/Participation in Class, given that no component shall exceed more than 10 marks.



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1	BDES PD 601	STUDIO	DESIGN STUDIO 5	0	0	8	8	0	0	0	200	200	400

 $\label{lem:Legends: L-Lecture; T-Tutorial/Teacher Guided Student Activity; P-Practical; C-Credit;$ 

#### **UNIT - III**

DESIGN PROCESS- Importance of Human factors in product design; Creative techniques and tools for Concept generation, concept evaluation; Product prototyping/ model making work flow, tools and techniques for model making and prototyping, introduction to prototype driven innovation.

24HRS

#### UNIT – IV

DESIGN TECHNOLOGY -Design technology related to product design. 24HRS

#### UNIT-V

Prototyping using design technology.

**24HRS** 

### **Suggested Book References**

- 1. Laurene Vaughan Practice based design research
- 2. Dopress Books Product Sketchbook
- 3. S.Balaram Thinking Design
- 4. Don Norman- The design of Everyday things
- 5. Roozenburg, N. F., & Eekels, J. (1995). Product design
- 6. Lidwell, W., Holden, K., & Butler, J.(2010). Universal principles of design, revised and updated
- 7. Paul Zelanski and Mary Pat Fisher Design principles

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### **Shri Vaishnav Institute of Architecture**

### **B.** Des in Product Design

#### BDES PD 602 – CRAFT BASED DESIGN PROJECT

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Sr. No.	Course Code	Course Typology	Course Name	L	Т	S	CREDI	End Sem University Exam (50% or 40%)	Two Term Exam (20%)	Teachers Assessment* (20%or 30%)	End Sem University Exam (50%)	Teachers Assessment* (50%)	TOTAL
2	BDES PD 602		CRAFT BASED DEIGN PROJECT AND PROTOTYPING	0	0	4	4	0	0	0	100	100	200

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

## **Course Educational Objectives (CEOs):**

Indigenous crafts offer a phenomenal base for drawing inspiration and developing culturally relevant designs in a contemporary context.

### **Course Outcomes (COs):**

- CO 1- To establish an understanding of our rich culture, heritage and traditions
- **CO 2-** This course aims to develop an understanding and appreciation for India's rich cultural heritage and vast repertoire of craft traditions to a designer who may choose to function as a design professional in the craft sector.
- **CO 3-** Analyze the socio-cultural economic influences on the craft, traditional methods of designing and production, use of indigenous materials and use of local technology, market linkages, external influences, etc.

# **Syllabus**

#### UNIT - I

To establish an appreciation and understanding of our rich culture, heritage and vast vocabulary of craft techniques. To expose the students to the gamut of contextually responsive space design of a community, craft activity and the role of design thereof.

12HRS

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				CRAFT BASED DEIGN PROJECT AND					0	0	0	100	100	200
	2	BDES PD 602	STUDIO	PROTOTYPING	0	0	4	4						

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

#### UNIT - II

To evaluate the possibility of extending the traditional material, construction techniques and craft techniques to contemporary application. To equip the students to undertake field research using suitable research tools wherein they directly interact with communities, artisans and skilled craftsman to collect analyze and record data.

12HRS

### **UNIT - III**

The course primarily focuses on an in-depth study, research and documentation of a particular context, craft community and craft: keeping in view various aspects such as the evolution of the craft, communities engaged in practicing the craft, socio-cultural economic influences on the craft, traditional methods of designing and production, use of indigenous materials and use of local technology, market linkages, external influences, etc.

12HRS

#### UNIT – IV

The students are required to spend a part of their project time on field interacting directly with practitioners of the selected craft. They collect and analyze the data using multiple tools in written and visual form. This is recorded by the students in form of a document wherein the students are also encouraged to present their individual insights, findings, and suggestions

12HRS

#### UNIT -V

Prototyping 12HRS

\*No references as this is region based project

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### **Shri Vaishnav Institute of Architecture**

### **B.** Des in Product Design

#### BDES PD 603 – FORMS IN FOUR DIMENSIONS

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3	BDES PD 603	STUDIO	FORMS IN FOUR DIMENSIONS	0	0	4	4	0	0	0	100	100	200

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

### **Course Educational Objectives (CEOs):**

**CEO 1-**To explore and understand the various principles of design and their transformation of Design

### **Course Outcomes (COs):**

- **CO 1-** Ability to control surfaces of objects created from imagination.
- CO 2- Understanding of evolution of shapes and forms.
- **CO 3-** Function oriented look at product aesthetics Applying Logic and mathematics to generate volumes

## **Syllabus**

#### UNIT - I

Projection and Transition Movement of Light around a Form, Movement in time and space. Movement of Space around a Form

12HRS

#### UNIT - II

Kinematic Structures, Mechanisms, spontaneous, automatic and reactive dynamic forms

12HRS

#### UNIT – III

Transformation Fluid Forms, Semi Fluid Forms, Semi Solid Forms

12HRS

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Sr. No	Course Code	Course Typology	t ourse Name	L	Т	S	CREDI	(50% or	Two Term Exam (20%)	Teachers Assessment* (20%or 30%)	End Sem University Exam (50%)	Teachers Assessment* (50%)	TOTAL
3	BDES PD 603	STUDIO	FORMS IN FOUR DIMENSIONS	0	0	4	4	0	0	0	100	100	200

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

#### **UNIT - IV**

Evolution Feature based evolution; Content based evolution; Environment Based Evolution 12HRS

#### UNIT – V

Union and Separation Merger, Conformity, Subtraction, Division Union and Separation Merger, Conformity, Subtraction, Division. Union and Separation Merger, Conformity, Subtraction, Division 12HRS

