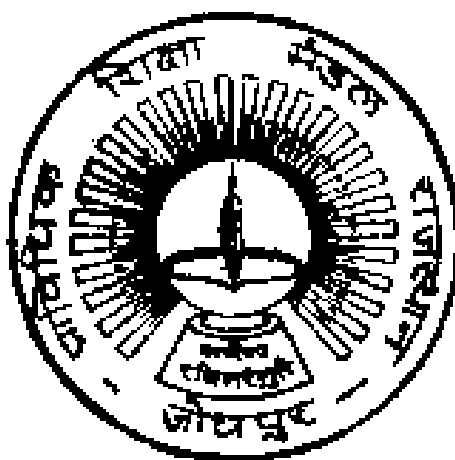


**GOVERNMENT OF RAJASTHAN**  
**BOARD OF TECHNICAL EDUCATION RAJASTHAN**  
**JODHPUR**

**SEMESTER SCHEME-2020-21**

**(SESSION 2021-2022 & ONWARDS)**



**TEACHING AND EXAMINATION SCHEME**  
**AND SYLLABUS**

**INTERIOR DECORATION**

**(ID)**

.....  
Curriculum Development Cell  
Board of Technical Education, Rajasthan  
W-6 Residency Road,  
Jodhpur

GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR  
**TEACHING AND EXAMINATION SCHEME**  
FOR DIPLOMA I SEMESTER (INTERIOR DECORATION)(ID)  
SESSION 2020-2021 & ONWARDS

Subject Code	Subject	Distribution of Time				Distribution of Max. Marks/ Duration							Total Marks	Credits
		Hours per week				End Semester Exam.				Internal Assessment				
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU	PR(S)		
*ID 1001	Communication Skills in English-I	1	--	--	1	60	3	--	--	40	--	--	100	1.0
*ID 1002	Computer Applications-I	2	--	--	2	60	3	--	--	40	--	--	100	2.0
ID 1003	Visual Arts	3	--	--	3	60	3	--	--	40	--	--	100	3.0
ID 1004	Interior Material & Construction – I	1	--	--	1	60	3	--	--	40	--	--	100	1.0
ID 1005	Art & Graphics – I Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 1006	Basic Design – I Lab	--	--	6	6	--	--	40	3	--	--	60	100	3.0
ID 1007	Architectural Drawing -I Lab	--	--	6	6	--	--	40	3	--	--	60	100	3.0
*ID 1008	Communication Skills in English-I Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
*ID 1009	Computer Applications-I Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 1010	Visual Arts Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 1011	Interior Material & Construction – I Lab	--	--	4	4	--	--	40	3	--	--	60	100	2.0
*ID1111	<b>Anandam (Joy of Giving)</b>	--	--	1	1	--	--	--	--	--	--	100	100	2.0
	Students Centered Activities	--	--	2	2	--	--	--	--	--	--	--	--	-
	<b>Total</b>	<b>7</b>	<b>--</b>	<b>29</b>	<b>36</b>	<b>240</b>		<b>280</b>		<b>160</b>	<b>--</b>	<b>520</b>	<b>1200</b>	<b>22.0</b>
<b>Grand Total :</b>													<b>1200</b>	<b>22.0</b>

- |  |   |
|--|---|
| 1. L : Lecture                                 | 5. PR : Marks for End Semester Exam for Practical             |
| 2. T : Tutorial                                | 6. CT : Marks for class tests (Internal Assessment)           |
| 3. P : Practical                               | 7. TU : Marks for tutorials (Internal Assessment)             |
| 4. TH : Marks for End Semester Exam for Theory | 8. PR(S) : Marks for practical and viva (Internal Assessment) |

\*ID 1001, \*ID 1002, \*ID 1008, \*ID 1009 and \*ID 1111 are Same in all Branches of Non Engineering.

**Two weeks Induction Programme** for students to be offered right at the start of First Semester.

**Induction Programme includes** 1. Creative Arts 2. Universal Human Values 3. Literary 4. Proficiency Modules 5. Lectures by Eminent Persons 6. Visits to City / Nearby Industries 7. Familiarization to Department / Branch / Exhibition room.

**Anandam (Joy of Giving):** In addition to the practical of one hour every week, students will have to do activities at home and college after college hours.

**Students Centered Activities include** 1. Expert lectures/ practice sessions on technical topics of common interest 2. Personality development 3. Human values 4. Industrial visits 5. Art of living 6. Environmental issues 7. Quiz programs 8. Interview techniques 9. Greening and cleaning of campus etc.

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR  
TEACHING AND EXAMINATION SCHEME  
FOR DIPLOMA II YSEMESTER (INTERIOR DECORATION)(ID)  
SESSION 2020-21 & ONWARDS

Subject Code	Subject	Distribution of Time				Distribution of Max. Marks/ Duration							Total Marks	Credits
		Hours per week				End Semester Exam.				Internal Assessment				
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU	PR(S)		
*ID 2001	Communication Skills in English-II	1	--	--	1	60	3	--	--	40	--	--	100	1.0
*ID 2002	Computer Applications-II	2	--	--	2	60	3	--	--	40	--	--	100	2.0
ID 2003	Theory of Materials	2	--	--	2	60	3	--	--	40	--	--	100	2.0
ID 2004	Interior Material & Construction – II	1	--	--	1	60	3	--	--	40	--	--	100	1.0
ID 2005	Art & Graphics – II Lab	--	--	3	3	--	3	40	3	--	--	60	100	1.5
ID 2006	Basic Design – II Lab	--	--	6	6	--	--	40	3	--	--	60	100	3.0
ID 2007	Architectural Drawing -II Lab	--	--	6	6	--	--	40	3	--	--	60	100	3.0
*ID 2008	Communication Skills in English-II Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
*ID 2009	Computer Applications-II Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 2010	Theory of Materials Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 2011	Interior Material & Construction – II Lab	--	--	4	4	--	--	40	3	--	--	60	100	2.0
*ID 2111	<b>Anandam (Joy of Giving)</b>	--	--	1	1	--	--	--	--	--	--	100	100	2.0
	Students Centered Activities	--	--	2	2	--	--	--	--	--	--	--	--	-
	<b>Total</b>	<b>6</b>	<b>--</b>	<b>30</b>	<b>36</b>	<b>240</b>	<b>--</b>	<b>280</b>	<b>--</b>	<b>160</b>	<b>--</b>	<b>520</b>	<b>1200</b>	<b>21.5</b>
<b>Grand Total :</b>												<b>1200</b>	<b>21.5</b>	

- |  |   |
|--|---|
| 1. L : Lecture                                 | 5. PR : Marks for End Semester Exam for Practical             |
| 2. T : Tutorial                                | 6. CT : Marks for class tests (Internal Assessment)           |
| 3. P : Practical                               | 7. TU : Marks for tutorials (Internal Assessment)             |
| 4. TH : Marks for End Semester Exam for Theory | 8. PR(S) : Marks for practical and viva (Internal Assessment) |

\*ID 2001, \*ID 2002, \*ID 2008, \*ID 2009 and \*ID 2111 are Same in all Branches of Non Engineering.

**Anandam (Joy of Giving):** In addition to the practical of one hour every week, students will have to do activities at home and college after college hours.

**Students Centered Activities include** 1. Expert lectures/ practice sessions on technical topics of common interest 2. Personality development 3. Human values 4. Industrial visits 5. Art of living 6. Environmental issues 7. Quiz programs 8. Interview techniques 9. Greening and cleaning of campus etc.

Student Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

**NOTE:** Students will go for one month (24 Working Days) Summer Internship in the Summer Vacations after Second Semester. The Assessment of the Summer Internship will be done in Third Semester.

GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR  
**TEACHING AND EXAMINATION SCHEME**  
FOR DIPLOMA **III SEMESTER (INTERIOR DECORATION) (ID)**  
SESSION 2021-2022 & ONWARDS

Subject Code	Subject	Distribution of Time				Distribution of Max. Marks/ Duration							Total Marks	Credits
		Hours per week				End Semester Exam.				Internal Assessment				
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/ Assi.	PR(S)		
*ID 3001	Environmental Studies-I	2	--	--	2	60	3	--	---	20	20	--	100	2.0
ID 3002	Workshop Materials and Practices - I	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 3003	Visual Arts – II	4	--	--	4	60	3	--	--	20	20	--	100	4.0
ID 3004	Interior Material & Construction – III	4	--	--	4	60	3	--	--	20	20	--	100	4.0
ID 3005	Interior Design & Furniture Design - I Lab	--	--	6	6	--	--	40	6	--	--	60	100	3.0
ID 3006	Basic Design – III Lab	--	--	5	5	--	--	40	6	--	--	60	100	2.5
ID 3007	Computer Aided Design – I lab	--	---	3	3	--	--	40	3	--	--	60	100	1.5
ID 3008	Workshop Materials and Practices - I Lab	--	--	1	1	--	--	40	3	--	--	60	100	0.5
*ID 3009	Environmental Studies -I Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 3010	Interior Material & Construction – III Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 3011	Visual Arts – II Lab	--	--	1	1	--	--	40	3	--	--	60	100	0.5
ID 3012	Summer Internship-I	--	--	--	--	--	--	100	--	--	--	--	100	2.0
*ID3333	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2.0
	Students Centered Activities	--	--	2	2	--	--	--	--	--	--	--	--	--
	<b>Total</b>	<b>13</b>	<b>--</b>	<b>23</b>	<b>36</b>	<b>240</b>	<b>--</b>	<b>380</b>	<b>--</b>	<b>80</b>	<b>80</b>	<b>520</b>	<b>1300</b>	<b>27.0</b>
	<b>Grand Total :</b>												<b>1300</b>	<b>27.0</b>

- |  |   |
|--|---|
| 1. L : Lecture                                 | 5. PR : Marks for End Semester Exam for Practical                 |
| 2. T : Tutorial                                | 6. CT : Marks for class tests (Internal Assessment)               |
| 3. P : Practical                               | 7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment) |
| 4. TH : Marks for End Semester Exam for Theory | 8. PR(S) : Marks for practical and viva (Internal Assessment)     |

\*ID 3001, \*ID 3009 and \*ID 3333 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR  
**TEACHING AND EXAMINATION SCHEME**  
FOR DIPLOMA IV SEMESTER (INTERIOR DECORATION)(ID)  
SESSION 2021-2022 & ONWARDS

Subject Code	Subject	Distribution of Time				Distribution of Max. Marks/ Duration							Total Marks	Credits
		Hours per week				End Semester Exam				Internal Assessment				
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/A ssi.	PR(S)		
*ID 4001	Environmental Studies-II	2	--	--	2	60	3	--	--	20	20	--	100	2.0
ID 4002	Workshop Materials and Practices - II	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 4003	History of Interior Design	5	--	--	5	60	3	--	--	20	20	--	100	5.0
ID 4004	Interior Material & Construction – IV	4	--	--	4	60	3	--	--	20	20	--	100	4.0
ID 4005	Computer Aided Design – II	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 4006	Basic Design – IV Lab	--	--	3	3	--	--	40	6	--	--	60	100	1.5
ID 4007	Computer Aided Design – II Lab	--	--	1	1	--	--	40	3	--	--	60	100	0.5
ID 4008	Workshop Materials and Practices – II Lab	--	--	1	1	--	--	40	3	--	--	60	100	0.5
*ID 4009	Environmental Studies-II LAB	--	--	2	2	--	--	40	--	--	--	60	100	1.0
ID 4010	Interior Material & Construction – IV Lab	--	--	2	2	--	--	40	6	--	--	60	100	1.0
ID 4011	Interior Design & Furniture Design II Lab	--	--	7	7	--	--	40	6	--	--	60	100	3.5
*ID 4444	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2.0
	Students Centered Activities	--	--	2	2	--	--	--	--	--	--	--	--	--
	<b>Total</b>	<b>17</b>	<b>--</b>	<b>19</b>	<b>36</b>	<b>300</b>	<b>--</b>	<b>240</b>	<b>--</b>	<b>100</b>	<b>100</b>	<b>460</b>	<b>1200</b>	<b>27.0</b>
<b>Grand Total :</b>												<b>1200</b>	<b>27.0</b>	

- |  |   |
|--|---|
| 1. L : Lecture                                 | 5. PR : Marks for End Semester Exam for Practical                 |
| 2. T : Tutorial                                | 6. CT : Marks for class tests (Internal Assessment)               |
| 3. P : Practical                               | 7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment) |
| 4. TH : Marks for End Semester Exam for Theory | 8. PR(S) : Marks for practical and viva (Internal Assessment)     |

\*ID 4001, \*ID 4009 and \*ID 4444 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

**NOTE:** Students will go for 6 weeks Summer Internship in the Summer Vacations after Fourth Semester. The Assessment of the Summer Internship will be done in Fifth Semester.

GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR  
TEACHING AND EXAMINATION SCHEME  
FOR DIPLOMA V SEMESTER (INTERIOR DECORATION)(ID)  
SESSION 2022-2023 & ONWARDS

Subject Code	Subject	Distribution of Time				Distribution of Max. Marks/ Duration							Total Marks	Credits
		Hours per week				End Semester Exam				Internal Assessment.				
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/Assi.	PR(S)		
*ID 5001	Professional Management & Entrepreneurship-I	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 5002	Building Services	4	--	--	4	60	3	--	--	20	20	--	100	4.0
ID 5003	Computer Aided Design – III	2	--	--	2	60	3	--	--	20	20	--	100	2.0
ID 5004	Interior Material & Construction – V	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 5005	Interior Design& Furniture Design III Lab	--	--	7	7	--	--	40	3	--	--	60	100	3.5
ID 5006	Basic Design – V Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 5007	Computer Aided Design – III Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 5008	Architectural Design and Drawing-I Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 5009	Natural Interior Scaping-I Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 5010	Interior Material & Construction – V Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 5011	Project	--	--	2	2	--	--	--	--	--	--	--	--	0.0
ID 5012	Summer Internship-II(6 Weeks after IV Semester)	--	--	--	--	--	--	100	--	--	--	--	100	3.0
*ID 5555	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2.0
	Students Centered Activities	--	--	2	2	--	--	--	--	--	--	--	--	-
	<b>Total</b>	<b>12</b>	<b>--</b>	<b>24</b>	<b>36</b>	<b>240</b>	<b>--</b>	<b>340</b>	<b>--</b>	<b>80</b>	<b>80</b>	<b>460</b>	<b>1200</b>	<b>26.5</b>
<b>Grand Total :</b>												<b>1200</b>	<b>26.5</b>	

- |  |  |
|--|--|
| 1. L : Lecture                                 | 5. PR : Marks for End Semester Exam for Practical                |
| 2. T : Tutorial                                | 6. CT : Marks for class tests (Internal Assessment)              |
| 3. P : Practical                               | 7. TU/Assi: Marks for tutorials/Assignment (Internal Assessment) |
| 4. TH : Marks for End Semester Exam for Theory | 8. PR(S) : Marks for practical and viva (Internal Assessment)    |

\*ID 5001, and \*ID 5555 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

**Note: Project will be continued and Assesed in VI Semester**

GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN, JODHPUR  
**TEACHING AND EXAMINATION SCHEME**  
FOR DIPLOMA VI SEMESTER (INTERIOR DECORATION) (ID)  
SESSION 2022-2023 & ONWARDS

Subject Code	Subject	Distribution of Time				Distribution of Max. Marks/ Duration							Total Marks	Credits
		Hours per week				End Semester Exam.				Internal Assessment				
		L	T	P	Tot	TH	Hrs.	PR	Hrs.	CT	TU/ Assi.	PR(S)		
*ID 6001	Professional Management & Entrepreneurship-II	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 6002	Estimation and Professional Practice	5	--	--	5	60	3	--	--	20	20	--	100	5.0
ID 6003	Computer Aided Design – IV	3	--	--	3	60	3	--	--	20	20	--	100	3.0
ID 6004	Interior Material & Construction – VI	2	--	--	2	60	3	--	--	20	20	--	100	2.0
ID 6005	Interior Design & Furniture Design IV Lab	--	--	5	5	--	--	40	3	--	--	60	100	2.5
ID 6006	Basic Design – VI Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 6007	Computer Aided Design – IV lab	--	--	1	1	--	--	40	3	--	--	60	100	0.5
ID 6008	Architectural Design and Drawing –II Lab	--	--	3	3	--	--	40	3	--	--	60	100	1.5
ID 6009	Natural Interior Scaping-II Lab	--	--	2	2	--	--	40	3	--	--	60	100	1.0
ID 6010	Interior Material & Construction – VI Lab	--	--	1	1	--	--	40	3	--	--	60	100	0.5
ID 6011	Project	--	--	6	6	--	--	40	--	--	--	60	100	4.0
*ID 6666	Anandam (Joy of Giving)	--	--	1	1	--	--	--	--	--	--	100	100	2.0
	Students Centered Activities	--	--	2	2	--	--	--	--	--	--	--	--	-
	<b>Total</b>	<b>13</b>	<b>--</b>	<b>23</b>	<b>36</b>	<b>240</b>	<b>--</b>	<b>280</b>	<b>--</b>	<b>80</b>	<b>80</b>	<b>520</b>	<b>1200</b>	<b>26.0</b>
<b>Grand Total :</b>												<b>1200</b>	<b>26.0</b>	

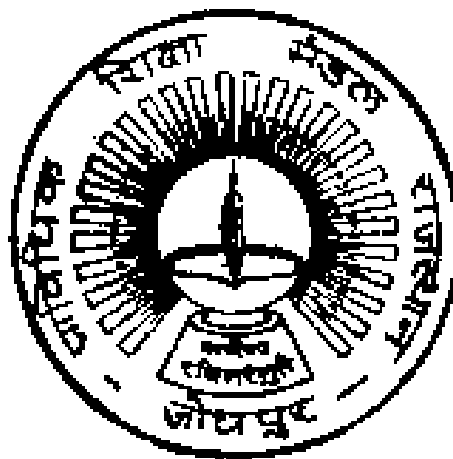
- |  |   |
|--|---|
| 1. L : Lecture                                 | 5. PR : Marks for End Semester Exam for Practical                 |
| 2. T : Tutorial                                | 6. CT : Marks for class tests (Internal Assessment)               |
| 3. P : Practical                               | 7. TU/Assi : Marks for tutorials/Assignment (Internal Assessment) |
| 4. TH : Marks for End Semester Exam for Theory | 8. PR(S) : Marks for practical and viva (Internal Assessment)     |

\*ID 6001, and \*ID 6666 are same in all Branches of Non Engineering

Students Centered Activities will be graded as A, B, C & D on the basis of attendance and interest of the student in learning.

**GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR**

**SEMESTER SCHEME-2020-21**



**I SEMESTER**  
(SESSION 2021-2022 & ONWARDS)



## COMMUNICATION SKILLS IN ENGLISH - I

Course Code	ID-1001 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - I
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

### RATIONAL

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders.

#### SUBJECT LEARNING OUTCOMES (SLOS)

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

### CONTENTS

	L
<b>1. Grammar :</b>	<b>6</b>
1.1 Parts of Speech : Noun; Pronoun; Verb; Adverb; Adjective ; Preposition ; Conjunction ; Interjection.	
1.2 Common errors in usage of parts of speech	
1.3 Articles, Modals in Conversational Usage, Tenses, and Modals: Can, Could, Shall, Should, Will, Would, May, Might, Must, Need not, Darenot, ought to, Used to.	
<b>2. Punctuation:</b>	<b>2</b>
2.1 Full stop, Comma, Question mark, Exclamation mark, Inverted Commas, Capital letters.	
<b>3. Letter Writing and Report Writing</b>	<b>3</b>

### REFERENCE BOOKS

1. Intermediate English Grammar                      Raymond Murphy, Cambridge University Press
2. English Grammar, Usage & Composition              Tickoo & Subramanian, Pub: S. Chand and Co.
3. A Practical Eng. Grammar (and its Exercise Books) Thomson and Martinet, Pub: ELBS
4. High School English Grammar and Composition      Wren & Martin, Pub: S. Chand and Co.
5. ABC of Common Grammatical Errors                      Nigel D Turton, Macmillan India Ltd.
6. Soft Skills    Dr. K. Alex Pub: S. Chand and Co.

## COMPUTER APPLICATIONS-I

Course Code	ID-1002 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - I
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

### RATIONALE

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course content is designed to give an overview and understand working of computer components and Operating System. The course also focuses on basic application Software for office automation.

### SUBJECT LEARNING OUTCOMES (SLOS)

After studying the subject, the students will be able to appreciate the role of Computer Technology, more specifically computer hardware, software and its application in the present social and economic scenario.

### CONTENTS

<b>1. Introduction</b>	<b>L 6</b>
1.1 Characteristics of Computers	
1.2 Application of Computer	
1.3 Component of Computer	
1.3.1 Block Diagram of Computer	
1.3.2 ALU and CU	
1.3.3 <b>Input Devices:</b> Keyboard, Mouse, Joystick, Scanner, Optical Mark Reader, Bar-code Reader, Magnetic Ink Character Reader, Web Camera	
1.3.4 <b>Output Device:</b> Monitor, Impact printer – Dot Matrix, Non Impact Printers: Laser and Inkjet Printer	
1.3.5 Memory Organization, Primary Memory, Secondary Memory	
1.4 Software	
1.4.1 System Software	
1.4.2 Application Software	
1.5 Relationship between Hardware and Software	
<b>2. Operating System</b>	<b>4</b>
2.1 Concept of Operating System	
2.2 Functions of Operating System	
2.3 Creating Folder and Shortcut	
2.4 Study of Popular Operating Systems: Windows, Androids.	
2.5 Control Panel: Adding new hardware and software, Display, Adding new font, User account management	
<b>3. Office Automation Software</b>	<b>9</b>
3.1 Word Processing	

- 3.1.1 Copy, Paste, Find and Replace, Redo Undo, Change Case, Spell Check
- 3.1.2 Creating and Formatting Tables, Mail Merge
- 3.1.3 Character and Paragraph Formatting, Page Formatting, Header Footer
- 3.2 Spreadsheet
  - 3.2.1 Creating, Saving and Editing a Workbook
  - 3.2.2 Formatting cells: changing data alignment, different number formats, changing font, adding borders and colors
  - 3.2.3 Sorting and Filtering, Charts and Graphs
- 3.3 Presentation Software
  - 3.3.1 Creating, Opening, Saving presentations and Printing: Slides, Handout
  - 3.3.2 Slide Layout, Presentation Views
  - 3.3.3 Design Presentation, Running and Controlling a Slide Show
- 4. Applications of Mobile Phones** **3**
  - 4.1 Importance of Mobile Phones
  - 4.2 Different Features of Mobile phones like SMS, Instant Messaging Services and File sharing
  - 4.3 Different applications of mobile phones in Education and Business.

#### REFERENCE BOOKS

- 1. Computer Fundamentals P.K. Sinha and P. Sinha, BPB publication.
- 2. Microsoft office for 2016 Amy Kinser, Pearson education.

\*\*\*\*\*

#### VISUAL ARTS - I

Course Code	ID-1003
-------------	---------

Course Title	Visual Arts-I
Number of Credits	3(L-3 T-0, P-0)
Prerequisites	None

### RATIONALE

Interior Design is a sum total of all Visual Arts. Visual Art promotes teaching and learning through Art, Craft and Design. The contents of this subject will be useful to students to develop a perception of space through interior elements, and their inter-relationship. It will help students to be able to understand and follow the process of design and visual concepts. This will help students to appreciate grammar of visual design and application in Interior Design. The idea is to study and analyse planar forms and an understanding of generation of a form, from an abstract idea.

### SUBJECT LEARNING OUTCOMES (SLOs)

After studying the subject, the students will be able to

1. Incorporate Art into interior spaces. Art is the effective way to elevate the quality of life.
2. Explore with all elements of Design and will effectively design and customize small Artworks for interior spaces.
3. Adorns and implements graphical standards of furniture.

### CONTENTS

<b>1.</b>	<b>INTRODUCTION TO THE ELEMENTS OF DESIGN:</b>	<b>L 09</b>
	1.1. Point	
	1.2. Line	
	1.2.1 Types of line	
	1.2.2 Symbolism of lines	
	1.3. Shapes	
	1.3.1 Types of shapes	
	1.4. Form	
	1.5. Texture	
	1.6. Space	
	1.7. <b>Study of Paper Forms-</b> Making different paper folded forms which can be used as light Fixtures/ furniture/decorative article in interior spaces.	
<b>2.</b>	<b>INTRODUCTION TO THE PRINCIPLES OF DESIGN:</b>	<b>06</b>
	2.1. Proportion	
	2.2. Balance	
	2.3. Harmony	
	2.4. Unity and variety	
	2.5. Rhythm	
	2.6. Emphasis	
<b>3.</b>	<b>COLOUR :</b>	<b>06</b>
	3.1. Definition of Colour	
	3.2. Qualities of Colour	
	3.3. Colour Systems	
	3.4. Factors affecting a Hue	
	3.5. Colour wheels – Primary, Secondary and Tertiary colours	

**4. ANTHROPOMETRY AND HUMAN SCALE:**

**12**

- 4.1 Dimensions of Adult and Children
- 4.2 Study of human Anthropometry for Residential spaces  
(Living Areas, Dining Areas, Bedrooms Kitchens ,Bathrooms and Closets)
- 4.3 Study of human Anthropometry for Conference Rooms/Seminar Halls
- 4.4 Study of human Anthropometry for Retail shops

**REFERENCE BOOKS**

- |                         |              |
|-------------------------|--------------|
| 1. Time Saver Standards | --           |
| 2. Interior Design      | Ahmed A Kasu |
| 3. Elements of Design   | F.G.Broomer  |

\* \* \* \* \*

SEMESTER SCHEME 2020-21

**INTERIOR MATERIAL AND CONSTRUCTION - I**

Course Code	ID-1004
Course Title	Interior Material and Construction-I
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

**RATIONALE**

This course is offered in the first year in order to familiarize students with the basics in building materials and technology. Construction began with the purely functional need for a controlled environment to moderate the effects of climate. It provides an introduction to variety of materials available in the market, used for execution in Interior Design practice.

**SUBJECT LEARNING OUTCOMES (SLOS)**

After studying the subject, the students will be able to

1. Understand the techniques and industry involved in the erection of structures.
2. Identify construction materials required for an assigned work.
3. Understand the basic building components.

**CONTENTS**

<b>1.</b>	<b>BASIC BUILDING STRUCTURE</b>	<b>L 03</b>
	1.1. Components of a building from foundation to coping level.	
<b>2.</b>	<b>BRICK MASONRY</b>	<b>06</b>
	2.1 Definition of technical terms	
	2.2 Types of Bonds	
	2.2.1 Header Bonds	
	2.2.2 Stretcher Bonds	
	2.2.3 English Bonds	
	2.2.4 Garden Wall Bonds	
	2.2.5 Herring Bone Bonds	
	2.2.6 Diagonal Bonds.	
<b>3.</b>	<b>DOORS AND WINDOWS</b>	<b>02</b>
	3.1 Definition of technical terms	
	3.2 Introduction to types of door and window frames/trims	

**REFERENCE BOOKS :**

- |                          |                      |
|--------------------------|----------------------|
| 1. Building Construction | W.B.Mckay            |
| 2. Building Construction | A.Michelle           |
| 3. Building Construction | G. C. Singh          |
| 4. Building Construction | Sushil Kumar & Gupta |
| 5. Building Materials    | Ranagawala           |

\* \* \* \* \*

**ART & GRAPHICS- I LAB**

Course Code	ID-1005
Course Title	Arts & Graphics - I Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

**RATIONALE**

Sketching is the fundamental of all Art & Expression. It plays a big role in cognitive development. This subject aims to impart basic knowledge of graphic standard drawings of plane and solid geometry. It aims to enhance their observation and sketching skills. It enables creative thinking and develops hand-eye co-ordination, analytic skills and conceptualizes ideas.

**SUBJECT LEARNING OUTCOMES (SLOS)**

After studying the subject, the students will be able to

1. Develop an understanding of three dimensional space.
2. Enhances rapid idea generation.
3. Enhances observation skills.

