



Rashtrasant Tukadoji Maharaj Nagpur
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Scheme and Syllabus
Bachelor of Science (Interior Design)

Submitted by
Board of Studies,
Bachelor of Science (Interior Design)

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – I (Interior Design – Major)

Sr. No .	Course category	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Credit	Examination Scheme						
				(Th)	T U	P		Theory				Practical		
								Exa m Hrs.	SEE	CIE	Mi n.	SE E	CIE	Mi n.
1	DSC	Interior Design I	BHD1T01	2	–	–	2	6*	80	20	40	–	–	–
2	DSC	Interior Design I	BHD1P01	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Material & Construction Techniques I	BHD1T02	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Material & Construction Techniques I	BHD1P02	–	–	2	1	–	–	–	–	–	50	25
5	GE/OE	Refer GE/OE basket	BG01T01	2	–	–	2	3	80	20	40	–	–	–
6	GE/OE	Refer GE/OE basket	BGO1T02	2	–	–	2	3	80	20	40	–	–	–
7	VSC	Refer VSC basket	BVS1P01	–	–	4	2	–	–	–	–	50	50	50
8	SEC	Refer SEC basket	BVS1P02	–	–	4	2	–	–	–	–	50	50	50
9	AEC	English Compulsory	BAE1T01	2	–	–	2	3	50	50	40	–	–	–
10	VEC	Environmental Science	BVE1T01	2	–	–	2	3	80	20	40	–	–	–
11	IKS	Vedic Mathematics	BIK1T01	2	–	–	2	3	80	20	40	–	–	–
12	CC	Refer CC Basket	BCC1P01	–	–	4	2	–	–	–	–	–	100	50
Total				14	–	16	22		530	170	–	125	275	

*The exam duration for Interior Design I is 6 hours (3 hours in two sittings)

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – II (Interior Design – Major)

Sr · No ·	Course categor y	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Cred it	Examination Scheme						
				(T h)	T U	P		Theory				Practical		
								Exa m Hrs.	SE E	CI E	Mi n.	SE E	CI E	Mi n.
1	DSC	Interior Design II	BHD2T03	2	–	–	2	6*	80	20	40	–	–	–
2	DSC	Interior Design II	BHD2P03	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Material & Constructio n Techniques II	BHD2T04	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Material & Constructio n Techniques II	BHD2P04	–	–	2	1	–	–	–	–	–	50	25
5	GE/OE	Refer GE/OE basket	BG02T03	2	–	–	2	3	80	20	40	–	–	–
6	GE/OE	Refer GE/OE basket	BGO2T04	2	–	–	2	3	80	20	40	–	–	–
7	VSC	Refer VSC basket	BVS2P03	–	–	4	2	–	–	–	–	50	50	50
8	SEC	Refer SEC basket	BVS2P04	–	–	4	2	–	–	–	–	50	50	50
9	AEC	Second language	BAE2T02	2	–	–	2	3	50	50	40	–	–	–
10	VEC	Constitutio n of India	BVE2T02	2	–	–	2	3	80	20	40	–	–	–
11	IKS	Vastu Shastra	BIK2T02	2	–	–	2	3	80	20	40	–	–	–
12	CC	Refer CC Basket	BCC2P02	–	–	4	2	–	–	–	–	–	100	50
Total				14	–	16	22		530	170		125	275	

*The exam duration for Interior Design II is 6 hours (3 hours in two sittings)

Exit Option: Award of UG Certificate in Major 40-44 credits and additional four credits score NSQF course/ Internship or continue with Major and Minor

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – III (Interior Design – Major)

Sr. No.	Course Category	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Credit	Examination Scheme						
				(Th)	TU	P		Theory				Practical		
								Exam Hrs.	SEE	CIE	Min.	SEE	CIE	Min.
1	DSC	Interior Design III	BHD3T05	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design III	BHD3P05	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Material & Construction Techniques III	BHD3T06	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Material & Construction Techniques III	BHD3P06	–	–	2	1	–	–	–	–	–	50	25
5	MINOR	Minor 1 (Refer Minor Basket)	–	2	–	–	2	3	80	20	40	–	–	–
6	MINOR	Minor 1 (Refer Minor Basket)	–	–	–	2	1	–	–	–	–	25	25	25
7	MINOR	Minor 2 (Refer Minor Basket)	–	2	–	–	2	3	80	20	40	–	–	–
8	MINOR	Minor 2 (Refer Minor Basket)	–	–	–	2	1	–	–	–	–	–	50	25
9	GE/OE	Refer GE/OE basket	BGO3T05	2	–	–	2	3	80	20	40	–	–	–
10	VSC	Refer VSC basket	BVS3P05	–	–	4	2	–	–	–	–	50	50	50
11	AEC	Second language	BAE3T03	2	–	–	2	3	50	50	40	–	–	–
12	FP	Field Project	BFP3P01	–	–	4	2	–	–	–	–	50	50	50
13	CC	Refer CC Basket	BCC3P03	–	–	4	2	–	–	–	–	–	100	50
Total				12	0	20	22		450	150	-	150	350	

*The exam duration for Interior Design III is 12 hours (3 hours in two sittings for two days)

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – IV (Interior Design – Major)

