DAVV Institute of Design
DEVI AHILYA VISHWAVIDYALAYA, INDORE

Scheme & Syllabus
Bachelor in Design (Product Design)
Course Credits

L -Lecture, T – Tutorial, P – Practical,

BS-Basic Science, ES-Engineering Science, HS-Humanities and Social Science including Management

Professional Core-PC, Professional Elective-PE, OE-Multidisciplinary Open Electives,
IK- Indian Knowledge system, PR-Project, INT-Internship

Year I: Semester 1

S. No	Course code	Course Name	Type	L	T	P	Hours	Credits
1	1DSBS1	Applied Mathematics-II	BS	3	1	0	4	4
2	IDSBS2	Applied Physics	BS	2	1	2	5	3+1(P)
3	1DSES3	Computer Programming	ES	2	1	2	5	3+1(P)
4	1DSES4	Basic Electrical Engineering	ES	2	1	2	5	3+1(P)
5	1DSES5	Engineering Graphics And Design	ES	2	0	4	6	2+2(P)
6	1DSHS6	Creative Skills	HS	2	0	0	2	2
		TOTAL		13	4	10	27	22

Year I: Semester 2

S. No	Course code	Course Name	Type	L	T	P	Hours	Credits
1	2DSBS1	Applied Mathematics-I	BS	3	1	0	4	4
2	2DSBS2	Applied Chemistry And Environment Science	BS	2	1	2	5	3+1(P)

3	2DSES3	General Mechanical Engineering	ES	2	1	2	5	3+1(P)
4	2DSES4	Basic Electronics	ES	2	1	2	5	3+1(P)
5	2DSES5	Workshop Practice	ES	0	0	2	2	1(P)
6	2DSHS6	Technical English	HS	2	1	0	3	3
7	2RDHS7	Design Thinking	HS	2	0	0	2	2
		Total		13	5	8	26	22

Year II: Semester 3

S. No	Course Code	Course Name	Type	L	T	P	Hours	Credits
1	3DS101	Object as History	BS	2	0	0	2	2
2	3DS102	Introduction to Ergonomics in Design	PC1	2	1	2	5	3 + 1P = 4
3	3DS103	Design Arts and Aesthetics	PC2	2	0	2	4	2 + 1P =3
4	3DS104	Materials and Processes for Model making	PC3	2	1	0	3	3
5	3DS105	Engineering for Designers	PC4	2	0	2	4	2+1P=3
6	3DS106	Exploratory Design Methods	PC5	2	0	2	4	2 + 1P = 3
7	3DS107	Lab./Workshop(Materials and Processes for Model making)	PC6	0	0	4	4	2P
8	3DSIK08	Principles of Ethical Design	IK1	1	1	0	2	2
		Total		13	3	12	28	22

Year II: Semester 4

S. No	Course Code	Course Name	Type	L	T	P	Hours	Credits
1	4DS108	Design Research Methods	PC5	2	1	2	5	3 + 1P = 4

2	4DS109	Branding – Identity and Packaging Design	PC6	2	1	0	3	3
3	4DS110	CAD & Digital Prototyping	PC7	2	1	2	5	3 +1P =4
4	4DS111	System Oriented Design	PC8	2	1	2	5	3+1P = 4
5	4DS112	Design for Future	PC9	2	1	2	5	3 + 1P = 4
6	4DS113	Design Project 1	PR/ IN	–	–	6	6	3P
		Total		10	5	14	29	22

Year III: Semester 5

S. No	Course code	Course Name	Type	L	T	P	Hours	Credits
1	5DS114	Design for UI/ UX	PC10	2	1	2	5	3 + 1P = 4
2	5DS115	Service Design	PC11	2	1	2	5	3 + 1P = 4
3	5DS116	Sustainable Design	PC12	2	1	2	5	3 + 1P = 4
4	5DS117	Professional Elective – 1 (Product Design & Development)	PE1	2	1	2	5	3 + 1P = 4
5	5DS118	Professional Elective – 2 (Qualitative & Quantitative Methods in Design)	PE2	2	1	2	5	3 + 1P = 4
6	5DS119	Design Project 2	PR/IN	0	0	4	4	2P
		Total		10	5	14	29	22