**CONTENTS**

	<b>P</b>
<b>1. FREE HAND SKETCHING OF STILL LIFE IMAGES :</b>	<b>15</b>
1.1 Free Hand sketching of objects (Pencil and charcoal):	
1.1.1 Trees	
1.1.2 Building - Modern & Historical	
1.2 Sketchbook to be maintained in the Session of at least three Sketches per weeks.	
<b>2. COLOUR:</b>	<b>12</b>
2.1 Trees	
2.2 Buildings	
Sketchbook to be maintained in the Session of at least three sketches per weeks in crayons and water colours.	
<b>3. INTRODUCTION TO GRAPHIC STANDARDS:</b>	<b>06</b>
3.1 Rendering techniques in Interior materials and finishes	

**REFERENCE BOOKS :**

- |  |                     |
|--|---------------------|
| 1. Rendering in Pen & Ink                | De Chiara Callender |
| 2. Architectural Sketching and Rendering | Stephen Kliment     |

\* \* \* \* \*

**BASIC DESIGN – I LAB**

Course Code	ID-1006
Course Title	Basic Design - I Lab
Number of Credits	3(L-0 T-0, P-6)
Prerequisites	None

**RATIONALE**

The act of designing is a complex process. Through a close study of existing interior projects a design methodology is developed. This subject introduces students to measured drawing & the case-study of existing interior spaces. It also includes the process of seeing, knowing and experiencing the technicalities of drawing measured drawings. The subject is aimed to develop graphic skills in preparation of measured drawings, their reading and interpretation.

**SUBJECT LEARNING OUTCOMES (SLOS)**

After studying the subject, the students will be able to

1. Adorns the student to map out and spatialize Interior spaces.
2. Understand of two-dimensional interior drawings : plan and elevations.
3. Students learn the mode of presentation of measured drawings.
4. Draw different orientations of the drawing.

**CONTENTS**

<b>1. MEASURED DRAWINGS:</b>	<b>P 12</b>
1.1 Importance of Measurement	
1.2 Procedure of Measurement	
1.3 Requirement of a Drawing Sheet	
1.4 Types of Drawing	
1.5 Drawing Presentation	
<b>2. MEASURED DRAWING &amp; CASE STUDY:</b>	<b>54</b>
2.1 Existing Interior Spaces Like:	
2.1.1 Plan, Sectional elevation of Kitchen	
2.1.2 Plan, Sectional elevation of Bedroom	
2.1.3 Plan, Sectional elevation of Drawing Room	
2.1.4 Plan, Sectional elevation of Toilets	

**REFERENCE BOOKS**

1. Interior Design Ahmed A Kasu

\* \* \* \* \*



**ARCHITECTURAL DRAWING- I LAB**

Course Code	ID-1007
Course Title	Architectural Drawing - I Lab
Number of Credits	3(L-0 T-0, P-6)
Prerequisites	None

**RATIONALE**

Architectural Drawing is the graphical language to express thoughts, ideas and concepts. It is said to be the language of all Interior Designers, Architects and Engineers. It enables students to understand solid geometry through graphic exercises of increased complexity. It deals with the details of drawings with regard to lettering, Geometry, projections, views at different angles and detailed views of objects.

**SUBJECT LEARNING OUTCOMES (SLOS)**

After studying the subject, the students will be able to

1. Effectively use of drawing instruments.
2. Understand solid Geometry.
3. Develops expression by accurate, précised, scaled and dimensioned drawings.

**CONTENTS**

	<b>P</b>
<b>1. DRAWING INSTRUMENTS:</b> Introduction and Demonstration.	<b>03</b>
<b>2. SCALES:</b> Introduction to Scales; their need and importance.	<b>03</b>
<b>3. LETTERING:</b> Exercises on Single Stroke Letters (Upper case and lower case)	<b>06</b>
<b>4. SOLID GEOMETRY:</b>	<b>54</b>
1.1 Principles of Orthographic Projections and introduction to first angle projection and third angle projection.	
1.2 Projection of Solids :	
1.2.1 Cube	
1.2.2 Prism	
1.2.3 Cylinder	
1.2.4 Cone	
1.2.5 Pyramid	
1.2.6 Section by simple horizontal & vertical planes .	

**REFERENCE BOOKS**

- |                               |             |
|-------------------------------|-------------|
| 1. Engineering Drawing        | N. D. Bhatt |
| 2. Engineering Drawing(Hindi) | B.C.Gupta   |
| 3. Engineering Drawing        | P.S. Gill   |
| 4. Engineering Drawing        | NS Kumar    |

\* \* \* \* \*

**COMMUNICATION SKILLS IN ENGLISH – I LAB**

Course Code	ID-1008 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - I Lab
Number of Credits	1(L-0 T-0, P-2)
Prerequisites	None

**RATIONAL**

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders.

**SUBJECT LEARNING OUTCOMES (SLOS)**

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

**CONTENTS****P**

We envisage two successive stages for attaining skills in communication ability;

1. Listening
2. Speaking

We can club them together as shown below.

- |   |          |
|---|----------|
| <b>1. Listening:</b>  | <b>7</b> |
| For improving listening skills, the following steps are recommended-                  |          |
| 1.1. Listen to Prerecorded Tapes  |          |
| 1.2. Reproduce vocally what has been heard  |          |
| 1.3. Reproduce in Written form  |          |
| 1.4. Summaries the text heard   |          |
| 1.5. Suggest Substitution of Words and Sentences                                      |          |
| 1.6. Answer Questions related to the taped text                                       |          |
| 1.7. Summaries in Writing   |          |
| <b>2. Speaking:</b>   | <b>7</b> |
| Introducing English consonant-sounds and vowel-sounds                                 |          |
| 2.1. Remedial exercises where necessary   |          |
| 2.2. Knowing Word stress, Shifting word stress in poly-syllabic words                 |          |
| [For pronunciation practice read aloud a Para or page regularly while others monitor] |          |
| <b>3. Body Language:</b>  | <b>8</b> |
| 3.1. Personal Appearance  |          |
| 3.2. Posture  |          |
| 3.3. Gestures and Hand Movements  |          |

- 3.4. Eye Contact
- 3.5. Facial Expressions

**Note:**

1. The Medium of teaching and examination will be English.
2. At least one question will be set from each unit.
3. No theory question will be set from syllabus of practical.

**REFERENCE BOOKS**

7. Intermediate English Grammar Raymond Murphy, Cambridge University Press
8. English Grammar, Usage & Composition Tickoo & Subramanian, Pub: S. Chand and Co.
9. A Practical Eng. Grammar (and its Exercise Books) Thomson and Martinet, Pub: ELBS
10. High School English Grammar and Composition Wren & Martin, Pub: S. Chand and Co.
11. ABC of Common Grammatical Errors Nigel D Turton, Macmillan India Ltd.
12. Soft Skills Dr. K. Alex Pub: S. Chand and Co.

\*\*\*\*

SEMESTER SCHEME 2020-21

**COMPUTER APPLICATIONS-I LAB**

Course Code	ID-1009 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - I Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

**RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course content is designed to give an overview and understand working of computer components and Operating System. The course also focuses on basic application Software for office automation.

**SUBJECT LEARNING OUTCOMES (SLOS)**

After studying the subject, the students will be able to appreciate the role of Computer Technology, more specifically computer hardware, software and its application in the present social and economic scenario.

**CONTENTS**

1. Overview of Parts of Computer, Practice of using My Computer, creating, deleting folders and shortcuts. **03**
2. Practice on Control Panel/ Installing/Uninstalling/ Adding Devices **03**
3. Exercise on Word Processing **09**
  - 3.1 Creating, Saving and Opening documents
  - 3.2 Editing Documents-Cut, Copy, Paste, Undo, Redo, Copying one document to other, Change Case, Go to
  - 3.3 Character and Paragraph Formatting, Numbering and Bullets
  - 3.4 Page Formatting, Header and Footer, Page Break, Watermark
  - 3.5 Spell Check, Find and Replace, Inserting Pictures and Clip-arts
  - 3.6 Working with Tables
  - 3.7 Mail-Merge.
4. Exercises on Spreadsheets: **09**
  - 4.1 Creating, saving and Opening worksheet.
  - 4.2 Editing Worksheet.
  - 4.3 Formatting Cells- Font, Number Formats Alignment and Borders.
  - 4.4 Charts and Graphs.
  - 4.5 Sorting and Filtering.
5. Exercises on Presentation Package: **06**
  - 5.1 Creating, saving and Opening presentations .
  - 5.2 Adding animation in slides
  - 5.3 Running a Slide Show

- 5.4 Printing Slides and Handouts  
6. Hands on Experience on usage of Mobile Phones

03

**REFERENCE BOOKS**

- |                              |   |
|------------------------------|---|
| 1 Computer Fundamentals      | P.K. Sinha and P. Sinha, BPB publication. |
| 2. Microsoft office for 2016 | Amy Kinser, Pearson education.            |

\*\*\*\*\*

SEMESTER SCHEME 2020-21

**VISUAL ARTS – LAB**

Course Code	ID-1010
Course Title	Visual Arts Lab
Number of Credits	1(L-0 T-0, P-2)
Prerequisites	None

**RATIONALE**

This course is offered in the first year in order to familiarize students with the basics in building materials and technology. Construction began with the purely functional need for a controlled environment to moderate the effects of climate. It provides an introduction to variety of materials available in the market, used for execution in Interior Design practice.

**SUBJECT LEARNING OUTCOMES (SLOs)**

After studying the subject, the students will be able to

1. Understands the human body proportions
2. Draw plan and elevation of human postures
3. Draw plan and elevations of furniture with all dimensions and clearances
4. Experiment with various materials and mediums for pictorial expressions

**CONTENTS**

<b>1. ELEMENTS OF DESIGN :</b>	<b>P 08</b>
1.1. Composition using various lines and techniques	
1.2. Two practical sheets on composition of geometric, Natural, Abstract and Non objective Shapes	
1.3. Two practical sheets on composition of Form	
1.4. Two practical sheets on Natural and manmade Texture	
1.5. Two practical sheets on Space	
<b>1.6 Study of Paper Forms-</b> Making different paper folded forms which can be used as light Fixtures / furniture/ decorative article in interior spaces.	
<b>2. PRINCIPLES OF DESIGN:</b>	<b>02</b>
2.1. 2 compositions showing Proportion, Harmony, Unity and variety, Rhythm, Emphasis	
2.2. 2 Compositions showing Symmetrical and Asymmetrical balance	
<b>3. COLOUR:</b>	<b>02</b>
○ Preparation of Colour wheels – Primary, Secondary and Tertiary colours	
○ Two Compositions in Tints and shades	
<b>4. ANTHROPOMETRY AND HUMAN SCALE:</b>	<b>10</b>
4.1 Dimensions of Adult and Children	
4.2 Human Anthropometry for Residential spaces	

(Living Areas, Dining Areas, Bedrooms, Kitchens, Bathrooms and Closets)

4.3 Human Anthropometry for Conference Rooms/Seminar Halls

4.4 Human Anthropometry for Retail shops

**Note :**

Students should maintain portfolio and give seminar in form of presentations towards the end of the session.

**REFERENCE BOOKS**

- |                                |                          |
|--------------------------------|--------------------------|
| 1. Time Saver Standards        | --                       |
| 2. Interior Design             | Ahmed A Kasu             |
| 3. Elements of Design          | F.G.Broomer              |
| 4. Design through discovery    | Marjorie Bevin           |
| 5. Roopradh kala ke Moolaadhar | S.K.Sharma & R.A.Agrawal |

\*\*\*\*\*

SEMESTER SCHEME 2020-21

**INTERIOR MATERIAL AND CONSTRUCTION – I LAB**

Course Code	ID-1011
Course Title	Interior Material and Construction - I Lab
Number of Credits	2(L-0 T-0, P-4)
Prerequisites	None

**RATIONALE**

This course is offered in the first year in order to familiarize students with the basics in building materials and technology. Construction began with the purely functional need for a controlled environment to moderate the effects of climate. It provides an introduction to variety of materials available in the market, used for execution in Interior Design practice.

**SUBJECT LEARNING OUTCOMES (SLOs)**

After studying the subject, the students will be able to

1. Understand the techniques and industry involved in the erection of structures.
2. Identify construction materials required for an assigned work.
3. Understand the basic building components.

**CONTENTS**

	<b>P</b>
<b>1. Building Wall Section from Foundation Level to coping level.</b>	<b>08</b>
<b>2. Brick Masonry</b> Drawing of Different wall Bonds up to 2 Brick thick walls	<b>24</b>
<b>3. Doors and windows</b>	<b>12</b>
3.1 Panelled door and Window	
3.2 Partly Panelled and partly glazed door and window	

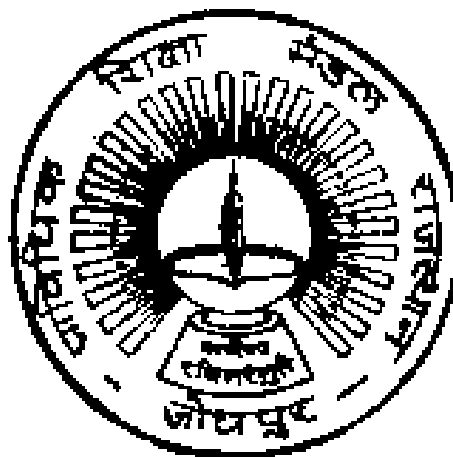
**REFERENCE BOOKS**

- |                          |                      |
|--------------------------|----------------------|
| 1. Building Construction | W.B.Mckay            |
| 2. Building Construction | A.Michelle           |
| 3. Building Construction | G. C. Singh          |
| 4. Building Construction | Sushil Kumar & Gupta |
| 5. Building Materials    | Ranagawala           |
|                          | * * * * *            |



**GOVERNMENT OF RAJASTHAN**  
**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR**

**SEMESTER SCHEME-2020-21**



**II SEMESTER**  
(SESSION 2021-2022 & ONWARDS)

**COMMUNICATION SKILLS IN ENGLISH - II**

Course Code	ID-2001 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - II
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

**RATIONAL**

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders

**SUBJECT LEARNING OUTCOMES (SLOS)**

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

**CONTENTS**

	L	5
<b>1. Vocabulary Building :</b>		<b>5</b>
1.1. Prefixes and Suffixes		
1.2. Synonyms and Antonyms		
1.3. One Word Substitution		
1.4. Words Often Confused		
1.5. Words Often Mis spelt		
<b>2. Sentence Building:</b>		<b>4</b>
2.1. Types of Sentences and their Transformation -		
2.1.1. Interchange of Affirmative and Negative sentences		
2.1.2. Interchange of Interrogative and Assertive sentences		
2.1.3. Interchange of Exclamatory and Assertive sentences		
<b>3. Composition:</b>		<b>2</b>
3.1. Unseen Passage, Précis Writing		
<b>4. Essay Writing:</b>		<b>2</b>
4.1. Essays on general topics and topics related to environmental problems.		