Sr. No .	Course Category	Name of Course	Course Code	Teaching Scheme(hrs.)			Total Credit	Examination Scheme						
				(Th)	T U	P		Theory				Practical		
								Exam Hrs.	SEE	CIE	M in .	SE E	CI E	Mi n.
1	DSC	Interior Design IV	BHD4 T07	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design IV	BHD4P04	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Material & Construction Techniques IV	BHD4T08	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Material & Construction Techniques IV	BHD4P08	–	–	2	1	–	–	–	–	–	50	25
5	Minor	Minor 3(Refer Minor Basket)	–	2	–	–	2	3	80	20	40	–	–	–
6	Minor	Minor 3(Refer Minor Basket)	–	–	–	2	1	–	–	–	–	25	25	25
7	Minor	Minor 4(Refer Minor Basket)	–	2	–	–	2	3	80	20	40	–	–	–
8	Minor	Minor 4(Refer Minor Basket)	–	–	–	2	1	–	–	–	–	–	50	25
9	GE/OE	Refer GE/OE basket	BG04T06	2	–	–	2	3	80	20	40	–	–	–
10	SEC	Refer SEC basket	BVS4P06	–	–	4	2	–	–	–	–	50	50	50
11	AEC	English Compulsory	BAE4T03	2	–	–	2	3	50	50	40	–	–	–
12	CEP	Community Service	BCM4P01	–	–	4	2	–	–	–	–	50	50	50
13	CC	Refer CC Basket	BCC4P04	–	–	4	2	–	–	–	–	–	100	50
Total				12	–	20	22	–	450	150		150	350	

* The exam duration for Interior Design IV is 12 hours (3 hours in two sittings for two days)

Exit Option: Award of UG Diploma in Major & Minor with 80-88 credits and additional four credits score NSQF course/ Internship or continue with Major and Minor

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – V (Interior Design – Major)

Sr. No .	Course Category	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Credit	Examination Scheme						
				(Th)	TU	P		Theory				Practical		
								Exam Hrs.	SEE	CIE	Min .	SEE	CIE	Min .
1	DSC	Interior Design V	BHD5T09	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design V	BHD5P09	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Material & Construction Techniques V	BHD5T10	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Material & Construction Techniques V	BHD5P10	–	–	2	1	–	–	–	–	–	50	25
5	DSC	Structure I	BHD5T11	2	–	–	2	3	80	20	40	–	–	–
6	DSC	Structure I	BHD5P11	–	–	2	1	–	–	–	–	25	25	25
7	DSE	Elective I	BHD5T12	3	–	–	3	3	120	30	60	–	–	–
8	DSE	Elective I	BHD5P12	–	–	2	1	–	–	–	–	–	50	25
9	Minor 5	Minor 5(Refer Minor Basket)	–	2	–	–	2	3	80	20	40	–	–	–
10	Minor 5	Minor 5 (Refer Minor Basket)	–	–	–	2	1	–	–	–	–	25	25	25
11	Minor 6	Minor 6 (Refer Minor Basket	–	2	–	–	2	3	80	20	40	–	–	–
12	Minor 6	Minor 6(Refer Minor Basket)	–	–	–	2	1	–	–	–	–	–	50	25
13	VSC	Refer VSC Basket	BVS5P07	–	–	4	2	–	–	–	–	50	50	50
14	CEP	Community Service	BCM5P02	–	–	2	1	–	–	–	–	25	25	25
Total				13		18	22	-	520	130		150	300	

* The exam duration for Interior Design V is 12 hours (3 hours in two sittings for two days)

Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – VI (Interior Design – Major)

Sr . N o.	Cours e catego ry	Name of Course	Course Code	Teaching Scheme (hrs.)			Tota l Cred it	Examination Scheme						
				(Th)	T U	P		Theory				Practical		
								Exa m Hrs.	SE E	CI E	Min .	SE E	CI E	Min .
1	DSC	Interior Design VI	BHD6T13	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design VI	BHD6P13	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Material & Construction Techniques VI	BHD6T14	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Material & Construction Techniques VI	BHD6P14	–	–	2	1	–	–	–	–	–	50	25
5	DSC	Structure I	BHD6T15	2	–	–	2	3	80	20	40	–	–	–
6	DSC	Structure I	BHD6P15	–	–	2	1	–	–	–	–	25	25	25
7	DSE	Elective II	BHD6T16	3	–	–	3	3	120	30	60	–	–	–
8	DSE	Elective II	BHD6P16	–	–	2	1	–	–	–	–	–	50	25
9	Minor	Minor 7(Refer Minor Basket)	–	2	–	–	2	3	80	20	40	–	–	–
10	Minor	Minor 7(Refer Minor Basket)	–	–	–	2	1	–	–	–	–	25	25	25
11	VSC	Refer VSC Basket	BVS6PO8	–	–	4	2	–	–	–	–	50	50	50
12	OJT	Internship (Related to DSC)	BOJ6P01	–	–	8	4	–	–	–	–	100	100	100
Total				11		22	22	-	440	110	-	225	325	

* The exam duration for Interior Design VI is 12 hours (3 hours in two sittings for two days)

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – VII (Honors) (Interior Design – Major)

Sr. No.	Course category	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Credit	Examination Scheme						
				(Th)	TU	P		Theory				Practical		
								Exam Hrs.	SEE	CIE	Min.	SEE	CIE	Min.
1	DSC	Interior Design VII	BHD7T17	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design VII	BHD7P17	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Furniture Design III	BHD7T18	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Furniture Design III	BHD7P18	–	–	2	1	–	–	–	–	–	50	25
5	DSC	Interior Services & Detailing	BHD7T19	2	–	–	2	3	80	20	40	–	–	–
6	DSC	Interior Services & Detailing	BHD7P19	–	–	2	1	–	–	–	–	25	25	25
7	DSC	Structure III	BHD7T20	2	–	–	2	3	80	20	40	–	–	–
8	DSC	Structure III	BHD7P20	–	–	2	1	–	–	–	–	–	50	25
9	DSE	Elective III	BHD7T21	3	–	–	3	3	120	30	60	–	–	–
10	DSE	Elective III	BHD7P21	–	–	2	1	–	–	–	–	25	25	25
11	RM	Research Methodology	BHD7T22	2	–	–	2	3	80	20	40	–	–	–
12	RM	Research Methodology	BHD7P22	–	–	4	2	–	–	–	–	50	50	50
Total				13		14	20	-	520	130	-	125	225	