Year III: Semester 6

S. No	Course code	Course Name	Type	L	T	P	Hours	Credits
1	6DS120	Exhibition & Space Design	PC13	2	1	2	5	3 + 1P = 4
2	6DS121	Marketing Research & Trend Analysis	PC14	2	1	2	5	3 + 1P = 4
3	6DS122	Designing for Society & Culture	PC15	2	1	2	5	3 + 1P = 4
4	6DS123	Professional Elective – 3 (Transportation Design)	PE3	2	1	2	5	3 + 1P = 4

5	6DS124	Professional Elective – 4 (Computer Aided Process and Planning)	PE4	2	1	2	5	3 + 1P = 4
6	6DS125	Design Project 3	PR/IN	0	0	4	4	2P
		Total		10	_5	14	29	22

Year IV: Semester 7

S. No	Course code	Course Name	Type	L	T	P	Hours	Credits
1	7DS126	Professional Elective – 5 (Design for Product Life Cycle)	PE5	2	1	2	5	3 + 1P = 4
2	7DS127	Professional Elective – 6 (Design Management & IPR)	PE6	2	1	2	5	3 + 1P = 4
3	7DS128	Design Thesis1	PR/IN	0	0	20	20	10P
		Total		04	02	24	30	18

Year IV: Semester 8

S. No	Course code	Course Name	Type	L	T	P	Hours	Credits
1	8DS129	Professional Elective – 7 (Strategic Design Management)	PE 7	2	1	2	5	3 + 1P = 4
2	8DS130	Design Seminar	PR/IN	0	0	04	04	2P
3	8DS131	Design Thesis 2	PR/IN	0	0	26	26	13P
		Total		02	01	32	35	18

LIST OF ELECTIVE

S. No.	Code	Course Name	Type	Lecture	Tutorial	Practical	Hours	Credits

V Semester (Electives)								
1	5DS117	Professional Elective – 1 (Product Design & Development)	PE1	2	1	2	5	3 + 1P = 4
2	5DS118	Professional Elective – 2 (Qualitative & Quantitative Methods in Design)	PE2	2	1	2	5	3 + 1P = 4
3	5DS130	Design Research Methodology	PE9	2	1	2	5	3 + 1P = 4
4	5DS131	Animation Design	PE10	2	1	2	5	3 + 1P = 4
5	5DS132	Storybook Design	PE11	2	1	2	5	3 + 1P = 4
VI Semester (Electives)								
6	6DS123	Professional Elective – 3 (Transportation Design)	PE4	2	1	2	5	3 + 1P = 4
7	6DS124	Professional Elective – 4 (Computer Aided Process and Planning)	PE5	2	1	2	5	3 + 1P = 4
8	6DS133	Design for Usability	PE12	2	1	2	5	3 + 1P = 4
9	6DS134	Design for User Experience	PE13	2	1	2	5	3 + 1P = 4
10	6DS135	Medical Device Design	PE14	2	1	2	5	3 + 1P = 4
VII Semester (Electives)								
11	7DS126	Professional Elective – 6 (Design for Product Life Cycle)	PE6	2	1	2	5	3 + 1P = 4
12	7DS127	Professional Elective – 7 (Design Management & IPR)	PE7	2	1	2	5	3 + 1P = 4
13	7DS136	Exhibition Design	PE15	2	1	2	5	3 + 1P = 4
14	7DS137	Health Care Design	PE16	2	1	2	5	3 + 1P = 4

15	7DS138	Universal Design	PE17	2	1	2	5	3 + 1P = 4
VIII Semester (Electives)								
16	8DS129	Professional Elective – 8 (Strategic Design Management)	PE 8	2	1	2	5	3 + 1P = 4
17	8DS139	Design for Industry 4.0	PE18	2	1	2	5	3 + 1P = 4
18	8DS140	Professional Practice in Design	PE19	2	1	2	5	3 + 1P = 4
19	8DS141	Design of Assistive Technologies	PE20	2	1	2	5	3 + 1P = 4

Note *

- **Total Program Credit = 168 Total Program Contact Hour = 233**
- **One Lecture = 01 hr**
- **One Tutorial = 01 hr One Practical = 02 hr**

Note: The above course contents can be modified as per requirement from time to time in accordance with University Ordinance No. 14.

DAVV Institute of Design
DEVI AHILYA VISHWAVIDYALAYA, INDORE

Bachelor of Design (B. Des. – Product Design)

1. Executive Summary

- **Brief Overview of the Program**:

  Bachelor of Design (B. Des.) in Product Design is a 4-year undergraduate program that focuses on the creation and improvement of products for daily life. It combines design thinking, engineering basics, ergonomics, and aesthetics to solve real-world problems through functional and innovative products.