**REFERENCE BOOKS**

- |  |                                      |
|--|--------------------------------------|
| 1. Intermediate English Grammar<br>University Press  | Raymond Murphy, Cambridge            |
| 2. English Grammar, Usage & Composition<br>and Co.   | Tickoo & Subramanian, Pub: S. Chand  |
| 3. A Practical Eng. Grammar (and its Exercise Books) | Thomson and Martinet, Pub: ELBS      |
| 4. High School English Grammar and Composition       | Wren & Martin, Pub: S. Chand and Co. |
| 5. ABC of Common Grammatical Errors                  | Nigel D Turton, Macmillan India Ltd. |
| 6. Soft Skills                                       | Dr. K. Alex, Pub: S. Chand and Co.   |

\* \* \* \*

**COMPUTER APPLICATIONS-II**

Course Code	ID-2002 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - II
Number of Credits	2(L-2, T-0, P-0)
Prerequisites	None

**RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course provides knowledge of internet, email, web browsing and E-commerce. It also gives overview of Cyber Security and Information technology Act.

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

**SUBJECT LEARNING OUTCOMES (SLOS)**

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

- |   |          |
|---|----------|
| <b>1. Computer Network</b>  | <b>5</b> |
| 1.1 Need of networks  |          |
| 1.2 Data Transmission Media: Twisted pair, Coaxial, Optical Fiber |          |
| 1.3 Types of Network-LAN, WAN, MAN                                |          |
| 1.4 Topologies of LAN - Ring, Bus, Star, Mesh and Tree            |          |
| 1.5 Digital and Analog Transmission                               |          |
| 1.6 Modem - Working and characteristics                           |          |
| <b>2. Internet</b>  | <b>8</b> |
| 2.1 Introduction to Internet, Intranet, World Wide Web.           |          |
| 2.2 Internet Service Provider.                                    |          |
| 2.3 URL   |          |
| 2.4 Web Brower and its functions, Web Page, Search Engines        |          |
| 2.5 Protocol: Basic of http, https, FTP, SMTP, POP                |          |
| 2.6 Basic of E-mail:  |          |
| 2.7 E-mail Service Provider                                       |          |
| 2.8 Composing E-mail  |          |
| 2.9 Mailing List  |          |
| 2.10 Creating Label   |          |
| 2.11 Signature  |          |
| 2.12 Spam   |          |
| <b>3. E-Commerce and Cyber Security</b>                           | <b>9</b> |
| 3.1 Introduction to E-Commerce                                    |          |
| 3.2 Type of E-Commerce  |          |
| 3.3 Advantages and Disadvantages of E-Commerce                    |          |
| 3.4 Payment Gateways  |          |

3.5 Introduction to different types of Cyber Attacks: Phishing, Ransomware, SQL Injection, Web Jacking, Trojan Attacks, Denial of Service, Cyber Stalking, Password Cracking, Hacking, E mail Spoofing

3.6 Cyber laws in India: Introduction to IT (Information Technology) Act'2000

3.7 Definition of Virus, Malware, Scanning & Removing Virus using Antivirus Program

**4. Multimedia**

**4**

4.1 What is Multimedia?

4.2 Text and Graphics.

4.3 Animation, Audio, Images and Video.

4.4 Multimedia Application in Education and Entertainments.

**REFERENCE BOOKS**

1. Computer Fundamentals P.K. Sinha and P. Sinha,BPB publication.
2. Data Communications and Networking Forouzan TMH
3. Internet for Everyone Alexis Leon & Mathews Leon, Vikas Publishing House, New Delhi.

\*\*\*\*\*

## THEORY OF MATERIALS

Course Code	ID-2003
Course Title	Theory of Materials
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

### RATIONALE

Interior materials and furnishings are integral to all interior design projects. They express our sense of Design and Style. The subject enhances the productivity of design. The student will have ideas about the different aspects of decoration in floor coverings, materials used in designing, lighting, curtains, furnishings etc. They showcase one's choices and interests. Interior design is about texture and contrasting these textures in order to add depth and interest to a space. These together enhance interior spaces by allowing a designer to synchronise interior elements with each other.

### SUBJECT LEARNING OUTCOMES (SLOS)

1. Adorns the students in determining the theme or concept for use of interior materials
2. Student will learn to express some definite idea or theme into interior spaces.
3. Students will learn to regulate acoustics . All soft furnishings contribute to noise reduction.

### CONTENTS

	<b>L</b>	
<b>1. FLOOR COVERING:</b>		<b>12</b>
1.1. Carpets		
1.1.1 Hand Made Carpets		
1.1.2 Hand Tufted Carpets		
1.1.3 Machine Made Carpets		
1.1.3.1 Cutpile		
1.1.3.2 Uncutpile		
1.2. Types of Carpets :		
1.2.1 Solid Plain Shades		
1.2.2 Mottled Design		
1.2.3 Stripped Design		
1.2.4 Jaspers Design		
1.2.5 Geometrical Design		
1.2.6 Oriental (Floral) Design		
1.2.7 Embossed Design		
1.2.8 Printed Design		
1.3. Wall to Wall Carpets		
1.4. Other Floor Coverings :		
1.4.1. Durries :		
1.4.1.1 Cotton Carpets (Durries)		
1.4.1.2 Woolen Durries		
1.4.1.4 Durries of Blended Fiber.		
1.4.2 Coir & Jute Matting Chattai		
1.4.3 Shaggy Floor Covering.		

- 2. **WINDOWS** - Types of windows & their treatments. 2
- 3. **CURTAINS AND CURTAINS MATERIALS :** 2
  - 3.1 Types of Curtains :
    - 3.1.1 Plain
    - 3.1.2 French
    - 3.1.3 Pleated
  - 3.2 Lining Materials.
  - 3.3 Curtain Materials
  - 3.4 Curtain Hard wares :
    - 3.4.1 Rods
    - 3.4.2 Rings
    - 3.4.3 Railings
    - 3.4.4 Hooks
  - 3.5 Curtain Accessories :
    - 3.5.1 Swags
    - 3.5.2 Valances
    - 3.5.3 Tails
    - 3.5.4 Tapes
    - 3.5.5 Ropes
  - 3.6 Types of Blinds :
    - 3.6.1 Austrain
    - 3.6.2 Festoon
    - 3.6.3 Roller
    - 3.6.4 Roman
- 4. **UPHOLSTERY COVERING MATERIAL AND OTHER ITEMS** 2
  - 4.1 Types of Upholstery Materials :
    - 4.1.1 Cotton
    - 4.1.2 Silk
    - 4.1.3 Woolen
    - 4.1.4 Synthetic
    - 4.1.5 Rexine
    - 4.1.6 Leather
  - 4.2. Cushioning Materials :
    - 4.2.1 Springs
    - 4.2.2 Jute
    - 4.2.3 Cotton
    - 4.2.4 Foam
    - 4.2.5 Rubber
- 5. **OTHER FURNISHINGS** 2
  - 5.1 Cushion Covers
- 6. **ACCESSORIES** 2

- 6.1 Placement of Accessories
- 6.2 Types of Accessories :
  - 6.2.1 Statues
  - 6.2.2 Paintings
  - 6.2.3 Lamps
  - 6.2.4 Book Shelves
  - 6.2.5 Mirrors
  - 6.2.6 Fish
  - 6.2.7 Birds
  - 6.2.8 Framing Pictures
- 6.3 Table Accessories :
  - 6.3.1 Ashtray
  - 6.3.2 Plants
  - 6.3.3 Vases
- 6.4 Latest Items of Furnishings & Visits to Shops.

**7. LIGHT FITTINGS :**

**4**

- 7.1 A broad Classification of Categories in Home Lighting:
  - 7.1.1 Direct
  - 7.1.2 Indirect
  - 7.1.3 Semi-Direct
  - 7.1.4 Concealed.
- 7.2 Lighting in Different Units in House :
  - 7.2.1 Garden & Gate Lights
  - 7.2.2 Exterior & Porch Lights
  - 7.2.3 Drawing Room Lights
  - 7.2.4 Dining Room Lights
  - 7.2.5 Bed Room Lights
  - 7.2.6 Toilet Lights
  - 7.2.7 Kitchen & Pantry Lights
  - 7.2.8 Lobbies & Corridor Lights
  - 7.2.9 Verandah & Entrance Lights
  - 7.2.10 Stairs & Terrace Lights
  - 7.2.11 Different kinds of Light Fixtures for Various Places in a House
  - 7.2.12 LED lights and CFL lights

Visit to Factories/Show Rooms and Preparation of file (Collection of Different Types of Materials)  
To be done under student centered activities.

**REFERENCE BOOKS :**

- 1. Soft Furnishings Sarah Cambell & Hillary More
- 2. American Rugs & Carpets Hellen Von Resentiel
- 3. Oriental Rugs Erich Aschenbrenner
- 4. Residential Lighting Randall Whitehead
- 5. Interior Design Ahmed A. Kasu

\*\*\*\*\*

**INTERIOR MATERIAL AND CONSTRUCTION - II**

Course Code	ID-2004
Course Title	Interior Material and Construction-II
Number of Credits	1(L-1 T-0, P-0)
Prerequisites	None

**RATIONALE**

This course is offered in the first year in order to familiarize students with the basics in building materials and technology. Construction began with the purely functional need for a controlled environment to moderate the effects of climate. It provides an introduction to variety of materials available in the market, used for execution in Interior Design practice.

**SUBJECT LEARNING OUTCOMES (SLOS)**

- Adorns the student with the techniques and industry involved in the erection of structures.
- Students will learn to outline the importance of sequencing and planning construction operations.
- Develops an understanding of the building construction process including the behaviour of basic materials.

**CONTENTS**

<b>1.</b>	<b>STONE MASONRY</b>	<b>L</b>
		<b>06</b>
	1.1 Rubble Masonry	
	1.2 Ashlar Masonry	
<b>2.</b>	<b>OPENINGS</b>	<b>03</b>
	2.1 Arches	
	2.1.1 Technical Terms used in Arch Work.	
	2.1.2 Types of Arches	
	2.1.2.1 One Centered	
	2.1.2.2 Two Centered	
	2.1.2.3 Three Centered	
	2.1.2.4 Four Centered.	
<b>3.</b>	<b>FLOORING</b>	<b>04</b>
	3.1 Flooring by different materials	
	3.1.1 Inner Flooring	
	3.1.2 Parkway Flooring.	

**REFERENCE BOOKS :**

- |                          |                      |
|--------------------------|----------------------|
| 1. Building Construction | W.B.Mckay            |
| 2. Building Construction | A.Michelle           |
| 3. Building Construction | G. C. Singh          |
| 4. Building Construction | Sushil Kumar & Gupta |
| 5. Building Materials    | Ranagawala           |

\* \* \* \* \*



**ART & GRAPHICS- II LAB**

Course Code	ID-2005
Course Title	Arts & Graphics - II Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

**RATIONALE**

Sketching is the fundamental of all Art & Expression. It plays a big role in cognitive development. This subject aims to impart basic knowledge of graphic standard drawings of plane and solid geometry. It aims to enhance their observation and sketching skills. It enables creative thinking and develops hand-eye co-ordination, analytic skills and conceptualizes ideas.

**SUBJECT LEARNING OUTCOMES (SLOS)**

1. Students begin to develop an understanding of three dimensional spaces.
2. Students will learn to refine and explore different variations.
3. Enhances visual explorations in Art.

**PRACTICALS****P****1. Free Hand Sketching of Still Life Images :**

- 1.1 Furniture.
- 1.2 Cars

**15**

Sketchbook to be maintained in the Session of at least three Sketches per weeks.

**2. Color :**  
**15**

- 2.1 Cars
- 2.2 Furniture

Sketchbook to be maintained in the Session of at least three Sketches per weeks.

**3. Basics of Compositions :**

Five Exercise of Two Dimensional Compositions customized for Interior space for example wall papers, stencil paints , cnc cutting etc.

**09****REFERENCE BOOKS :**

1. Rendering in Pen & Ink De Chiara Callender
2. Architectural Sketching and Rendering Stephen Kliment

\* \* \* \* \*

**BASIC DESIGN – II LAB**

Course Code	ID-2006
Course Title	Basic Design - II Lab
Number of Credits	3(L-0 T-0, P-6)
Prerequisites	None

**RATIONALE**

The act of designing is a complex process. Through a close study of existing interior projects a design methodology is developed. This subject introduces students to measured drawing & the case-study of existing interior spaces. It also includes the process of seeing, knowing and experiencing the technicalities of drawing measured drawings. The subject is aimed to develop graphic skills in preparation of measured drawings, their reading and interpretation.

**SUBJECT LEARNING OUTCOMES (SLOS)**

- Students acquire an understanding of plan and elevations of small residences.
- Students will learn surface development to enable drawing objects without errors .
- Students will understand the characteristics of objects.

**PRACTICALS****P****1. Designing & Planning 54**

- 1.1. Plan of a Single Room Residence
- 1.2. Elevation of a Single Room Residence

**2. Presentation Techniques : 24**

- 2.1. Model Making :
  - 2.1.1 Simple Geometric Forms Like Cube  
(Two Exercise)
  - 2.1.2 Simple Geometric Forms Like Prism  
(Two Exercise)
  - 2.1.3. Simple Geometric Forms Like Pyramids  
(Two Exercise)
  - 2.1.4. Simple Geometric Forms Like Cylinder  
(Two Exercise)
  - 2.1.5. Simple Geometric Forms like Cone  
(Two Exercise)

**REFERENCE BOOKS :**

Interior Design Ahmed A Kasu

\*\*\*\*\*

**ARCHITECTURAL DRAWING- II LAB**

Course Code	ID-2007
Course Title	Architectural Drawing - II Lab
Number of Credits	3(L-0 T-0, P-6)
Prerequisites	None

### RATIONALE

Architectural Drawing is the graphical language to express thoughts, ideas and concepts. It is said to be the language of all Interior Designers, Architects and Engineers. It enables students to understand solid geometry through graphic exercises of increased complexity. It deals with the details of drawings with regard to lettering, Geometry, projections, views at different angles and detailed views of objects.