* The exam duration for Interior Design VII is 12 hours (3 hours in two sittings for two days)

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – VIII (Honors) (Interior Design – Major)

Sr. No.	Course category	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Credit	Examination Scheme						
				(Th)	TU	P		Theory				Practical		
								Exam Hrs.	SEE	CIE	Min.	SEE	CIE	Min.
1	DSC	Interior Design VIII	BHD8T23	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design VIII	BHD8P23	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Furniture Design IV	BHD8T24	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Furniture Design IV	BHD8P24	–	–	2	1	–	–	–	–	–	50	25
5	DSC	Interior Services & Detailing	BHD8T25	2	–	–	2	3	80	20	40	–	–	–
6	DSC	Interior Services & Detailing	BHD8P25	–	–	2	1	–	–	–	–	25	25	25
7	DSC	Structure IV	BHD8T26	2	–	–	2	3	80	20	40	–	–	–
8	DSC	Structure IV	BHD8P26	–	–	2	1	–	–	–	–	–	50	25
9	DSE	Elective IV	BHD8T27	3	–	–	3	3	120	30	60	–	–	–
10	DSE	Elective IV	BHD8P27	–	–	2	1	–	–	–	–	25	25	25
11	OJT	Apprenticeship (Related to DSC)	BOJ8P02			8	4	–	–	–	–	100	100	100
Total				11		18	20		440	110		175	275	

* The exam duration for Interior Design VIII is 12 hours (3 hours in two sittings for two days)

Four Year UG Honors Degree in Major & Minor with 160-176 credits

Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – VII (Research) (Interior Design – Major)

Sr · No ·	Course catego ry	Name of Course	Course Code	Teaching Scheme (hrs.)			Tot al Cre dit	Examination Scheme						
				(Th)	T U	P		Theory				Practical		
								Exa m Hrs.	SE E	CI E	Mi n.	SE E	CI E	Mi n.
1	DSC	Interior Design VII	BHD7T1 7R	2	–	–	2	12*	80	20	40	–	–	–
2	DSC	Interior Design VII	BHD7P1 7R	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Interior Services & Detailing	BHD7T1 8 R	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Interior Services & Detailing	BHD7P1 8R	–	–	2	1	–	–	–	–	–	50	25
5	DSC	Structure – IV	BHD7T1 9R	2	–	–	2	3	80	20	40	–	–	–
6	DSC	Structure – IV	BHD7P1 9R	–	–	2	1	–	–	–	–	25	25	25
7	DSE	Elective III	BHD7T2 0R	3	–	–	3	3	120	30	60	–	–	–
8	DSE	Elective III	BHD7P2 0R	–	–	2	1	–	–	–	–	–	50	25
9	RM	Research Methodolo gy	BHD7T2 1R	2	–	–	2	3	80	20	40	–	–	–
10	RM	Research Methodolo gy	BHD7P2 1R	–	–	4	2	–	–	–	–	50	50	50
11	RP	Research Project or Dissertatio n (Core)	BRP7P01	–	–	6	3	–	–	–	–	75	75	75
Total				11		18	20	-	440	110	-	175	275	

* The exam duration for Interior Design VII is 12 hours (3 hours in two sittings for two days)

FYUGP-Scheme I - VIII Semester
Bachelor of Science (Honors/ Research)
Four Year (Eight Semester Degree Course)
Teaching and Examination Scheme
B.Sc. Sem. – VIII (Research) (Interior Design – Major)

Sr. No.	Course category	Name of Course	Course Code	Teaching Scheme (hrs.)			Total Credit	Examination Scheme						
				(Th)	TU	P		Theory				Practical		
								Exam Hrs.	SEE	CIE	Min.	SEE	CIE	Min.
1	DSC	Interior Design VIII	BHD8T22R	2	–	–	2	12	80	20	40	–	–	–
2	DSC	Interior Design VIII	BHD8P22R	–	–	2	1	–	–	–	–	25	25	25
3	DSC	Interior Services & Detailing	BHD8T23R	2	–	–	2	3	80	20	40	–	–	–
4	DSC	Interior Services & Detailing	BHD8P23R	–	–	2	1	–	–	–	–	–	50	25
5	DSC	Structure – IV	BHD8T24R	2	–	–	2	3	80	20	40	–	–	–
6	DSC	Structure – IV	BHD8P24R	–	–	2	1	–	–	–	–	25	25	25
7	DSE	Elective IV	BHD8T25R	3	–	–	3	3	120	30	60	–	–	–
8	DSE	Elective IV	BHD8P25R	–	–	2	1	–	–	–	–	–	50	25
9	RP	Research Project or Dissertation (Core)	BRP8P02	–	–	14	7 (4+2+1)	–	–	–	–	175	175	175
Total				9		22	20		360	90		225	325	

R is the Subject code indicates Research

* The exam duration for Interior Design VIII is 12 hours (3 hours in two sittings for two days)

Four Year UG Honors Degree in Major & Minor with 160-176 credits

Total Credits:

1. Three Year UG Degree Program: 132
2. Four Year UG Degree Program: 172

Abbreviations: Generic/Open Electives: OE, Vocational Skills & Skill Enhancement Courses: VSEC, Vocational Skill Courses: VSC, Skill Enhancement Courses: SEC, Ability Enhancement Courses: AEC, Indian Knowledge Systems: IKS, Value Education Courses: VEC, On Job Training (Internship/Apprenticeship): OJT, Field Project: FP, Community Engagement & Service: CEP, Co-curricular Courses: CC, Research Methodology: RM, Research Project: RP