- **Objectives and Goals:**

  This program provides opportunities for acquiring knowledge and skills relevant to product design through courses on relevant aspects of design, technology, ergonomics and aesthetics and through projects conducted within a professional environment. The goal is to create professional Product Designers qualified for senior position in industries and institutions.

- **Expected Outcomes** :

  Program outcomes describe what students are expected to know and be able to do by the time of graduation. Students undergoing this program will have following capabilities:

  a) Ability to apply Integrate knowledge, skill and attitude that will sustain an environment of learning and creativity.

  (b) Ability to develop an understanding of various Trend Analysis & Product Conceptualization.

  (c) Ability to apply critical and contextual solutions on variety of Visual design and Product design strategies.

  (d) Ability to develop logical and creative thinking for the solutions of Product Design.

  (e) Ability to apply, explain, and recognize basic engineering, mechanical, and technical principles.

  (f) Ability to apply creative process techniques in synthesizing information, problem- solving and critical thinking.

  (g) Ability to understand, study, analyze and solve various kinds of existing problems in the field of product design.

  (h) Ability to apply deep knowledge of Product Design, material & Technology in the industries.

  (i) An understanding of professional and ethical values.

  (j) Ability to communicate effectively in diverse groups and exhibit leadership skills. To develop an understanding of global environment and its protection.

2. Introduction

- **Background of the Department/School/Institute/Centre**

  Institute of Engineering &Technology (IET), DAVV was established in 1996 as a university Teaching Department. Currently IET has offered B. Tech degree in Computer Engineering, Electronics & Telecommunication Engineering, Information Technology, Mechanical Engineering, Electronics & Instrumentation Engineering and Civil Engineering. IET is also offering Post Graduate programmes in Software Engineering, Information Security, Industrial Engineering & Management, Design & Thermal Engineering, VLSI, Digital Communication and Digital Instrumentation. IET has also good placement records at both UG and PG level.
  Looking at demand of industry and society IET is introducing Bachelor of Design (B. Des. – Product Design) program.

  Vision Statement of B. Des. Program:

  To cultivate visionary designers who combine creativity, critical thinking, and sustainable practices to shape meaningful, human-centered design solutions that positively impact society and the world.

- **Mission Statement of B. Des Program:**

  The mission of the Bachelor of Design program is to equip students with the essential skills, knowledge, and creative mind set needed to thrive in the design industry. Through hands-on learning, interdisciplinary collaboration, and a deep understanding of design principles, we aim to produce forward-thinking, innovative designers who can address real-world challenges and contribute to a sustainable, inclusive, and evolving global design landscape.

- **Rationale for Introducing the Program**

  Introducing a **Bachelor of Design** (B. Des. – Product Design) program is a strategic and timely step that meets educational, industrial, and societal needs. It prepares students for dynamic careers, nurtures innovation, and supports national development goals—while fostering a new generation of design leaders and thinkers. The decision to introduce a Bachelor of Design (B. Des.) program is grounded in a comprehensive understanding of current global trends, national priorities, and the evolving needs of industries and society. Design plays a vital role in preserving cultural heritage, promoting sustainability, and improving the quality of life. Introducing a B. Des. program enables students to work on projects that address local community challenges and foster social innovation.

- **Relevance to Regional/National Priorities**

Criteria	**Alignment with National/Regional Goals**
Societal Needs	Design plays a vital role in preserving cultural heritage, promoting sustainability, and improving the quality of life. Introducing a B. Des. program enables students to work on projects that address local community challenges and foster social innovation.
Industrial Requirements	Design sits at the intersection of technology, art, and social science. A B. Des. program fosters

	interdisciplinary learning, critical for preparing students for emerging careers in areas such as: • UX/UI Design • Product Design • Interaction Design • Environmental and Sustainable Design • Design for AI and IoT systems
Academic Advancement	India has a limited number of quality design institutions compared to the demand. A B. Des. program expands access to high-quality design education, especially if introduced in regions underserved by existing institutions.
NEP 2020 Goals	The **National Education Policy (NEP) 2020** promotes multidisciplinary education and creativity. A B. Des. program supports these goals by offering flexible, skill-based, and project-driven learning that can complement engineering, humanities, and business education.