### ▪ SUBJECT LEARNING OUTCOMES (SLOS)

- Enhances the analytical ability in students
- Develops the understanding of 3 dimensional drawing.
- Students will learn the physical dimensions of the objects

### PRACTICALS

	<b>P</b>
<b>1. Isometric &amp; Axonometric View :</b>	<b>36</b>
<b>1.1</b> Fundamentals of Isometric Projection and isometric scales	
<b>1.2</b> Making Isometric Views & Axonometric Views of furniture-	
1.2.1 Table	
1.2.2 Chair (with arms and without arms)	
1.2.3 Bed.	
<b>2. Introduction to one point perspective –</b>	<b>42</b>
<b>2.1</b> Definitions of Perspective Elements	
<b>2.1.1</b> Station Point	
<b>2.1.2</b> Picture Plane	
<b>2.1.3</b> Vanishing Points	
<b>2.1.4</b> Height Lines	
<b>2.1.5</b> Ground Line	
<b>2.1.6</b> Eye Level	
<b>2.2</b> Simple exercises of solids	

### REFERENCE BOOKS

- |                                   |             |
|-----------------------------------|-------------|
| 1. Engineering Drawing & Graphics | K.Venugopal |
| 2. Engineering Graphics           | P J Shah    |

\* \* \* \* \*

**COMMUNICATION SKILLS IN ENGLISH II-LAB**

Course Code	ID-2008 (Common in All Branches of Non Engineering)
Course Title	Communication Skills in English - II Lab
Number of Credits	1(L-0 T-0, P-2)
Prerequisites	None

**RATIONAL**

For business purposes at every level of performance, language remains the most common and important means of communication. A diploma holder who wants to join an industry or organization needs to possess adequate knowledge and skills in language, its usage and presentation. Proficiency both in written and spoken language is required to be developed among the diploma holders

**SUBJECT LEARNING OUTCOMES (SLOS)**

The first year syllabus will develop among students the basic knowledge and skills related to syntax and semantics of English Language.

**PRACTICALS**

<b>1. Delivering Short Discourses :</b>	<b>P</b>
1.1. About Oneself	<b>8</b>
1.2. Describing a Place, Person, an Object	
1.3. Describing a Picture, Photo	
<b>2. Group Discussion :</b>	<b>8</b>
2.1. Developing skills to initiate a discussion [How to open]	
2.2. Snatching initiative from others [Watch for weak points, etc.]	
<b>3. Interview Skills:</b>	<b>10</b>
3.1. Desirable Qualities	
3.2. Preparation –	
3.2.1. Know the Company	
3.2.2. Know Yourself	
3.2.3. Review Common Interview Questions	
3.2.4. Prepare Questions You Want to Ask the Interviewer	
3.3. Using Proper Verbal and Non-Verbal Cues	
3.4. Exhibiting Confidence	
3.5. Tips for Success	

**Note:**

1. The Medium of teaching and examination will be English.
2. At least one question will be set from each unit.
3. No theory question will be set from syllabus of practicals.

**REFERENCE BOOKS**

1. Intermediate English Grammar Raymond Murphy, Cambridge University Press
2. English Grammar, Usage & Composition Tickoo & Subramanian, Pub: S. Chand and Co.
3. A Practical Eng. Grammar (and its Exercise Books) Thomson and Martinet, Pub: ELBS
4. High School English Grammar and Composition Wren & Martin, Pub: S. Chand and Co.
5. ABC of Common Grammatical Errors Nigel D Turton, Macmillan India Ltd.
6. Soft Skills Dr. K. Alex, Pub: S. Chand and Co.

\* \* \* \*

**COMPUTER APPLICATIONS-II LAB**

Course Code	ID-2009 (Common in All Branches of Non Engineering)
Course Title	Computer Applications - II Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

**RATIONALE**

Use of Computer is increasing for precise and speedy work so it is useful to provide computer knowledge to the students. The course provides knowledge of internet, email, web browsing and E-commerce. It also gives overview of Cyber Security and Information technology Act.

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

**SUBJECT LEARNING OUTCOMES (SLOS)**

The student will be able to understand the concept of Networks, internet and importance of Cyber security in the present time.

**PRACTICALS****P**

1. Study of different types of Networks and Network Topologies.	3
2. Visit to different Internet Sites.	3
3. Content Searching using Search Engines.	3
4. Downloading and uploading on Websites	3
5. Creating E-mail accounts, Composing and Sending E-mail.	3
6. Sending E-mail with attachments and signature.	3
7. Updating E-mail setting	3
8. Hands on Experience on Different types of E-commerce Websites	3
9. Exercise on Online shopping showing use of payment gateways	3
10. Identifying Cyber Attacks	6
11. Multimedia Applications	6

**REFERENCE BOOKS**

- |                                       |   |
|---------------------------------------|---|
| 1. Computer Fundamentals              | P.K. Sinha and P. Sinha, BPB publication.                         |
| 2. Data Communications and Networking | Forouzan TMH  |
| 3. Internet for Everyone              | Alexis Leon & Mathews Leon,<br>Vikas Publishing House, New Delhi. |

\*\*\*\*\*

**THEORY OF MATERIALS LAB**

Course Code	ID-2010
Course Title	Theory of Materials Lab
Number of Credits	1.5(L-0 T-0, P-3)
Prerequisites	None

**RATIONALE**

Interior materials and furnishings are integral to all interior design projects. They express our sense of Design and Style. The subject enhances the productivity of design. The student will have ideas about the different aspects of decoration in floor coverings, materials used in designing, lighting, curtains, furnishings etc. They showcase one's choices and interests. Interior design is about texture and contrasting these textures in order to add depth and interest to a space. These together enhance interior spaces by allowing a designer to synchronise interior elements with each other.

**SUBJECT LEARNING OUTCOMES (SLOS)**

**Adorns the students in determining the theme or concept for use of interior materials**

Student will learn to express some definite idea or theme into interior spaces.

Students will learn to regulate acoustics . All soft furnishings contribute to noise reduction.

**CONTENTS**

<b>1. FLOOR COVERING :</b>	<b>P 6</b>
1.1. Sketches of types of Carpets	
1.1.1 Loop pile/round wire	
1.1.2 Cut pile (Plush & shag)	
1.1.3 Cut & Loop pile	
1.1.4 Random shear	
1.2. Design of Carpets :	
1.2.1 Solid Plain Shades	
1.2.2 Mottled Design	
1.2.3 Stripped Design	
1.2.4 Jaspers Design	
1.2.5 Geometrical Design	
1.2.6 Oriental (Floral) Design	
1.2.7 Embossed Design	
1.2.8 Printed Design	
<b>2. WINDOWS –</b>	<b>6</b>
Sketches of problem windows with their treatment	
<b>3. CURTAINS</b>	<b>6</b>
3.1 Sketches of types of curtain pleats :	
3.1.1 Plain	
3.1.2 French	
3.1.3 Pleated	
<b>3.2 Sketches of Curtain Accessories :</b>	<b>6</b>
3.2.1 Swags	
3.2.2 Valances	
3.2.3 Tails	

3.3 Types of Blinds :	
3.3.1 Austrain	
3.3.2 Festoon	
3.3.3 Roller	
3.3.4 Roman	
<b>4. OTHER FURNISHINGS</b>	<b>3</b>
Types of various shapes of cushion covers	
<b>5. ACCESSORIES</b>	<b>6</b>
5.1 Sketches of various types of Accessories :	
5.1.1 Lamps	
5.1.2 Book Shelves	
5.1.3 Mirrors	
5.1.4 Vases	
<b>6. LIGHT FITTINGS :</b>	<b>6</b>
6.1 Sketches of different types of lights	
6.2 Fixtures for various units (room by room) in a house	
6.2.1 Ambient & recessed light	
6.2.2 Chandeliers	
6.2.3 Pendant lights	
6.2.4 Accent lights	
6.2.5 Leds	
6.2.6 Wall sconce	
6.2.7 Cove lights	
6.2.8 wall lamps	
6.2.9 floor lamp	
6.2.10 wall washers	
6.2.11 Track lights	
6.2.12 Spot lights	
6.2.13 Task lights	
6.2.14 Ceiling mounted fixtures	
6.2.15 Desk/Table lamps	
6.2.16 Under cabinet lighting.	

Visit to Shops/Show Rooms for latest items,accessories,furnishings, hardwaresand Preparation of file (Collection of Different Types of Materials)

#### **REFERENCE BOOKS :**

1. Soft Furnishings Sarah Cambell& Hillary More
2. American Rugs & Carpets Hellen Von Resentiel
3. Oriental Rugs Erich Aschenbrenner
4. Residential Lighting Randall Whitehead
5. Interior Design Ahmed A. Kasu

\*\*\*\*\*

**INTERIOR MATERIAL AND CONSTRUCTION – II LAB**

Course Code	ID-2011
Course Title	Interior Material and Construction - II Lab
Number of Credits	2(L-0 T-0, P-4)
Prerequisites	None

**RATIONALE**

This course is offered in the first year in order to familiarize students with the basics in building materials and technology. Construction began with the purely functional need for a controlled environment to moderate the effects of climate. It provides an introduction to variety of materials available in the market, used for execution in Interior Design practice.

**SUBJECT LEARNING OUTCOMES (SLOS)**

- Adorns the student with the techniques and industry involved in the erection of structures.
- Students will learn to outline the importance of sequencing and planning construction operations.
- Develops an understanding of the building construction process including the behaviour of basic materials.

**PRACTICALS**

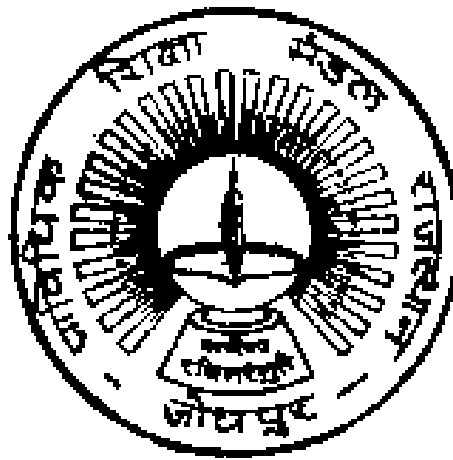
<b>1. STONE MASONRY :</b>		<b>16</b>
1.1	Rubble Masonry	
1.2	Ashlar Masonry	
<b>2. OPENINGS :</b>		<b>20</b>
2.1	Arches	
2.1.1	Types of Arches	
2.1.1.1	One Centered	
2.1.1.2	Two Centered	
2.1.1.3	Three Centered	
2.1.1.4	Four Centered.	
<b>3. FLOORING :</b>		<b>16</b>
3.1.1	Inner Flooring	
3.1.2	Parkway Flooring.	

\*\*\*\*\*



**GOVERNMENT OF RAJASTHAN  
BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR**

**SEMESTER SCHEME-2020-21**



**III SEMESTER**  
(SESSION 2021-2022 & ONWARDS)

**ENVIRONMENTAL STUDIES-I**

Course Code	ID-3001 (Common in All Branches of Non Engineering)
Course Title	ENVIRONMENTAL STUDIES-I
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

**Course Objectives**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

**Course Outcomes**

After completing the course the Learner will

- Understand the importance of Environmental cleanliness
- Gain knowledge about the causes of Water and Air pollution ,their effects and methods to check the same.
- Have the knowledge of different types of solid waste and their management techniques.

**COURSE CONTENTS**

<b>1. General :</b>	<b>3</b>	<b>L</b>
1.1 Biotic and abiotic environment.		
1.2 Adverse effects of Environmental Pollution		
1.3 Control strategies		
<b>2. Water Pollution :</b>	<b>7</b>	
2.1 Water Quality Standards		
2.2 Surface and underground water sources		
2.3 Impurities in water and their removal		
2.4 Adverse effects of domestic waste water and industrial effluent to surface water sources		
2.5 Self purification of streams		
<b>3. Air Pollution :</b>	<b>7</b>	
3.1 Sources of air contaminants		
3.2 Adverse effects on human health		
3.3 Measures to check air pollution		
3.4 Greenhouse effect		
3.5 Global warming		
3.6 Acid rain		
3.7 Ozone depletion		
<b>4. Solid Waste Management :</b>	<b>7</b>	
4.1 Introduction to solid waste		
4.2 Its collection and disposal		
4.3 Recovery of resources		
4.4 Sanitary land-filling		
4.5 Vermi-composting		
4.6 Hazardous waste management		

**REFERENCE BOOKS :**

1. Patyavaran Shiksha & Dr. V.K. Vijay Dr. A.N. Mathur, Dr. N.S. Rathore
2. Patyavaran Adhyayan Dr. B.C. Jat Dr. Ram Kumar Gujar
3. Patyavaran Avabodh Dr. D.D. Ojha
4. Environmental chemistry and pollution control : S.S. Dora
5. Ecology concepts and application : Manuel C. Muller
6. Environmental protection Emil T. Chanlett
7. Environmental science Cumingham. Saigo
8. Solid waste management : C.I.. Mantell
9. पर्यावरण विनाश के कगार पर राजीव गुप्ता
11. पर्यावरण जीवों का आंगन प्रेमानन्द चंदोला
12. पर्यावरण (त्रैमासिक) पर्यावरण एवं वन मंत्रालय, नई दिल्ली
13. Panda, New letter WWF-India, New Delhi

\*\*\*\*\*

SEMESTER SCHEME-2021

**WORKSHOP MATERIALS AND PRACTICES - I**

Course Code	ID 3002
Course Title	WORKSHOP MATERIALS AND PRACTICES - I
Number of Credits	3 (L 3, T -0, P -0)
Prerequisites	Nil

**COURSE LEARNING OBJECTIVES:**

For the student of interior design, knowledge of workshop practice is essential.

- This subject will introduce the students to various materials and processes in designing interiors.
- The important design processes involve wood working processes like wood joinery work, glass processes like frosting, etching, crystallizing etc. and painting & polishing & preparation of surfaces.
- By going through the exercises a student will be able to understand the techniques of making wood furniture's, surface preparations and learn about working with glass.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Define the functional aspects of interior materials.
- Demonstrate different types of interior materials and finishes and apply them on the interior space elements
- Defines glass- it's types and its applications in Interiors
- Students learn about surface preparation of various wood surfaces.

**COURSE CONTENTS:**

<b>1 GLASS:</b>	<b>10</b>
1.1 Properties sizes & uses in Decorative Purposes of following types of Glass :	
1.1.1 Sheet	
1.1.2 Plate	
1.1.3 Safety – wired, toughened and laminated	
1.1.4 Coloured	
1.1.5 Ground	
1.1.6 Heat Resistant	
1.1.7 Glass-Blocks	
<b>2 Finishes on Wood</b>	<b>16</b>
Varnishes	
2.1.1 Oil and Water varnish	
2.1.2 Turpentine and spirit varnish	
2.2 Polish :(Properties and uses)	
2.2.1 French polish	
2.2.2 Wax polish	
2.2.3 Melamine Polish	
2.3 Lacquer: (Properties and uses)	

**REFERENCES:**

1. Workshop Technology I,II,III, by SK Hajra, Choudhary and AK Choudhary; Media Promoters and Publishers Pvt. Ltd. Mumbai.
2. Workshop Technology Vol. I, II, III by Manchanda; India Publishing House, Jalandhar.