Basket for VSC (Interior Design)

Semester	Course Category	Name of Course	Course Code
I	VSC	Graphics I	BVS1P01
II	VSC	Graphics II	BVS2P03
III	VSC	Graphics III	BVS3T05
V	VSC	Estimation & Costing I	BVS5PO7
VI	VSC	Estimation & Costing II	BVS6P08

Basket for ELECTIVE (DSE) Category Courses (Interior Design)

Semester	Course Category	Name of Course	Course Code	credits
V	Elective 1	Furniture Design I	BHD5T12	4
		History & Architecture Heritage Interior I		
VI	Elective 2	Furniture Design II	BHD6T16	4
		History & Architecture Heritage Interior II		
VII	Elective 3	IL+DM I	BHD7T21	4
		History of Art and Architecture III + Heritage Interior		
VIII	Elective 4	IL+DM II	BHD8T29	4
		History of Art and Architecture IV + Heritage Interior		

B.Sc. Interior Design (Honors/ Research)
A four-year eight semester degree program

1. Introduction to B.Sc. (Honours/ Research) Interior Design

The Choice Based Credit System (CBCS) provides an opportunity to a student to choose courses from the syllabus comprising Core, Elective, Generic and Skill-based vocational courses. It offers a flexibility of program structure while ensuring that the student gets a strong foundation in the subject and gains in-depth knowledge. The learning outcome based curriculum framework (LOCF) will provide students with a clear purpose to focus their learning efforts and enable them to make a well judged choice regarding the course they wish to study. This will suit the present day needs of students in terms of securing their paths towards higher studies or employment.

Program Duration and Design: The B.Sc. (Hons/Res) **Interior Design** course is a eight semester course spread over four academic years. The teaching – learning process involves theory and practical classes and will be student-centred. Apart from the conventional chalk and talk method, power point presentations, audio–video tools, class discussions, simulations and virtual labs (wherever possible) will be used. Students will be encouraged to carry out short term projects and participate in industrial and institutional visits, seminars and workshops. Assessment will be based on continuous internal evaluation (CIE) and semester end examination (SEE). Each theory paper will be of 100 marks out of which 20% marks are for internal assessment while a practical paper will be of 50 marks comprising 50% internal assessment.

2. Learning Outcome-based Curriculum Framework in BSc (Hons/ Res) Interior Design

The Learning Outcomes-based Curriculum Framework (LOCF) for the B.Sc. (Hons/ Res) degree in **Interior Design** provides a broad structural framework that can accommodate the current curricular needs as well as gives sufficient flexibility to include changes in content that assume importance as the frontiers of science grow. The inherent flexibility in framework allows design of course basket in tune with individual preferences. The basic uniformity in core course design ensures smooth movement across universities in the country.

Nature and Extent: The B.Sc. (Hons/Res) **Interior Design** programme covers a wide range of basic and applied courses as well as courses of interdisciplinary nature.

Aims of the Programme: The core courses offered in the programme aim to build a strong conceptual chemical knowledge base in the student, the contents of electives and skill enhancement courses help them explore their fitness and suitability to pursue studies in these areas.

3. Programme Specific Outcomes (PSOs) in B.Sc. (Hons/Res) Interior Design

PROGRAMME OUTCOME AIM : To develop professional, creative and skilled students as practitioners of Interior Design .

PO1. Analytical Thinking

Demonstrate analytical thinking to identify , evaluate and formulate design strategies and opportunities. Using a creative problem-solving methods in order to approach one solution from the multiple possibilities generated and implement it.

PLO 2. Human-Centered Cultural Awareness

Thoroughly understand the client and end-user needs, as well as relevant cultural elements, to support the development of a design solution. Understand the meaning and impact of design as it relates to human interaction, technology, theoretical frameworks, and interdisciplinary efforts.

PLO 3. Communication

Demonstrate effective visual, verbal, and written communication. Effectively communicate design solutions both visually and through client-centric presentations.

PLO 4. Technical Skills & Professional Knowledge

Demonstrate the ability and knowledge to determine appropriate design solutions and technical documentation throughout the design process, in alignment with client and user needs along with environmental, aesthetic, and financial considerations.

PLO 5. Professionalism and Ethics

Demonstrate professionalism having a good understanding of and ability in dealing with a cross-disciplinary teams, organizing and forming linkage found in work environments. Having Ethical approach to design projects, strong client communication skills, and assessing and evaluating the role of the context of the projects.

4. Structure of the Programme in B.Sc. (Hons/Res) Interior Design

The programme includes Core Courses and Elective Courses. The Discipline Specific Core (DSC) Courses are all compulsory courses. There are three types of Elective Courses – Discipline Specific Elective (DSE), Generic Elective (GE), Vocational/ Skill Enhancement Courses (VS). In addition there are Ability Enhancement Courses (AEC). Field based projects and research projects add to the skill component.

SEMESTER I

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program

B.Sc. Sem I (Interior Design – Major)

BHD1T01 Interior Design I

-Theory-

AIM: The aim of the subject is to understand the principles of design and its application to interior design. Visual perception through simple design elements and organization.

UNIT I

Understanding visual perception of forms analyzed through spatial elements like, line, plane and volume through graphic tools and 3D explorations. Understanding their combinational character.

UNIT II

Impact of variables like size, shape, colour, tone, texture and light on spatial elements of design. Compositions as symmetrical, asymmetrical, balanced/unbalanced, steady/dynamic etc. perception of forms through movement in space.

UNIT III

Understanding design issues through order, pattern, rhythm- ISSUES Composition. Synthesis of these elements evolves understanding of order in space and form, Variation, issues of geometry, principles of perception, proximity, closure similarity form in content, figure and ground relationships, static and dynamic aspects of spaces.