### **Suggested Book References-**

- 1. 1.Ellen Lupton, Jennifer Tobias, Alicia Imperiale, Grace Jeffers and Randi Mates, Skin: Surface, Substance, and Design
- 2. Princeton Architectural Press, 2002
- 3. Li: Dynamic Form in Nature, Wooden Books, 2007
- 4. Lung-Wen Tsai, Mechanism Design: Enumeration of Kinematic Structures According to Function, CRC Press, 2001
- 5. Sibel Deren Guler, Madeline Gannon, KateSicchio, Crafting Wearables: Blending Technology with Fashion, 2016

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### **Shri Vaishnav Institute of Architecture**

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#### BDES PD 604 – PACKAGING DESIGN

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4	BDES PD 604		PACKAGING DESIGN	1	0	3	4	50	20	30	0	100	200

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

### **Course Educational Objectives (CEOs):**

**CEO 1-**To introduce students to the field of packaging design and make them understand design process, structural possibilities and material used in packaging through hands on assignments

## **Course Outcomes (COs):**

- **CO 1-** To understand that packaging has a crucial role to attract consumer, force them to choose the product and act as a brand communication vehicle.
- **CO 2-**It will also help students to understand the effect on consumer's perception about products and brands through structural packaging.
- **CO 3-**Understanding on different types of Material used in packaging through hands on assignments

## **Syllabus**

#### UNIT - I

Introduction to different kinds of packaging material; Studying about requirements of different products; Exposure of products, services and packaging in stores and similar environments

12HRS

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4	BDES PD 604		PACKAGING DESIGN	1	0	3	4	50	20	30	0	100	200

 $\boldsymbol{Legends} \colon \boldsymbol{L} \text{ - Lecture; } \boldsymbol{T} \text{ - Tutorial/Teacher Guided Student Activity; } \boldsymbol{P} - Practical; \quad \boldsymbol{C} \text{ - Credit; }$ 

#### UNIT - II

CASE STUDIES- Studying a variety of packaging case studies for different brands, materials used; studying the sustainability aspect; understanding the feasibility; Deconstructing and studying packaging of different brands (2-5 brands can be taken in consideration); Elaborating the study on any of the selected brands. **12HRS** 

#### UNIT - III

PROJECT SELECTION- Selection of product for packaging development; Researching about the current packaging available; constraints and positive aspects; understanding, target audience, budget, branding

12HRS

#### UNIT - IV

PROJECT DEVELOPMENT- Developing a packaging for the selected product; incorporating improvements that can be worked upon after the research work. **12HRS** 

#### UNIT - V

FINAL PACKAGING AND ITS BRANDING- Working on the branding aspect of the packaging that has been developed 12HRS

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Sr. No.	Course Code	Course Typology	Course Name	L	Т	S	CREDIT	End Sem University Exam (50% or 40%)	Two Term Exam (20%)	Teachers Assessment* (20%or 30%)	End Sem University Exam (50%)	Teachers Assessment* (50%)	TOTAL N
4	BDES PD 604	STUDIO	PACKAGING DESIGN	1	0	3	4	50	20	30	0	100	200

#### **REFERENCES:**

- 1. 1.Marianne R. Klimchuk, Sandra A. Krasovec, Packaging Essentials: 100 Design Principles for Creating Packages (Design Essentials), Rockport Publishers; 1 edition, June 1, 2010
- 2. Paul Jackson, Structural Packaging: Design your own Boxes and 3D Forms (Paper engineering for designers and students), Laurence King Publishing, 2012 Faculty of Architecture and Planning, Integral University, Lucknow
- 3. Giles Calver, What Is Packaging Design? (Essential Design Handbooks), Rotovision, 2007
- 4. Peng Chong (Editor), Interactive Packaging Design, Design Media Publishing Ltd, 2018
- 5. Pentawards (Editor), The Package Design Book 2 (VARIA), TASCHEN; Mul edition, 2013
- 6. Tony Ibbotson, Peng Chong, Eco Packaging Now , Images Publishing Dist Ac, 2016



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#### **BDES PD 605 – DISSERTATION**

					EACHII HEME/W				EXA	AMINATION S	СНЕМЕ		S
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Sr. No.	Course Code	Course Typology	Course Name	L	Т	S	CREDIT	End Sem University Exam (50% or 40%)	Two Term Exam (20%)	Teachers Assessment* (20%or 30%)	End Sem University Exam (50%)	Teachers Assessment* (50%)	TOTAL M
5	BDES PD 605	THEORY	DISSERTATION	1	1		2	50	20	30	0	0	100

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

## **Course Educational Objectives (CEOs):**

The dissertation provides a forum for discussion of issues relating to design concerns, design philosophy, design need or any other design related areas.

## **Course Outcomes (COs):**

- **CO 1-** To strengthen the students' ability to undertake self-initiated research or acquire particular competence.
- **CO 2-** To explore and reflect the students' perception and understanding of the chosen area through facts, case study, field research.
- CO 3- Understanding on methodology of research , nature of research , various Stages of research, design and research methodology Techniques of data collection in different stages ,research reporting techniques, structure of a report , Writing skills, presentation skills. Standards for Use of primary and secondary references, bibliography, notation, cross references etc Nature of an undergraduate thesis, its structure and other requirements.

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#### BDES PD 606 – INDUSTRIAL VISIT

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6	BDES PD 606	LAB	INDUSTRIAL VISIT	0	0	2	2	0	0	0	50	50	100

**Legends**: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit;

### **Course Educational Objectives (CEOs):**

Industrial visit will be conducted for students, to have in-depth knowledge on how industry works.

#### **GUIDELINES**

- A tour report of A-3 size sheets with proper sketches, photographs, and theory documentation of the topic.
- Videos or any other supporting documentation can also be a part of submission as per the requirement.

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