\*\*\*\*\*

**VISUAL ARTS – II**

Course Code	ID 3003
Course Title	VISUAL ARTS – II
Number of Credits	04 (L-4, T -0, P -0)
Prerequisites	Inclination and awareness towards Art forms

**COURSE LEARNING OBJECTIVES:**

- Visual Arts/Aesthetics is an art of sensitive appreciation of the “beautiful” It is the pursuit a devotion to beauty and refined taste. It is developing a well developed sense of beauty.
- Sense of Aesthetics helps us to create the simple things of life in a more presentable manner. A simple ordinary thing or an object when treated with aesthetic sense becomes extra ordinary and unusual.
- Visual Art can be termed as an art of presenting a thing, an object, or a design in such a fashion that it looks more beautiful and desirable.
- Students of diploma in Interior Decoration are supposed to have the knowledge about the basics of design and Art and the types of design and Folk Arts and other related elements to develop skills for designing creative spaces.

**COURSE OUTCOMES:**

- Students acquire knowledge of design and it's types.
- Students get acquainted with the various Art forms of our culture.
- Develops an innate understanding of visual art concepts.
- Creates an understanding of refinement on visual sense of aesthetics.
- Adorns the student with the proportions of the different components of the human body
- Develops competency in colour perception and psychological responses to colour

**COURSE CONTENTS:**

<b>1. DESIGN:</b>	<b>04</b>
1.1 Definition of Design.	
1.2 Types of Design :	
1.2.1 Functional Design	
1.2.2 Structural Design	
<b>2. ART:</b>	<b>08</b>
2.1 Definition of Art	
2.2 Folk Art forms of India – Worli, Madhubani, Gond Art, Kalamkari	
<b>3. COLOUR:</b>	<b>12</b>
3.1 Properties of Colour	
3.2 Colour Schemes	
3.3 Factors Influencing a Colour Scheme, Selection in Interior Spaces	
3.4 Colour Scheme for a Residential Unit & Commercial Spaces.	
3.5 Psychological effects of Colour.	
<b>4. ANTHROPOMETRY AND HUMAN SCALE</b>	<b>28</b>
4.1 Lobby and reception	
4.2 Restaurants	
4.3 Bar	
4.4 Suite Rooms/Guest rooms	
4.5 Beauty Parlours	

**REFERENCE BOOKS:**

1. Time Saver Standards for Building Types by Joseph De Chiara and John Callendera
2. Architects Data by Neufert
3. Architectural Aesthetics by Sangeet Sharma, Abhishek Publication, 57-59, Sector 17, Chandigarh

**INTERIOR MATERIALS & CONSTRUCTION – III**

Course Code	<b>ID 3004</b>
Course Title	<b>INTERIOR MATERIALS &amp; CONSTRUCTION – III</b>
Number of Credits	4 (L-4,T-0, P-0)
Prerequisites	NIL

**COURSE LEARNING OBJECTIVES:**

- This very important subject is the foundation of interior construction. The student will have ideas of various types of Timber and wood products - their applications in construction.
- The main motive of this subject is to recognize the perfect presentation of design with all techniques.
- The students will have requisite knowledge regarding characteristics, uses and availability of various stones, bricks, timber and wood materials and skills in determining suitability of materials for various construction purposes.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Identify various types of Timber
- Identify types of defects of timber
- Enables students to physically identify materials
- Enables competitive study based upon the cost, brand name, sizes of various materials available in the local market.

**COURSE CONTENTS:**

<b>1. TIMBER:</b>	<b>8</b>
1.1 Classification -	
1.1.1 Exogenous	
1.1.2 Endogenous	
1.1.3 Soft Wood	
1.1.4 Hard Wood	
<b>2. VARIOUS TYPES OF INDIAN TIMBER</b>	<b>8</b>
2.1 Teak	
2.2 Sal	
2.3 Chir	
2.4 Toon	
2.5 Shisham	
2.6 Pine	
2.7 Neem	
2.8 Mango	
2.9 BaBool	
Properties and uses of above Timbers.	
Availability and Cost of Wood.	
<b>3 TIMBER USED IN FURNITURE MANUFACTURING:</b>	<b>16</b>
3.1 Seasoning of Timber	
3.2 Defects in Timber	
3.3 Recognition Methods of Superior and Inferior Qualities.	
<b>4 WOODS BASED PRODUCTS:</b>	<b>12</b>
Brief description of manufacture and Properties and uses of the following -	
4.1 Plywood	
4.2 Block Board	
4.3 Particle Board	
4.4 Laminates	
4.5 MDF	
4.6 Perforated Boards	
Study of the brand name and cost of the wood based products available in the market	
<b>5 Stones</b>	<b>8</b>
5.1 Classification of stones - Natural and Artificial stones	
5.2 Properties and uses of following –	
5.2.1 Marble	

- 5.2.2 Granite
- 5.2.3 Sandstone
- 5.2.4 Limestone
- 5.2.5 Slate
- 5.2.6 Quartz

**NOTE:**

The students are also expected to refer to Architecture and Interior Journals like inside – Outside, Interiors today, Design and Interiors, Architect and builder, Builders Friend etc.

**REFERENCES:**

- 1 "Engineering Materials" by D Sharma, SK and Mathur GC; S. Chand and Co. Jalandhar
- 2 "Engineering Materials" by Surendra Singh; Vikas Publishing House Pvt. Ltd. New Delhi
- 3 "Engineering Materials" by Bahl, SK; , Rainbow Book Co., Delhi
- 4 "Civil Engineering Materials" by TTTI, Chandigarh; Tata McGraw Hill Publication, New Delhi.
- 5 "Engineering Materials" by Shahane; Allied Book Stall, Poona,
- 6 "Engineering materials" by Gurcharan Singh; Standard Publishers Distributors, Delhi..
- 7 "Construction Materials" by SC Rangawala; Charoter Publishers

\*\*\*\*\*

SEMESTER SCHEME-2020-21

**INTERIOR DESIGN & FURNITURE DESIGN LAB – I**

Course Code	ID 3005
Course Title	INTERIOR DESIGN & FURNITURE DESIGN– I LAB
Number of Credits	3.0 (L-0, T -0, P -6)
Prerequisites	NILL

**COURSE LEARNING OBJECTIVES:**

- Students are expected to know, design and execute building interiors. With the knowledge of this subject the students can help in handling interior projects from the concept stage to the project implementation stage.
- Also this exercise is necessary since the interiors are becoming more integral part of architecture and considerable stress is being laid in interior design. Teachers while imparting instructions are expected to explain concepts and principles introducing various interior finishing materials.
- It develops realization of Interior Design profession today creating comfortable functional and aesthetically appealing harmonious interior environment.

**COURSE OUTCOMES:**

At the end of the course, the student can /able to:

- Apply planning procedures for residential spaces
- Acquires two dimensional hand drafting skills
- Acquires quick sketching skills as they apply to residential spaces
- Employ space planning techniques and conventions
- Learns to write residential interior specifications
- Recognizes main components and design needs for residential interiors
- Learns to draw detailed drawings of furniture
- Learns to plan and draw interior spaces based on standards and minimum dimensions

**COURSE CONTENTS:**

- 1. SPACE ANALYSIS:** 48  
**Plan, elevations, electric plan, flooring & ceiling plan of the following on scale :**  
**Residence**
  - 1.1 Drawing Room
  - 1.2 Kitchen
  - 1.3 Bedrooms – Master / Child's Bed Room
- 2. Practical Exercises on Furniture Design in the form of working drawing of the following:** 30
  - 2.2 Beds
  - 2.3 Study Table
  - 2.4 Chairs - (Study Chair, with and without Arm Chair)
  - 2.5 Kitchen counter
  - 2.6 Sofa
  - 2.7 Wardrobe

Elementary introduction to CAD as a drafting and designing tool. Students may be encouraged to take up some assignment with the application of AutoCAD software tools – Diagram.dia Students should maintain portfolio and give seminar towards the end of the session.

**MAGAZINES**

- a) Inside Outside Magazine
- b) Indian design magazine
- c) Society exteriors
- d) Architecture + Design (A+D)

**REFERENCES:**

1. Time saver for store planning and design-Charles E. Brondy, *publishing*, Charles H. Kerr & Company began
2. The best interiors and life styles of India-by the Indian and Eastern Engineering Co Ltd.,
3. Interior Design by Ahmed Kasu.
4. Nufert Architect's data
5. Inter-wood (Published by Monica International)

\*\*\*\*\*



**BASIC DESIGN LAB – III LAB**

Course Code	ID 3006
Course Title	BASIC DESIGN LAB – III Lab
Number of Credits	2.5 (L-0, T -0, P -5)
Prerequisites	NILL

**COURSE LEARNING OBJECTIVES:**

- Basic Design forms a core subject for learning lettering and preparing three dimensional drawings.
- It lays considerable stress on practical work so that students attain sufficient skills in lettering, and desired competencies for preparing good quality interior drawings.
- The main motive of this subject is to recognize the perfect presentation of design with all techniques.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Acquires writing skills using lettering appropriate for architectural communication
- Develops ability to produce drawings that include basic hand rendering techniques.
- Develops an awareness of three dimensional spaces
- Learns to create shade effects in perspective drawings of interior spaces
- Learns three dimensional presentations

**COURSE CONTENTS:**

<b>1. Calligraphy &amp; Lettering</b>	<b>05</b>
1.1 stroke practice	
1.2 Lettering in English	
<b>2 Free Hand Sketching of Still Life Images :</b>	<b>10</b>
2.1 Free hand sketching of three – dimensional geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres Cylinders etc).	
2.2 Drapery	
<b>3 Three Dimensional Design :</b>	<b>50</b>
3.1 One point Perspective of Bedrooms – Master/Child room	
3.2 One point Perspective of Kitchen	
3.3 One point Perspective of Drawing Room	

Students may be encouraged to take up some assignment to draw and draft of three – dimensional geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres Cylinders) with the application of open source software tools – Tinker CAD. Students should maintain portfolio and give seminar towards the end of the session.

**REFERENCES:**

- 1 Rendering with Pencil and Ink by Gill Robert W., Published by Thomas and Hudson, New Delhi.
- 2 Interior Design by Ahmed A. Kasu.

\*\*\*\*\*

**COMPUTER AIDED DESIGN – I LAB**

Course Code	ID 3007
Course Title	COMPUTER AIDED DESIGN – I LAB
Number of Credits	1.5 (L-0, T-0, P-3)
Prerequisites	NILL

**COURSE LEARNING OBJECTIVES:**

- CAD being the backbone of modern designing increases the productivity of the designer, improves the quality of design, improves communication and improves the efficiency of design.
- In the present times an Interior Designer should be capable of drafting drawings on the computer, due to increasing need for computerized drawings by most interior designers and architects for their ease of drafting, editing, managing and presentation.
- At the end of the course the students should be able to make 2-D architectural drawings for presentation and construction purposes.
- The student should get familiar with the latest CAD versions.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Enables drawing layout functionality, allows surface rendering
- Enables very fast and easy conceptual modelling
- Allows to easily visualizing ideas and concepts before turning them into real projects.

**COURSE CONTENTS:**

- 1 Elementary introduction to CAD drafting and designing 3 D modelling tool- Assignment to draw and draft three – dimensional geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres Cylinders) with the application of open source software tools – Tinker CAD. **15**

**GOOGLE SKETCH UP**

- 2 **Moving Around** **03**

2.1 Orbit

2.2 Pan

- 3 **Drawing Commands** **09**

3.1 Line

3.2 Circle

3.3 Rectangle

3.4 Arc

3.5 Polygon

Draw blocks of 3 D entities comprising of rectangles, square, polygon

- 4 **Manipulation Commands** **09**

4.1 Push/Pull

4.2 Offset

4.3 Rotate

4.4 Move

4.5 Follow Me

4.6 Scale

- 5 **Applying Materials** **03**

5.1 Paint Bucket

Students may be encouraged to take up some assignment with the application of open source software tools – GNU image manipulation Program. Students should maintain portfolio and give seminar towards the end of the session.

**REFERENCES:**

- |                                |                                     |
|--------------------------------|-------------------------------------|
| 1 Computer Graphics            | Roy-A Plastck                       |
| 2 Computer Graphics            | Foley, Dam, Feiner, Hughes, Pearson |
| 3 Computer Graphics            | Roger F.                            |
| 4 SketchUp for Interior Design | Lydia Sloan Cline                   |

\*\*\*\*\*

**WORKSHOP MATERIALS AND PRACTICES –I LAB**

Course Code	ID 3008
Course Title	WORKSHOP MATERIALS AND PRACTICES –I LAB
Number of Credits	0.5 (L-0, T -0, P -1)
Prerequisites	NILL

**COURSE LEARNING OBJECTIVES:**

- General workshop practices are included in the curriculum in order to provide hands-on experience about use of different tools and basic manufacturing practices.
- This subject aims at developing general manual and machining skills in the students. In addition, the development of dignity of labour, safety at work place, team working and development of right attitude are the other objectives.
- The subject aims to understand material and tools by making objects which allow students to explore forms, surfaces, textures, and patterns i.e. elements and principles of design

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Identify tools and equipment used and their respective functions.
- Identify different types of materials and their basic properties.
- Use and take measurements with the help of basic measuring tools/equipment.
- Select materials, tools, and sequence of operations to make a job as per given drawing. Prepare simple jobs independently and inspect the same.
- Enables to identify various types of defects in different type of materials.
- Follow safety procedures and precautionary measures.
- Develop and apply basic skills in carpentry work.

**COURSE CONTENTS:**

- 1. Introduction and applications of carpentry jobs. 5**
  - 1.2 Name and use of raw materials used in carpentry shop : wood & alternative materials(board, plywood)
  - 1.3 Names, uses, care, precautions and maintenance of hand tools and other commonly used tools and materials used in carpentry shop by segregating as cutting tools, supporting tools, holding tools , measuring tools etc.
  - 1.4 Simple Exercises on ply board.
- 2. Demonstration of Wood joinery 3**
- 3. Painting, Polishing Including Preparation of various Surfaces Like Wood, Wall & Metal Surface 5**
  - 3.2 Introduction regarding painting tools and equipments used for preparation of different colours surfaces
  - 3.3 Exercise in
    - 3.3.1 Surface preparation before painting (steel and wood)
    - 3.3.2 Application of primer coat
    - 3.3.3 Painting wooden & Steel Items
    - 3.3.4 Spray Painting wooden & metal items

**REFERENCES:**

- 1 Workshop Technology I,II,III, by SK Hajra, Choudhary and AK Choudhary; Media Promoters and Publishers Pvt. Ltd. Mumbai.
- 2 Workshop Technology Vol. I, II, III by Manchanda; India Publishing House, Jalandhar.