UNIT IV

Analysis of visual elements of design. Design principles for eg. Unity and Balance etc.

UNIT V

Geometrical character of design elements leading to principles like contrast, Harmony, Rhythm, Proportion, emphasis and subordination, repetition etc.

REFERENCES:

1. Time Saver Standards
2. Visual Arts: A Basic Study by Bhagwat Desai
3. Form Space and Order by D.K.Ching

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program

B.Sc. Sem I (Interior Design – Major

BHD1P01 Interior Design I

PRACTICAL:

- Preparation of Colour Wheel □ Colour Interaction Samples □ Composition with Basic Shapes/ Materials □ Making of different Forms using Basic Materials

The exercises shall be based on:

1. Understanding and application of design elements and variables.
2. Understanding and application of design principles through 2D and 3D compositions.
3. Quantitative and qualitative aspects of space through design exercise.

REFERENCES:

1. Time Saver Standards
2. Visual Arts: A Basic Study by Bhagwat Desai
3. Form Space and Order by D.K.Ching

Interior Design I (THEORY AND PRACTICAL)

S. No	Course Outcomes
CO1	Understand the elements of design as point, line, plane and volume and their combinational character
CO2	Classification of variables as size, shape, colour, texture and light and its impact on the elements of design
CO3	Making compositions as symmetrical, asymmetrical, steady and dynamic.
CO4	Understanding of form, space and organization through synthesis. Organization through perception by resolving figure and ground relationship.
CO5	Analyzing visual elements through various principles of design as Unity, Balance, Harmony, Contrast, Rhythm etc.

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem I (Interior Design – Major)
BHD1T02 MATERIAL AND CONSTRUCTION TECHNIQUES I
-THEORY-

Aim: Understanding building as a system. Introduction to basic building material and construction methods. General idea about their chemical and physical properties leading to structural strength and aesthetic qualities. Emphasis should be given on developing understanding about making choice of appropriate building materials in a given situation.

UNIT I

Building Terminology, Building components, its characteristics and behavior. Relationship between building components& building material

UNIT II

Materials - Clay, brick, stone their physical and behavioral properties, process of manufacture, tools and techniques of application to built form and interiors

UNIT III

Openings in masonry, arches, lintels

UNIT IV

Material – Sand, cement, aggregate, mortar, concrete. Process of manufacture, in situ reinforced cement concrete construction, physical and behavioral properties, application in built forms and interiors, Cane and bamboo, tools and techniques of joinery, application to built forms and interiors

Sessional Work:Plates,Site visit reports, tutorials, notes, sketches and market surveys.

REFERENCES:

- 1.Building Construction by Sushil Kumar
- 2.Building Construction by Rangwala
- 3.Building Construction by Barry and Mckay

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem I (Interior Design – Major)

BHD1P02 MATERIAL AND CONSTRUCTION TECHNIQUES I
-PRACTICAL :

The Practical exercises shall be drawing and design output on sheets

1. Standard indication of construction material on drawings
2. Bricks and Bats
3. Types of Brick Bonds
4. Lintels and Arches
5. Elements of building for load bearing and RCC structures
6. Stone Masonry
7. Application of bamboo to furniture

Material and Construction Techniques I

S. No	Course Outcomes
CO1	Develop understanding of the elements of building
CO2	Develop understanding of the materials and techniques of masonry construction
CO3	Develop understanding of the openings in masonry
CO4	Develop understanding of the materials and techniques of construction of RCC, cane & bamboo

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem I (Interior Design – Major)

BVS1P01 GRAPHICS - I (VSC)

PRACTICAL 2 credits

AIM : To introduce students to technical drawing methods and equipment , language of graphics i.e. vocabulary and grammar enabling students to express simple three dimensional objects by developing their skill for communicating graphically objects so as to later adopt the same for depicting buildings and building components.

UNIT I

Familiarization of equipment and recapitulation: Ability to handle and use various drawing instruments and media for technical drawing and sketching. Introduction to graphic language and its components viz. Line types; meaning and application, lettering , use of various metric scales, conventions ,standard annotations and format .Principles of plane geometry and geometrical constructions .systems of measurement MKS and FPS.

UNIT II

Understanding scales: study of scales, their use in practice and construction of plain and diagonal scale. Concept of enlargement and reduction of objects.

UNIT III

Introduction to orthographic projections : The concept of representing objects and elements of drawing such as point , line , planes and simple regular geometric forms / 3 dimensional objects as plan/s section/s and elevation/ learning the basics of drawing orthographic projections for simple combinations of point , line , planes and solids primarily as first angle projections and or third angle projections.

UNIT IV

Orthographic projections: Drawing Orthographic Projections of simple and complex solids based on geometrical constructions , either single or in combinations.

UNIT V

Understanding and drawing views: learning the basics of drawing isometric views and Axonometric projections for representing various simple and complex geometrical shapes and forms and rendering the same to understand materials .

SESSIONAL WORK:

- Exercises should be based on simple and complex geometrical shapes and cover all units in plate forms.
- Sessional work should be planned to cover all the units mentioned in course outline with thrust on skill development, accuracy and understanding of the topic.
- Maximum weight age of 10 percent in assessment should be given to the assignments of geometrical constructions.
- Manually drafted assignments to cover the course outline based on all units.

REFERENCES:

- 1.Ching Francis D.K.: Architectural Graphics
- 1.Leslie Martin: Architectural graphics:
- 2.Jolhe D A : Engineering Graphics , Tata McGraw Hill , New Delhi
- 3.Bhat N D, “Elementary Engineering Drawing-Plane and Solid Geometry”, Chartotar Publishing House, Anand (1988)
- 4.M.S.Kumar : Engineering Drawing, DD publications, Chennai
- 5.I.H. Morris : Geometrical Drawing for Art Students, Orient Longman Chennai.