Program Details

Aspect	**Details**
Title of the Program	Bachelor of Design (B. Des. – Product Design)
Level of Study	Undergraduate
Duration	**Minimum**: Four Years **Maximum**: Eight Years As per Ordinance No. 14 applicable to UTDs.
Eligibility Criteria	Higher Secondary (10+2) or equivalent examination from a recognized board having science stream and mathematics as a subject with at least 50% marks in aggregate or an equivalent grade for General/OBC candidates, and 45% marks in aggregate or an equivalent grade for SC/ST and Differently Abled (DA) category candidates from a recognized Board.
Age limit	As per the provisions of Devi Ahilya Vishwavidyalaya / State Govt. norms for U.G. programmes.
Admission Procedure	Based on ranking of JEE-Mains Exam being conducted by NTA and Qualifying Exam (10+2 with PCM)
Syllabus for Entrance Test	Syllabus of JEE MAINS Entrance Examination
Seats	Seats for Indian Students: -**75**---- (reservation as per state Govt. rules). Seats for NRI/ Foreign Students: ---N.A.-
Duration	……VIII… Semesters (…04….. Years)

Curriculum Design

- **Course Structure and Credits**

Category	Number of Courses	Credits
Core Courses	36	138
Elective Courses	05	10
Practical/Internship	02	20
Total	43	168

- **Linkages to Industry and Research Opportunities** :

  Students are encouraged to develop innovative and creative solutions to design challenges. The program often includes practical projects and workshops, allowing students to apply their knowledge and develop their skills. Many programs offer partnerships with industry leaders, providing students with real-world exposure and networking opportunities. (Collaborations, internships, research projects.)

- **Unique Features**: The **Bachelor of Design (B. Des.)** program is distinguished by its commitment to innovative pedagogy and interdisciplinary learning. These elements are integral to producing adaptable, creative, and future-ready design professionals. Studio-Based Learning, Interdisciplinary Curriculum, Use of Emerging Technologies**3D printing, and generative design** platforms. Focus on Design Thinking and Innovation.

3. Institutional Readiness

Infrastructure

Facilities	Current Status	Proposed Additions
Classrooms	01	01
Laboratories	To be developed	Development of Design Labs
Library Resources	To be developed	Books, soft wares related to design to be purchased
Other Academic Spaces	To be developed	Development of Design Studios

ICT Facilities

- Facilities of IET can be used. e- learning resources has to be developed., etc.

Research and Development

- Since it a new program R & D facility has to be developed.

Student Support

Support Services	Available	Planned
Career Guidance	N.A.	Through CPC of DAVV & faculties of IET, Counselling session by industry experts.
Mentoring	N.A.	Faculty of IET & other experts
Scholarships/Financial Aid	N.A.	All Govt. Scholarships applicable to other students of DAVV

4. Market and Feasibility Analysis

Demand Analysis

Industry and Employment Opportunities The B.Des program prepares graduates for wide range of dynamic, high-growth career paths across industries that increasingly prioritize **design thinking, user experience, innovation, and sustainability**. As design becomes a strategic function in both traditional and emerging sectors, employment opportunities continue to expand. Product and Industrial Design Industrial/Product Designer, Design Engineer, Packaging Designer, Ergonomics Specialist.

Target Audience

Higher Secondary (10+2) or equivalent examination from a recognized board having science stream and mathematics as a subject with at least 50% marks in aggregate or an equivalent grade for General/OBC candidates, and 45% marks in aggregate or an equivalent grade for SC/ST and Differently Abled (DA) category candidates from a recognized Board.

(Potential student demographics.)

Fee Structure for Batch 2025-26:

For Indian Students:

Semester	Academic Fee	Development & Maintenance Fee	Students' Services Fee		Examination Fee	Total (Rs.)	
			Boys	Girls		Boys	Girls
First	65000	--	--	--	2750	65000	65000
Second	--	60000	7450	7010	2750	67450	67010
Third	65000	--	--	--	2750	65000	65000
Fourth	--	60000	7450	7010	2750	67450	67010
Fifth	65000	--	--	--	2750	65000	65000
Sixth	--	60000	7450	7010	2750	67450	67010
Seventh	65000	--	--	--	2750	65000	65000
Eighth	--	60000	7450	7010	2750	67450	67010

Caution money (Refundable) of Rs.4000 (Four Thousand) /- will be charged additionally in the first semester.

For NRI/ Foreign Students: USD ……NA……. per annum. Refundable caution money (once at the time of admission): USD ……NA….