\*\*\*\*\*

**ENVIRONMENTAL STUDIES-I LAB**

Course Code	ID-3009 (Common in All Branches of Non Engineering)
Course Title	ENVIRONMENTAL STUDIES-I LAB
Number of Credits	1.0 (L-0, T-0, P-2)
Prerequisites	None

**Course Objective**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

**Course Outcomes**

After completing the course the Learner will

- Understand the extent of Air pollution in their city.
- Understand the extent of Water pollution in their city.
- Know about the Ph value of water , hardness and TDS of water, their importance method of determination .
- Have knowledge of solid waste management of their city

**PRACTICALS**

1. Visit to the important circles and measurement of Air Quality Index
2. Determination of Ph Value of tap Water
3. Determination of Hardness of tap Water by EDTA Method
4. Determination of TDS of tap Water
5. Visiting the local agency to Prepre the report of solid waste management of the city .
6. Plantation

\*\*\*\*\*

**INTERIOR MATERIAL & CONSTRUCTION – III LAB**

Course Code	ID 3010
Course Title	INTERIOR MATERIALS & CONSTRUCTION – III LAB
Number of Credits	1.0 (L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

At the end of the course, the student can able to:

- Explore career options in the building construction industry.
- Develop sound safety practices.
- Demonstrate desirable work habits.
- Appreciate and demonstrate high standards of workmanship.
- Identify masonry tools and materials.
- Understand basic skills in masonry work
- Identify exterior finish tools and materials.
- Develop and apply basic skills in exterior finish work.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Select and identify different types of doors, windows
- Enables to recognize different types of doors and window styles for use in two dimensional floor plans.
- Learns the types of frames and trims for door and window frames
- Learns about various materials and sections, fixtures and fasteners, hold fasts used in doors and windows

**COURSE CONTENTS:****Detailed Drawings of the Following:**

<b>1 Doors :</b>	<b>10</b>
1.1 Single rebate door - Flush Door	
1.2 Double rebate door – Grills & Fly Proof Mesh Door	
<b>2 Windows: Detailed Drawings of the Following:</b>	<b>10</b>
2.1 Bay Window	
2.2 Corner Window	
2.3 Grills & Fly Proof Mesh Window	
2.4 Grill designs	
<b>3 Door window fixtures</b>	<b>06</b>
3.1 Tower bolts	
3.2 Hinges including concealed hinges	
3.3 Door Handles	
3.4 Floor door stopper	
3.5 Mortice lock	
3.6 Door closer – including hydraulic types	

**REFERENCES:**

1. "Building Construction" by Rangwala, SC; Charotar Book Stall, Anand
2. "A Text Book of Building Construction" by Kulkarni, GJ; Ahmedabad Book Depot
3. "A Text Book of Building Construction" by Arora, SP and Bindra, SP; Dhanpat Rai and Sons, New Delhi.
4. "Building Construction" by Sushil Kumar; Standard Publishers Distributors, Delhi

\*\*\*\*\*

**VISUAL ARTS – II LAB**

Course Code	ID 3011
Course Title	VISUAL ARTS – II LAB
Number of Credits	0.5 (L-0, T -0, P -1)
Prerequisites	NILL

**COURSE LEARNING OBJECTIVES:**

- Visual arts are used in subject Design for making living spaces more beautiful and desirable. This subject is offered in order to appreciate grammar of visual design and application in Interior Design.
- The idea is to study and analyse planar forms and an understanding of generation of a form from a two dimensional abstract idea.
- The main motive of this subject is to recognize the patterns, style of decorative designs and symmetry with interior objects.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Develop an understanding of folk art forms
- Develops the sense of depth of line, shape, mass etc.
- Enhances drawing skills while using techniques of drawings and graphics.
- Follow safety procedures and precautionary measures.

**COURSE CONTENTS:**

- |   |           |
|---|-----------|
| <b>1. Folk art</b>  | <b>04</b> |
| 1.1 Madhubani Art   |           |
| 1.2 Worli Art   |           |
| 1.3 Kalamkari   |           |
| 1.4 Gond Art  |           |
| <b>2. Colour</b>  | <b>09</b> |
| 2.1 2 Dimensional compositions in Achromatic, Monochromatic and Polychromatic colour schemes. |           |
| 2.2 2 Dimensional compositions in Tints and Shades.   |           |

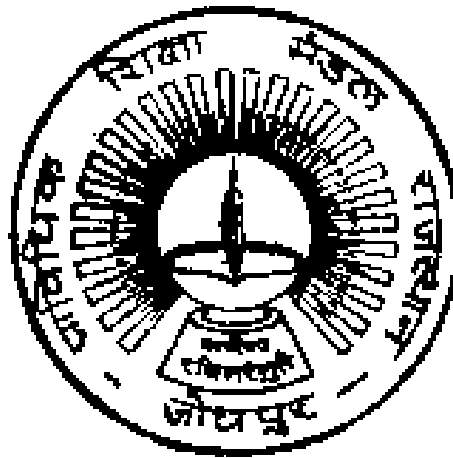
**REFERENCES:**

- |                              |                   |
|------------------------------|-------------------|
| 1. Interior Design           | Ahmed A Kasu      |
| 2. Modern Painting in Colour | Dengo             |
| 3. Home Furnishing           | Anna Hough & Rutt |

\*\*\*\*\*

**GOVERNMENT OF RAJASTHAN**  
**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR**

**SEMESTER SCHEME-2020-21**



**IV SEMESTER**  
(SESSION 2021-2022 & ONWARDS)

**ENVIRONMENTAL STUDIES-II**

Course Code	ID-4001 (Common in All Branches of Non Engineering)
Course Title	ENVIRONMENTAL STUDIES-II
Number of Credits	2(L-2 T-0, P-0)
Prerequisites	None

**COURSE LEARNING OBJECTIVES**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

**COURSE OUTCOMES-**

After completing the course the Learner will

- Understand the importance of Environmental cleanliness
- Gain knowledge about the causes of Land pollution , Land erosion and prevention
- Understand about Biodiversity and ecosystems
- Water harvesting methods and about the Rural Sanitation
- Know the different Non conventional energy sources and their advantages

**COURSE CONTENTS**

<b>1.</b>	<b>Land Pollution :</b>		<b>L</b>
	1.1 Soil conservation		
	1.2 Land erosion		
	1.3 Afforestation		<b>5</b>
<b>2.</b>	<b>Ecology :</b>		<b>7</b>
	2.1 Basics of species		
	2.2 Biodiversity		
	2.3 Population dynamics		
	2.4 Energy flow		
	2.5 Ecosystems		
<b>3.</b>	<b>Water Harvesting and Rural Sanitation :</b>		<b>7</b>
	3.1 Water harvesting techniques		
	3.2 Different schemes of Rural Water Supply in Rajasthan		
	3.3 Rural Sanitation		
	3.3 Septic Tank		
	3.5 Collection and disposal of wastes		
	3.6 Bio-gas		
	3.7 Community Awareness and participation		
<b>4.</b>	<b>Non Conventional Energy Sources :</b>		<b>7</b>
	4.1 Non-Conventional (Renewable) sources of energy		
	4.2 Solar energy, Wind energy, Bio-mass energy, Hydrogen energy		

**REFERENCE BOOKS :**

1. Patyavarán Shiksha & Dr. V.K. Vijay Dr. A.N. Mathur, Dr. N.S. Rathore
2. Patyavarán Adhyayan Dr. B.C. Jat Dr. Ram Kumar Gujar



3. Patyavaran Avabodh Dr. D.D. Ojha
4. Environmental chemistry and pollution control : S.S. Dora
5. Ecology concepts and application : Manuel C. Muller
6. Environmental protection Emil T. Chanlett
7. Environmental science Cumingham. Saigo
8. Solid waste management : C.I.. Mantell
9. Introduction to Environmental Engineering & Science Prentice Hall of India, 1995
10. Concept of Ecology, 1991 Edward J Kormondy
11. Ecology 1975 Odum
12. Environmental Engineering Peavy, Rowe, Tehobaniglum
13. Environmental Impact Assessment Mc Graw Hill, NewYork, 1977
14. Environmental Technologies for Sustainable Development Dr. Upendra Pandel  
Dr. M.P. Poonia
15. Environmental Pollution & Management V.K. Kohli & Vikas Kohli
16. पर्यावरण विनाश के कगार पर राजीव गुप्ता
17. पर्यावरण जीवों का आंगन प्रेमानन्द चंदोला
18. पर्यावरण (त्रैमासिक) पर्यावरण एवं वन मंत्रालय, नई दिल्ली
19. Panda, New letter WWF-India, New Delhi

\*\*\*\*\*

SEMESTER SCHEME-20

## WORKSHOP MATERIALS AND PRACTICES - II

Course Code	ID 4002
Course Title	WORKSHOP MATERIALS AND PRACTICES - II
Number of Credits	03 (L-3, T-0, P-0)
Prerequisites	None

### COURSE LEARNING OBJECTIVES:

For the student of interior design, knowledge of workshop practice is essential.

- The students learn the design processes involved in surface preparation and finishes.
- By going through the exercises a student will be able to understand the techniques of surface preparations and learn about working with paints and plaster of Paris.

### COURSE OUTCOMES:

At the end of the course, the student can able to:

- Enables competitive study based upon the cost, brand name, sizes of various materials available in the local market.
- Enables to understand finishes for plastered surfaces
- Identifies the methods and finishing for ceilings

### COURSE CONTENTS:

<b>1. Finishes on plastered surfaces :</b> Properties and uses 1.1 Plastic Emulsion Paints 1.2 Deco Paints 1.3 Texture paints 1.4 Distempers and Snowcem- Trade Names, Properties, Covering capacities, Costs, Handling Techniques uses of above.	<b>21</b>
<b>2. Properties and uses</b> 2.1 Gypsum 2.2 Plaster of Paris	<b>06</b>
<b>3. Glues:</b> 3.1 PVA Glue 3.2 Cyanoacrylate (CA) Wood Glue 3.3 Epoxy based glue 3.4 Polyurethane wood glue 3.5 Hide Glue	<b>12</b>

### REFERENCES:

1. Workshop Technology I,II,III, by SK Hajra, Choudhary and AK Choudhary; Media Promoters and Publishers Pvt. Ltd. Mumbai.
2. Workshop Technology Vol. I, II, III by Manchanda; India Publishing House, Jalandhar.

\*\*\*\*\*

**HISTORY OF INTERIOR DESIGN**

Course Code	ID 4003
Course Title	HISTORY OF INTERIOR DESIGN
Number of Credits	05 (L-5,T -0, P -0)
Prerequisites	Nil

**COURSE LEARNING OBJECTIVES:**

- The knowledge of this subject will help the students to understand how political, physical, social, economical and technological change affects the design, materials and construction techniques.
- This subject will impart the primary knowledge of the rise of modern Architecture, the History of the 20th century interior design & furniture, Introduction to works of the masters in interior design, Period Furniture's ranging from Ancient Egypt, Greco-Roman, Gothic, Italian Renaissance to the English Renaissance.

**COURSE OUTCOMES:**

- Enables to recognize interior design including furniture styles, decorative elements and motifs
- Enables to recognize the relationship of political, physical, social, economical and religious influences on design
- Enables to understand the details of interior design, furniture design techniques and ornaments of period furniture
- Interpret and apply historic design styles to contemporary interior environment settings.

**COURSE CONTENTS:**

<b>1 Evolution of Modern Architecture:</b>	<b>15</b>
1.1 History of the 20th Century Interior Design & Furniture	
1.1.1 Furniture Development in Germany	
1.1.2 Furniture Development in France	
1.1.3 Furniture Development in England	
1.1.4 Furniture Development in Italy	
1.1.5 Furniture Development in USA	
1.2 Bauhau's furniture movement	
<b>2 Period Furniture:</b>	<b>50</b>
2.1 Ancient Egypt:	
2.1.1 Characteristic Features	
2.1.2 Decoration	
2.1.3 Sketches of Following Furniture :	
2.1.3.1 Egyptian Carved Chair (Dog Feet)	
2.1.3.2 Egyptian Stool (Duck's Head Feet)	
2.2 Greco-Roman	
2.2.1 Characteristics Features	
2.2.2 Sketches of	
2.2.2.1 Klismos Chair	
2.2.2.2 Roman Table Inlaid	
2.3 Gothic	
2.3.1 Characteristics Features	
2.3.2 Sketches of	
2.3.2.1 The Convention Chair of Edward - I	
2.3.2.2 Gothic Cabinet	
2.4 Italian Renaissance	
2.4.1 Characteristic Features	
2.4.2 Sketches of	
2.4.2.1 Dante Chair	
2.4.2.2 Italian Renaissance Side Board or "Gredenza"	
2.4.2.3 Italian Renaissance Carved "Cassapanca"	
2.5 The English Renaissance - Tudor & Elizabeth :	
2.5.1 Characteristic Features	
2.5.2 Sketches of	