Graphics I

S. No	Course Outcomes
CO1	Handle the drawing set up and equipment
CO2	Acquire the knowledge of and apply or use of various metric scales, conventions ,standard annotations and format . Understand the concept of enlargement and reduction of objects
CO3	Acquire the ability to apply Principles of plane geometry and geometrical constructions Understand the concept of enlargement and reduction of objects.
CO4	Drawing Orthographic Projections of simple solids based on geometrical constructions , either single or in combinations
CO5	Be able to comprehend and apply drafting skills at level 1

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem I (Interior Design – Major)
BVE1T01: ENVIRONMENTAL SCIENCE

COURSE OUTCOMES:

At the end of the course, students shall be able to:

- Explain the basics of Environmental Science and Atmospheric Science along-with the components of Environment
- Explicate the importance of Environmental Education.
- Elucidate the fundamentals of atmospheric science including formation, depletion and effects of ozone layer and acid rain on environment.
- Describe the various physical and chemical characteristics and properties of Water and Soil
- Understand the Ecology and its allied branches
- Comprehend about Population and Community Ecology
- Study the changes in Population by understanding the concept of Population ecology

Unit-I: Basics of Environmental Science (7.5 Hrs)

- A. Introduction of Environmental Science: Definition, Types, Classification, Characteristics, Components and principles of environment. Scope and need for environmental science, Multidisciplinary nature of environmental science, Environmental ethics.
- B. Environmental Education: Goals, Objectives and principles of environmental education, formal and non-formal environmental education, environmental programme, importance of environmental education, environmental awareness.
- C. Components of Environment: Atmosphere (Structure and composition), hydrosphere – distribution of water, hydrological cycle, global water balance, lithosphere – Internal structure of Earth, types of rocks, Biosphere- Boundaries of biosphere.

Unit-II: Basics of Atmospheric Science (7.5 Hrs)

- A. Atmospheric Chemistry: Structure of atmosphere based on temperature, photochemical reaction in the atmosphere, temperature inversion and lapse rate, smog formation, types of smog (sulphur and photochemical smog), adverse effect of smog on human being, aerosol.
- B. Green House Effect: Greenhouse gases, relative contribution and effects of greenhouse effect, control of greenhouse gases. Ozone depletion: chemistry of ozone depletion, Dobson Unit, ozone depleting substances (ODS), ozone hole, consequences of ozone depletion, mitigation measures and international protocols.
- C. Acid Rain: Chemistry of Acid Rain, effect of acid rain on ecosystem, control measures. Precipitation – Forms of precipitation (rain, drizzle, snow, sleet, and hail), types of precipitation (conventional, orographic, and cyclonic).

Unit-III: Basics of Ecology (7.5 Hrs)

- A. Ecology: Definition, subdivision and modern branches of ecology, ecology spectrum, scope of ecology. Application and significance of ecology to human beings.
- B. Abiotic Factors: Temperature: effect of temperature on plants and animals, Adaptation to meet extreme temperature. Light: Zonation in marine habitat, effects of light on plants and animals, Microclimate and fire, Shelford law of tolerance, Leibigs law of minimum.
- C. Biotic Factor: Inter specific relationship Positive: Mutualism (symbiosis), commensalism, proto- cooperation Negative: Parasitism, predation, competition, Antibiosis, Neutralism.

Unit-IV: Ecosystems and food chain (7.5 Hrs)

- A. Ecosystem: Definition, structure and function of ecosystem, types of ecosystem: Terrestrial (forest, grassland, desert, cropland), Aquatic (Marine and freshwater)
- B. Food chain: Definition & types: Grazing food chain, detritus food chain, and parasitic food chain, food web in forest and grassland ecosystem. Ecological pyramids (number biomass and energy), energy flow in ecosystem (Y- shaped). Energy flow and the law of thermodynamics.
- C. Biogeochemical Cycles: Definition, classification, gaseous cycle (oxygen, carbon and nitrogen) Sedimentary cycle (phosphorus and sulphur).

Reference Books:

- 1. Text Book of Environment: K M Agrawal, P.K. Sikdar, and S.C. Deb, Mc'Millan Publication, Mumbai.
- 2. Man and Environment: M.C. Dash and P.C. Mishra, Mc'Millan Publication, Mumbai.
- 3. Environmental Science: S.C. Santra, New Central Book Pvt.Ltd, Kolkatta.
- 4. Environmental Problems and Solution: D.K. Asthana, S.Chand Publication, New Delhi.
- 5. Environmental Chemistry: S.S. Dara, S.Chand Publication ,New Delhi.
- 6. Environmental Chemistry: A.K. Dey, New Age International Publishers,2001.
- 7. A Textbook of Environmental Studies: Dr S.Satyanarayan, Dr S.Zade, Dr S Sitre and Dr P.U. Meshram, Allied Publishers, New Delhi.
- 8. Environmental Biology: Biswarup Mukherjee, Tata McGraw-Hill Publishing Company Ltd, New Delhi,1996.
- 9. Animal Ecology and Distribution of Animals: Veer Bala Rastogi , Rastogi Publication, Meerut (U.P).
- 10. Ecology and Environment: P.D.Sharma, Rastogi Publication ,Meerut (U.P).
- 11. Fundamentals of Environmental Biology: S. Arora, Kalyani Publishers.
- 12. Environmental Biology: P.K.G. Nair, Himalaya Publication.
- 13. Environmental Biology: K.C. Agrawal, Agro Botanical Publisher ,Bikaner,1994

