CBSE | DEPARTMENT OF SKILL EDUCATION

CURRICULUM FOR SESSION 2021-2022

DESIGN (SUBJECT CODE – 830)

JOB ROLE: ASSISTANT DESIGNER

CLASS – XII

This Course on Design is intended to introduce ideas, methodologies, principles, fundamentals and skills that comprise a common knowledge base important to all design disciplines. These fundamentals will foster a multidisciplinary design experience among students and will prepare them to move to the next level. It will provide the students with foundation and fundamentals of skills in design. The course will benefit applicants who have little or no training or experience in art and design and who wish to begin formal education in this field.

SCHEME OF UNITS

This course is a planned sequence of instructions consisting of units meant for developing employability and vocational competencies of students of Class XI opting for skill subject along with other education subjects.

The unit-wise distribution of hours and marks is as given on the next page:

DESIGN (SUBJECT CODE 830)
CLASS – XII (SESSION 2021-2022)
Total Marks: 100 (Theory-60 + Practical-40)

	TERM	UNITS	NO. OF HOURS for Theory and Practical		MAX. MARKS for Theory and Practical
PART A		**Employability Skills**			
	Term I	Unit 1 : Communication Skills-IV	10		05
		Unit 2 : Self-Management Skills- IV	10		
		Unit 3 : ICT Skills- IV	10		
	Term II	Unit 4 : Entrepreneurial Skills- IV	10		05
		Unit 5 : Green Skills- IV	05		
		Total	**50**		**10**
PART B		**Subject Specific Skills**	**Theory**	**Practical**	**Marks**
	Term I	Unit 1: Introduction to Design	50	40	15
		Unit 2: Design Tools & Techniques	15	20	10
	Term II	Unit 3: Occupational Health and Safety	15	20	10
		Unit 4: Practical Workshop	30	20	15
		Total	**110**	**100**	**50**
PART C		**Practical Work**			
		Practical Examination			15
		Written Test			10
		Viva Voce			05
		Total			**30**
PART D		**Project Work/Field Visit**			10
		Practical File/ Student Portfolio			
		Total			**10**
		GRAND TOTAL	**260**		**100**

DETAILED CURRICULUM/ TOPICS FOR CLASS XII

PART-A: EMPLOYABILITY SKILLS

S. No.	Units	Duration (in Hours)
1.	Unit 1: Communication Skills- IV	10
2.	Unit 2: Self-management Skills- IV	10
3.	Unit 3: Information and Communication Technology Skills- IV	10
4.	Unit 4: Entrepreneurial Skills- IV	15
5.	Unit 5: Green Skills- IV	05
	TOTAL DURATION	**50**

NOTE: **Detailed Curriculum/ Topics to be covered under Part A: Employability Skills can be downloaded from CBSE website**.

Part-B – SUBJECT SPECIFIC SKILLS

- ❖ Unit 1: Introduction to Design
- ❖ Unit 2: Design Tools & Techniques
- ❖ Unit 3: Occupational Health and Safety
- ❖ Unit 4: Practical workshop

UNIT-1: INTRODUCTION TO DESIGN

Session 1: Design Thinking

- Human-centric approach to Design
- Research and Discovery
- Ideation
- Prototyping & Piloting
- Testing

Session 2: Design Fundamental

- Geometry and space
- Simple Product Design

UNIT-2: DESIGN TOOLS AND TECHNIQUES

Session 1: Basic Materials

- Categorization of Basic Materials and related properties
- Material Forms and Sources and measures
- Working on Basic Materials

Session 2: Basic Production Processes

- Basic Production Processes in Textile Industry
- Basic Production Processes in Wood Industry
- Basic Production Processes in Metal Industry
- Basic Production Processes in Plastic Industry

UNIT 3: OCCUPATIONAL HEALTH & SAFETY

- Safety and Health responsibility in Metal and Plastic industry
- Role of wav safe inspection in the above industries.
- Hazard identification risk assessment and risk control in metal and plastic industries.
- Dealing with emergency
- Minimum 3 visits to industries related to the above areas.

UNIT 4: PRACTICAL WORKSHOP

Session 1: Knowledge Workshop

- Source and Document information on environmentally friendly design
- Project 1 : Research on a past movement of Design
- Project 2 : Photograph and report on an Architectural monument of national repute/ recognition
- Project 3 : Critique the Design of display and control of a complex product such as computer/ washing medicine/ medical equipment

Session 2: Design Concept workshop

- Design concept workshop on Design for Handicapped
- Design concept workshop on Sustainable Design
- Design concept workshop on Interface Design

Session 3: Product Design workshop

- Produce Design for a product for children
- Produce Design for display and control for Senior Citizens
- Design a functional product from waste

Session 4: Digital workshop

- Introduction to Basic Design software
- Digitize images for reproduction
- Project 1: Digital workshop Adobe Photoshop
- Project 2: Digital workshop Adobe Illustrator
- Project 3: Digital workshop Adobe In-Design

LAB REQUIREMENTS (FOR A GROUP OF TWENTY STUDENTS):

1. **Technical Drawing Equipment**

   - Computer station Licensed software (Autocad by Autodesk or Adobe Creative Suite CS6 or higher).
   - Printer.
   - Photography supplies, digital photo frame, access to photo printers.

2. **Drawing Equipment and Materials**

   - Soft boards - All around on the walls.
   - Stools.
   - Black board.
   - White board.
   - Crayons, pastels, charcoal.
   - Colored pencils, pens, washable markers, calligraphy pens, erasers.
   - Variety of paper, cardboard.
   - Dry-erase boards, markers.
   - Chalk, chalk board, erasers.
   - Non-toxic paint (tempera, acrylic, oil, water colour, finger paint).
   - Colored ink, stamps, wood blocks, natural materials, cardboard.
   - Paint brushes, rollers, squeeze bottles, spray bottles, sponges, paint scrapers.
   - Glue, paste, glue sticks, pots, brushes, spreaders.
   - Paper scraps, magazines, cards, wrapping paper, ribbon, cellophane, newspapers.
   - Cardboard tubes, boxes, roll
   - Pair of scissors.
   - Staplers.
   - Geometry sets.
   - Paper punches.
   - Clips, thumb tacks.
   - Adhesive tapes, glue, craft glue.
   - Sandpaper, cloth, string, wire.