

Institute of Engineering & Technology, DAVV

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

Introduction:

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. Key aspects of this course are following:

Focus on product development: The program emphasizes the entire product design process, from initial concept to final production.

Multidisciplinary approach: It integrates knowledge from various fields like design thinking, ergonomics, and engineering.

Problem-solving: Students learn to identify and address user needs through product design.

User-Centred design: The program emphasizes understanding user behaviour and incorporating feedback into the design process.

Innovation and creativity: Students are encouraged to develop innovative and creative solutions to design challenges.

Hands-on experience: The program often includes practical projects and workshops, allowing students to apply their knowledge and develop their skills.

Industry collaboration: Many programs offer partnerships with industry leaders, providing students with real-world exposure and networking opportunities.

Program 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:

- (i) Ability to apply Integrate knowledge, skill and attitude that will sustain an environment of learning and creativity.
- (ii) Ability to develop an understanding of various Trend Analysis & Product Conceptualization.
- (iii) Ability to apply critical and contextual solutions on variety of Visual design and Product design strategies.
- (iv) Ability to develop logical and creative thinking for the solutions of Product Design.
- (v) Ability to apply, explain, and recognize basic engineering, mechanical, and technical principles.
- (vi) Ability to apply creative process techniques in synthesizing information, problem-solving and critical thinking.
- (vii) Ability to understand, study, analyze and solve various kinds of existing problems in the field of product design.
- (viii) Ability to apply deep knowledge of Product Design, material & Technology in the industries.
- (ix) An understanding of professional and ethical values.

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

Objectives:

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 objective is to create professional Product Designers qualified for senior position in industries and institutions.

Eligibility:

Higher Secondary (10+2) or equivalent examination from a recognized board with any subject (candidates having science stream and mathematics as a subject will be preferred) 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.

Seats:

Seats for Indian Students: 60 (Reservation as per the State Govt. rules) + Additional with

EWS quota: Total: 75

Seats for NRI students: 03 (Inclusive in 60)

Seats for PIO/ Foreign Students: 03 (Over and above 60)

Duration: Eight Semesters (Four Years).

Proposed Fee Structure for Batch 2025-29:

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

- Hostel Fee and Central Library Fee will be extra and as per University norms.
- For NRI/ NRI Sponsored/ PIO/ Foreign Nationals Belong to SAARC or BIMSTEC: Fee in each semester will be 2.5 times of the above mentioned existing total fee.
- Foreign Nationals Belong to other than SAARC or BIMSTEC: Fee of US\$ 3500 per annum shall be payable on yearly basis.
- Caution Money (Refundable) and Alumni Fee (Chargeable in the First Semester):

Category	Caution Money	Alumni Fee
For Indian Nationals	Rs. 4,000	Rs. 500
For NRI/ NRI Sponsored/ PIO/ Foreign Nationals Belong to SAARC or BIMSTEC	Rs. 10,000	Rs. 1,000
Foreign Nationals Belong to other than SAARC or BIMSTEC	Rs. 10,000	Rs. 1,000

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	2DSHS7	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	PC3	2	1	0	3	3

		Model making						
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)	PC	0	0	4	4	2P
8	3DSIK1	Principles of Ethical Design	IK	2	0	0	0	2
		Total		14	2	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 ELECTIVES

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.

Learning Outcomes:

Bachelor of Design (B. Des. Product Design) provide a strong foundation for individuals interested in start-ups and entrepreneurship. Bachelor of Design (B. Des.) in Product Design offers a wide range of career opportunities and a promising future in the design industry. Graduates can work in various roles such as Product Designer, Industrial Designer, UX Designer, and Packaging Designer, among others. The industry is continually expanding, with increasing demand for designers who can integrate creativity, technology, and sustainability.

DEVI AHILYA VISHVA VIDYALAYA, INDORE

REGULATION FOR BACHELOR OF DESIGN (B. Des.) in PRODCUT DESIGN

REGULATION NO. _____

1.	Degree Title	:	Bachelor of Design (B. Des.) in Product Design
2.	Name of Faculty	:	Faculty of Engineering
3.	Name of the School of Studies	:	Institute of Engineering & Technology
4.	Duration	:	Minimum: Four Years Maximum: Eight Years As per Ordinance No. 14 applicable to UTDs.
5.	Eligibility	:	Higher Secondary (10+2) or equivalent examination from a recognized board with any subject (candidates having science stream and mathematics as a subject will be preferred) 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.
6.	Age Limit	:	As per the provisions of Devi Ahilya Vishwavidyalaya / State Govt. norms for U.G. programmes.
7.	Admission Procedure	:	Based on ranking of JEE-Mains Exam being conducted by NTA
8.	Seats	:	Seats for Indian Students: 60 (Reservation as per the State Govt. rules) + Additional with EWS quota: Total : 75 Seats for NRI students: 03 (Inclusive in 60) Seats for PIO/ Foreign Students: 03 (Over and above 60)
9.	Fee	:	As decided by Devi Ahilya Vishwavidyalaya from time to time.
10.	Examination	:	As per Ordinance No. 14 applicable to UTDs.
11.	Curriculum	:	As decided by the Departmental Committee from time to time.
12.	Eligibility for Degree	:	A student will be eligible for award of B. Tech. Degree when he/ she earns minimum required number of valid and virtual credits specified for the programme within maximum duration of the programme, but not before minimum duration of the programme. Minimum Required Valid Credits : 160 Minimum Required Virtual Credits : 16
13.	Attendance	:	Requirement of attendance will be as per University Ordinance governing the Examinations (No. 6). In general, attendance of at least seventy-five

	Requirement		<p>percent of lectures and practical separately, will be required in each course to sit in the semester end examination.</p> <p>For special reasons such as prolonged illness deficiency in percentage of attendance not exceeding fifteen percent of the total number of lectures delivered and practical/sessional held in each course may be condoned by the Vice Chancellor.</p>
14.	General Instructions and Specific Provision	:	<p>No branch transfer is permissible in any other branch during the course of studies. For any other matter not covered in this Regulation, General Rules of Devi Ahilya Vishwavidyalaya as applicable in Semester Examination shall apply. In other matters, Executive Council of Devi Ahilya Vishwavidyalaya shall be competent to take decision.</p>