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program

B.Sc. Sem I (Interior Design – Major)

Indian Knowledge System (IKS)

SEM1: VEDIC MATHEMATICS (BIK1T01)

Course Outcomes: This course will enable the students to

1. Improve speed and accuracy in numerical calculations
2. Acquire IQ skills and high-end technical knowledge
3. gain test taking skills & creativity of calculations

UNITS	TOPICS	HOURS
Unit 1	(i) Addition - Subtraction - Combined operations - Beejank (ii) Multiplication methods: Urdhwatiryagbhayam, Nikhilam, Ekanyunen, Ekadhiken, Antyayordashakepi. (iii) Vinculum - Operations. (iv) Awareness of 1 to 5 Vedic sutras as per Shankaracharya Bharthikrishan Teerthji Swamiji's book.	8
Unit 2	(i) Division methods : Nikhilam, Paravartya Yojayet, Dhvajank (ii) GCD and LCM (iii) Expression of GCD in terms of two numbers.	8
Unit 3	(i) Divisibility tests, Osculation & Reverse osculation. (ii) Division Algorithm, Quotient & Remainder. (iii) Duplex method.	7
Unit 4	i) Squares & Square-roots for 6 digit number. (ii) Cubes & Cube-roots for 6 digit number, Contribution of Indian Mathematicians in Arithmetic.	7
	TOTAL	30 HRS

Reference Books:

1. Tirthaji B.K. (1965) Vedic Mathematics, Motilal Banarsidass
2. Bidder G.P. (1856) On Mental Calculation. Minutes of Proceedings, Institution of Civil Engineers (1855-56), 15, 251-280
3. Scripture E.W. (1891) American Journal of Psychology. Vol. IV 1-59
4. Mitchell F.D. (1907) American Journal of Psychology. Vol. XVIII 61-143
5. Aitken A.C. (1954) The Art of Mental Calculation: With Demonstrations. Transactions of the Society of Engineers. 45, 295-309
6. Dow A. (1991) A Unified Approach to Developing Intuition in Mathematics, Scientific Research on the Transcendental Meditation and TM-Sidhi Program Vol 5, 3386-3398
7. Williams K.R. (1984) Discover Vedic Mathematics. Vedic Mathematics Research Group
8. Nicholas, Williams, Pickles (1984) Vertically and Crosswise. Inspiration Books

SEMESTER II

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program

B.Sc. Sem II (Interior Design – Major)

BHD2T03 INTERIOR DESIGN II

AIM: Space making in order to understand elements and organization. Visual perception of Interior spaces by creating Comfortable, functional and arithmetically appearing harmonious Interior Environment.

UNIT I

Introduction to concept of space. Elements of enclosed form- Combinations, resultant configurations & Characters.

UNIT II

Man and his basic living activity. Relationship of space with that of function for basic living activity. Organizational types and their correlation to linkages, types of routes and movement.

UNIT III

Functional analysis, minimum space requirements, anthropometrics, space planning for living activity.

UNIT IV

Quantitative and qualitative aspects of space through case studies and design exercise. Functional efficiency and qualitative aspects of relation to space.

UNIT V

Analysis of existing spaces and built forms, materials and structural systems, built form and its expression. Lighting, air views & issue.

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem II (Interior Design – Major)

BHD2P03 INTERIOR DESIGN II

PRACTICAL :

- Preparation of Colour Wheel □ Colour Interaction Samples □ Composition with Basic Shapes/ Materials □
Making of different Forms using Basic Materials

The exercises shall be based on:

- 1) application of design elements
- 2) Analysis of space and in relation to function.
- 3) Data collection: Survey and analysis of existing space.
- 4) Quantitative and qualitative aspects of space through design exercise

REFERENCES:

1. Time Saver Standards
2. Visual Arts: A Basic Study by Bhagwat Desai
3. Form Space and Order by D .K. Ching

Interior Design II

S. No	Course Outcomes
CO1	Understand the concept of space
CO2	Understand the Relationship of space with that of function for basic living activity.
CO3	Understand anthropometrics, for living activity in correlation to space planning.
CO4	Understanding the quantitative and qualitative aspects of space through case studies.
CO5	Analyzing of existing spaces for various design parameters.

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem II (Interior Design – Major)
BHD2T04 MATERIAL AND CONSTRUCTION TECHNIQUES – II
THEORY

AIM: Understanding timber and timber joinery and its application. Understanding wood products and derivatives.

UNIT I

Material –timber – classification of trees, characteristics of good timber, sawing methods, tools and techniques of basic timber joinery.

UNIT II

Application of timber to openings like doors and windows, Timber paneled, partly paneled and partly glazed and fully glazed doors including hardware, design standards and criteria of opening.

UNIT III

Application of timber to partition and paneling .

UNIT IV

Material –Reconstituted wood, plywood, block boards, particle boards, fiber boards, cement fiber board's etc- their properties, process of manufacturing, tools and techniques of joinery.

Surface finishes to reconstituted wood like laminates, veneer, and other proprietary material.

SESSIONAL WORK:

1. Plates, Site visit reports, tutorials, notes, sketches and market surveys.

REFERENCES:

4. Building Construction by Sushil Kumar
5. Building Construction by Rangwala
6. Building Construction by Barry and McKay

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem II (Interior Design – Major)

BHD2P04 MATERIAL AND CONSTRUCTION TECHNIQUES – II
PRACTICAL

The Practical exercises shall be drawing and design output on sheets

1. Joinery in timber.
2. Types of doors and windows.
3. Application of timber to doors and windows.
4. Application of timber to Partition and panelling.
5. Elements of building for load bearing and RCC structures.
6. Identification of reconstituted wood types and forms of market availability.
7. Identification of finishes to reconstituted wood types and forms market availability

Material and Construction Techniques II

S. No	Course Outcomes
CO1	Understand of the types of timber, sawing methods and joinery of timber.
CO2	Understand the application of timber to doors windows and ventilators.
CO3	Understand the application of timber to partitions and paneling.
CO4	Understand the application of reconstituted wood like plywood, block boards, particle boards, fiber boards, cement fiber board.

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program

B.Sc. Sem II (Interior Design – Major)

(VSC)

BVS2P03 GRAPHICS II

AIM: drawing skills as tools to design thinking and visualization to enable the students to understand and express Composite three-Dimensional objects as perspective views. to understand objects formed by additive and interpenetrated solids using various graphical projection systems including sections and rendering suitably to understand materials , tones and textures.

UNIT I:

Development of Surfaces: development of simple geometrical shapes, cut solids / complex forms using the conventional methods viz.. Unfold, unroll and radial.

UNIT II:

Orthographic projections: drawing orthographic projections of cut solids, true sections etc. of single or combination solids .simple and complex cuts i.e. single plane cutting an object and two planes cutting an object.

UNIT III:

Interpenetration of solids: using projections to derive lines, curves and planes formed by the intersection of planes with solids and solids with solids.

UNIT IV:

Geometrical Drawing of special and complex curves: Geometrical construction of Sine curve, Geometrical mean, Golden Section, Archimedean Spiral, Logarithmic Spiral. Geometrical construction of Ellipse.

UNIT V:

Introduction to perspective drawing: types of perspective drawing (Vanishing point, picture plane and eye level) , difference between isometric view and perspective view. Parallel and angular perspective views of objects

SESSIONAL WORK:

- Sessional work should be planned to cover all the units mentioned in course outline with thrust on skill development, accuracy and understanding of the topic.
- Maximum weightage in assessment should be given to the assignments and use of model making skills to understand methods taught.
- Manually drafted assignments to cover the course outline based on above units.

REFERENCE:

- 1.Ching Francis D.K.: Architectural Graphics
- 2.Leslie Martin: Architectural graphics:

- 3.Jolhe D A : Engineering Graphics , Tata McGraw Hill , New Delhi
- 4.Bhat N D, “Elementary Engineering Drawing-Plane and Solid Geometry”,
Chartotar Publishing House, Anand (1988)
- 5.M.S. Kumar : Engineering Drawing, DD publications, Chennai
- 6.I.H. Morris : Geometrical Drawing for Art Students, Orient Longman Chennai

Graphics II

S. No	Course Outcomes
CO1	Geometrical Drawing Of Special And Complex Curves
CO2	Understanding And Ability Of Drawing : Interpenetration Of Solids
CO3	Acquire the ability to Draw and apply the techniques of Development of Surfaces.
CO4	Drawing Orthographic Projections of complex solids based on geometrical constructions , in combinations or complex forms as cut solids
CO5	Be able to comprehend and apply drafting skills at level 2

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem II (Interior Design – Major)

CONSTITUTION OF INDIA (BVE2T02)

Syllabus

UNIT – I:

- Historical Background to the Framing of the Indian Constitution: General Idea about the Constituent Assembly of India.

UNIT – II

- Preamble – Nature and key concepts/Constitutional values, Socialism, Secularism, Democracy, Justice, Liberty, Equality and Fraternity
- Salient Features of the Constitution of India

UNIT – III

- General study about the kinds, nature and importance of; Fundamental Rights, Directive Principles of State Policy and Fundamental Duties.

UNIT –IV

Introduction of the Constitutional Institutions and Authorities;

- Central Legislature and Executive (Parliament of India, President of India and Council of Ministers)
- State Legislature and Executive (State legislative Assemblies, Governors and Council of Ministers)
- Higher Judiciary (Supreme Court of India and High Courts)

Bachelor of Science (Honors / Research) 4 yr. 8 Semester Degree Program
B.Sc. Sem II (Interior Design – Major)
IKS
BIK2T02 Vaastu Shastra.

Aim: Introduction to the ancient science of Vaastu Shastra.

UNIT – I

Introduction to Vastu Shastra: Basic concepts and sthapatya veda , The purpose of Vastu.

Introduction to terms and terminology.

UNIT – II

Vastu Shastra Principles and vastu purusha: Mayan and Principles of traditional Indian architecture. Body parts of Vaastu Purusha occupying the directions.

16 Directions with there Elements and Colour, Introduction to Panch mahabhoot tatvas (The Five elements, directions, and design principles.)

UNIT III:

Vastu Shastra and Interior Design, : Learning the attributes of the directions and functions. The Magnetic compass and its use in Chart interpretation and Chart analysis for designing spaces

UNIT IV:

Vastu Shastra for Commercial Spaces , Design for businesses and offices, Vastu Shastra for Landscaping , importance and placement of Arts and crafts in vastu shastra

UNIT V:

Vastu and Environment. Relevance of Vastu in modern era. Vastu Shastra for Sustainable Architecture,

REFERENCES:

1. Secrets of Vastushastra. By N.H. Sahasrabudhe & ;R.D. Mahatme.
2. Applied Vastu Shastra in Modern Architecture B.B. Puri.
3. Visvakarmaprakash: Khemraj Shri Krishnadas Publications, Mumbai.
4. Brihadvastumala: Brahmanand Tripathi, Chaukhamba Surbharti Publication Varanasi

S. No	Course Outcomes
CO1	Understanding basic principles of vastu shastra
CO2	Understanding the five elements and impact on placement of activities in residences, office etc
CO3	Develop an understanding of ideal location of building or building complexes as per shastra
CO4	develop an understanding about attributes of location as per charts for a plot/ building