- 2.5.2.1 Tudor Wainscot Chair
- 2.5.2.2 Tudor Stool
- 2.5.2.3 Elizabethan Melon-Bull Draw-Top Refectory Table
- 2.6 Jacobean
  - 2.6.1 Characteristics Features
  - 2.6.2 Sketches of
    - 2.6.2.1 Restoration Chair
    - 2.6.2.2 Dak Chest of Jacobean Period
- 2.7 William & Mary :
  - 2.7.1 Characteristic Features
  - 2.7.2 Sketches of
    - 2.7.2.1 William & Mary Trumpet - Leg Highboy
    - 2.7.2.2 Double Hood W&M Secretary, Block Feet
    - 2.7.2.3 Six Legged Marquetry
- 2.8 Queen Anne :
  - 2.8.1 Characteristic Features
  - 2.8.2 Sketches of
    - 2.8.2.1 Queen Anne Arm Chair showing cabriole leg
    - 2.8.2.2 Queen Anne Needlework Stool with Pad Feet
    - 2.8.2.3 Queen Anne Settee Showing Claw & Ball Feet
- 2.9 Chippendale
  - 2.9.1 Characteristic Features
  - 2.9.2 Sketches of
    - 2.9.2.1 Chippendale Ribband Back Chair
    - 2.9.2.2 Chippendale Drop-Leaf Side Table
    - 2.9.2.3 Chippendale Tilt-Top Piecrust Table with Claw & Ball Feet
- 2.10 Hepplewhite:
  - 2.10.1 Characteristic Features
  - 2.10.2 Sketches of
    - 2.10.2.1 Hepplewhite "Tambour" Desk
    - 2.10.2.2 Hepplewhite Side Chair
    - 2.10.2.3 Hepplewhite Arm Chair
- 2.11 Adam Brothers
  - 2.11.1 Characteristic Features
  - 2.11.2 Sketches of
    - 2.11.2.1 Adam Cane-Seat Armchair
    - 2.11.2.2 Adam Serpentine Front Console Table
- 2.12 Sheraton
  - 2.12.1 Characteristic Features
  - 2.12.2 Sketches of
    - 2.12.2.1 Sheraton Adjustable Dressing Glass
    - 2.12.2.2 Sheraton Folding Wash Stand
- 2.13 Louis xiv
  - 2.13.1 Characteristic Features
  - 2.13.2 Sketches of
    - 2.13.2.1 Louis xiv Arm Chair, Showing Saltier Stretcher, Cane Back & Leather Seat.
    - 2.13.2.2 Louis xiv Carved Armoire
- 2.14 Louis xv (Rococo Period)
  - 2.14.1 Characteristic Features
  - 2.14.2 Sketches of
    - 2.14.2.1 Marble Rococo Console with Scroll Foot
    - 2.14.2.2 "Encoignure" or Corner Cabinet
- 2.15 Louis xvi
  - 2.15.1 Characteristic Features
  - 2.15.2 Sketches of
    - 2.15.2.1 Book Case
    - 2.15.2.2 Mantle Clock
- 2.16 American
  - 2.16.1 Characteristic Features

- 2.16.2 Sketches of
  - 2.16.2.1 Colonial Gate Leg Table
  - 2.16.2.2 Low Buoy
  - 2.16.2.3 Side Board

**REFERENCES:**

1. History of Architecture by Sir Banister Fletcher, Architectural Press, Oxford, UK
2. Interior Design by Ahmed and Kasu

\*\*\*\*\*

SEMESTER SCHEME-2021-21

**INTERIOR MATERIAL & CONSTRUCTION – IV**

Course Code	<b>ID 4004</b>
Course Title	INTERIOR MATERIAL & CONSTRUCTION – IV
Number of Credits	4 (L-4,T-0, P-0)
Prerequisites	NIL

**COURSE LEARNING OBJECTIVES:**

- This very important subject is the foundation of interior construction.
- The student will have ideas of various types of Bricks Tiles, Stairs & their applications in construction.
- The main motive of this subject is to recognize the different parts of various building components. The aim is to develop an understanding of the behaviour and function of various components of buildings.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Illustrates construction materials and wall , floor and roof finishes
- Enables to identify various types of stair design
- Enables to understand the functional aspects of materials
- Enables competitive study based upon the cost, brand name, sizes of various materials available in the local market.

**COURSE CONTENTS:**

<b>1. Tiles:</b>	<b>20</b>
Various Types of Tiles: (Properties and uses)	
1.1 Roofing Tiles	
1.2 Floor Tiles	
1.3 Wall Tiles	
1.4 Decorative Tiles	
<b>2. Stairs:</b>	<b>20</b>
2.1 Classification of Stairs	
2.2 Staircase Requirements	
2.3 Technical terms	
<b>3. Bricks :</b>	<b>12</b>
3.1 Classification of Bricks	
3.2 Properties and uses of Bricks	

**REFERENCES:**

1. "Engineering Materials" by D Sharma, SK and Mathur GC; S. Chand and Co. Jalandhar
2. "Engineering Materials" by Surendra Singh; Vikas Publishing House Pvt. Ltd. New Delhi
3. "Engineering Materials" by Bahl, SK; , Rainbow Book Co., Delhi
4. "Civil Engineering Materials" by TTTI, Chandigarh; Tata McGraw Hill Publication, New Delhi.
5. "Engineering Materials" by Shahane; Allied Book Stall, Poona,
6. "Engineering materials" by Gurcharan Singh; Standard Publishers Distributors, Delhi..
7. "Construction Materials" by SC Rangawala; Charoter Publishers

\*\*\*\*\*

**COMPUTER AIDED DESIGN – II**

Course Code	ID 4005
Course Title	computer aided design – II
Number of Credits	3.0 (L-3, T-0, P-0)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- CAD being the backbone of modern designing increases the productivity of the designer, improves the quality of design, improves communication and improves the efficiency of design.
- In the present times an Interior Designer should be capable of drafting drawings on the computer, due to increasing need for computerized drawings by most interior designers and architects for their ease of drafting, editing, managing and presentation.
- At the end of the course the students should be able to make 2-D architectural drawings for presentation and construction purposes.
- The student should get familiar with the latest CAD versions.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Draw 2D drawings on AutoCAD
- Application of Drafting tools for creating and rendering 2 D Drawings
- Learns to dimension drawings in Cad
- Learns to create environment for effective and speedy drafting
- Learns to edit and modify drawings in cad
- Ability to produce drawings that show appropriate line weights

**COURSE CONTENTS:****AUTOCAD**

- |   |           |
|---|-----------|
| 1. <b>Getting Started with AutoCAD</b>                  | <b>06</b> |
| 1.1 Opening and Creating Drawings                       |           |
| 1.2 Exploring the AutoCAD interface Zooming and Panning |           |
| 2. <b>Drawing Environment and Layout:</b>               | <b>09</b> |
| 2.1 Units   |           |
| 2.2 Limits  |           |
| 2.3 Title Block   |           |
| 2.4 Layout  |           |
| 3. <b>Elements of Drawing:</b>                          | <b>09</b> |
| 3.1 Line  |           |
| 3.2 Circle  |           |
| 3.3 Rectangle   |           |
| 3.4 Polygon   |           |
| 3.5 Donut   |           |
| 3.6 Arc   |           |
| 3.7 Ellipse   |           |
| 3.8 Hatch/Gradient                                      |           |
| 4. <b>Modifying and editing drawings:</b>               | <b>09</b> |
| 4.1 Selection methods                                   |           |
| 4.2 Erase   |           |
| 4.3 Offset  |           |
| 4.4 Trim  |           |
| 4.5 Extend  |           |
| 4.6 Copy  |           |
| 4.7 Move  |           |
| 4.8 Mirror  |           |
| 4.9 Rotate  |           |
| 4.10         Scale                                      |           |

- 4.11 Stretch
- 4.12 Array
- 4.13 Chamfer/Fillet
- 4.14 Explode

## 5. Dimensioning of Objects

06

- 5.1 Dimensioning
- 5.2 Dimension edit and dimension style manager

Students may be encouraged to take up some assignment with the application open source software tools – Diagram.dia. To draw 2 d objects, Students should give seminar towards the end of the session using open source software Libre office impress

**Note :** The Essential theory should be taught during the practical's.

### REFERENCES:

- |   |                              |                                     |
|---|------------------------------|-------------------------------------|
| 1 | Computer Graphics            | Roy-A Plastck                       |
| 2 | Computer Graphics            | Foley, Dam, Feiner, Hughes, Pearson |
| 3 | Computer Graphics            | Roger F.                            |
| 4 | SketchUp for Interior Design | Lydia Sloan Cline                   |

\*\*\*\*\*

SEMESTER SCHEME-2021-21



**BASIC DESIGN– IV Lab**

Course Code	ID 4006
Course Title	Basic Design – IV Lab
Number of Credits	1.5 (L-0, T -0, P -3)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- This very important subject is the foundation of interior design. The student will have ideas of Anthropometrics & its application in design, three dimensional design & free hand sketching.
- Interior models as three- dimensional representations are made in different mediums. The students will get acquainted with all of these.
- The main motive of this subject is to recognize the perfect presentation of design with all techniques.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Demonstrate a number of drawing skills while using appropriate tools, equipment, materials, processes, medium selection, techniques of drawings and graphics, etc.
- Learns 3d drawing in perspective
- Enhances free hand sketching, colouring and rendering like shades and shadows
- Develops to visualize and understand the third dimension in furniture design

**COURSE CONTENTS:**

<b>1 Two Point Perspective</b>	<b>15</b>
1.1 Furniture (any Three)	
1.2 Building Exterior	
<b>2 Three Dimensional Design :</b>	<b>24</b>
2.1 One point Perspective of Retail spaces	
2.2 One point Perspective of Café	

Students may be encouraged to take up some assignment to draw and draft of three – dimensional geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres, Cylinders) with the application of open source software tools – TinkerCAD. Students should maintain portfolio and give seminar towards the end of the session.

**REFERENCES:**

- 1 Rendering with Pencil and Ink by Gill Robert W., Published by Thomas and Hudson, New Delhi
- 2 Interior Design by Ahmed A. Kasu.

\*\*\*\*\*

**COMPUTER AIDED DESIGN – II LAB**

Course Code	ID 4007
Course Title	Computer Aided Design – II Lab
Number of Credits	<b>0.5 (L-0, T -0, P - 1)</b>
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- CAD being the backbone of modern designing increases the productivity of the designer, improves the quality of design, improves communication and improves the efficiency of design.
- In the present times an Interior Designer should be capable of drafting drawings on the computer, due to increasing need for computerized drawings by most interior designers and architects for their ease of drafting, editing, managing and presentation.
- At the end of the course the students should be able to make 2-D architectural drawings for presentation and construction purposes.
- The student should get familiar with the latest CAD versions.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Draw 2D drawings on AutoCAD
- Application of Drafting tools for creating and rendering 2 D Drawings
- Learns to dimension drawings in Cad
- Learns to create environment for effective and speedy drafting
- Learns to edit and modify drawings in cad
- Ability to produce drawings that show appropriate line weights

**COURSE CONTENTS:**

- |   |          |
|---|----------|
| <b>1 Elementary introduction to CAD drafting and designing 2 D tools-</b>   | <b>6</b> |
| Assignment to draw and draft interior layout plans  |          |
| <b>2 AutoCAD Blocks</b>   | <b>4</b> |
| All Interior Design Blocks, All Tree and Plants Blocks, All Transportations Vehicles Lorries, All Furniture Blocks, All Tables Blocks, All Bed Blocks, All OfficeTable Blocks, All Sofa Blocks, All Chair Blocks, All Decoration Blocks, All Kitchen Blocks, All Bathroom Blocks, All Windows curtain Blocks, All Landscape blocks, All People Blocks |          |
| <b>3 Furniture design elevations</b>  | <b>3</b> |

**REFERENCES:**

- |                     |                                     |
|---------------------|-------------------------------------|
| 1 Computer Graphics | Roy-A Plastck                       |
| 2 Computer Graphics | Foley, Dam, Feiner, Hughes, Pearson |
| 3 Computer Graphics | Roger F.                            |

\*\*\*\*\*

**WORKSHOP MATERIALS AND PRACTICES –II LAB**

Course Code	ID 4008
Course Title	Workshop materials and practices –II lab
Number of Credits	0.5(L-0, T -0, P -1)
Prerequisites	Keenness to learn manufacturing practices

**COURSE LEARNING OBJECTIVES:**

- Students of Interior Decoration at diploma level are expected to assist in the preparation of interior and architectural models of various kinds in their professional career.
- This skill can also form a basis of self-employment. Interior and Architecture models as three- dimensional representations are made in different mediums. The students should be acquainted with all of these mediums/materials

**COURSE OUTCOMES:**

- Enables to Differentiate between materials and construction methods and finishing of ceilings
- Enhances the visualization of 3 Dimensional modeling
- Enables to understand model making techniques and materials
- Knowledge of model making tools and their application

**COURSE CONTENTS:**

- |  |          |
|--|----------|
| <b>1 Introduction to POP Modelling (any one) –</b>   | <b>3</b> |
| Preparation of Models of Ceiling, Pillars, Cornices.   |          |
| <b>2 Model making materials and techniques.</b>  | <b>7</b> |
| 2.1 Preparing Models using the following materials:  |          |
| Handmade and ivory sheet, Thermo coal Mount Board/Sun Board                                    |          |
| One Interior Project   |          |
| <b>3 Sculpture Making :</b>  | <b>2</b> |
| 3.1 Thermocol  |          |
| 3.2 Mount Board/sun board  |          |
| 3.3 Clay modelling   |          |
| <b>4 Demonstration on glass techniques and Computerised Numerical Control cutting machines</b> | <b>1</b> |

**REFERENCES:**

1. Workshop Technology by Hazara & Dwivedi
2. Workshop Technology I,II,III, by SK Hajra, Choudhary and AK Choudhary; Media Promoters and Publishers Pvt. Ltd. Mumbai.
3. Workshop Technology Vol. I, II, III by Manchanda; India Publishing House, Jalandhar.

\*\*\*\*\*

**ENVIRONMENTAL STUDIES-II LAB**

<b>Course Code</b>	ID-4009 (Common in All Branches of Non Engineering)
<b>Course Title</b>	Environmental Studies-II Lab
<b>Number of Credits</b>	1.0 (L-0, T-0, P-2)
<b>Prerequisites</b>	None

**COURSE LEARNING OBJECTIVES**

Environmental study is a subject as per directions of Supreme Court / Govt. of India. Under Act. 51 A (g) of our constitution it is our fundamental duty to protect our environment.

A diploma holder must have knowledge of different types of pollution so that she may help in balancing the eco system and controlling pollution by pollution control measures. She should also be aware of environmental laws related to the control of pollution.

**COURSE OUTCOMES-**

After completing the course the Learner will

- Understand the extent of Land pollution in their city.
- Understand the local birds, plants, insects.
- Importance of Afforestation (Plantation)
- Have awareness towards Environment

**PRACTICALS**

1. Visit to local area to document environmental assets-mountain/ desert / river / forest
2. Study of local birds, plants, insects
3. Plantation
4. Environmental awareness campaign through exhibitions

Note : After visits/ study, the students will prepare posters , charts , reports for exhibitions / presentations.

\*\*\*\*\*

**INTERIOR MATERIAL & CONSTRUCTION – IV LAB**

Course Code	ID 4010
Course Title	INTERIOR MATERIALS & CONSTRUCTION – IV LAB
Number of Credits	1.0 (L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- Students learn about properties with particular reference to their use and appearance in particular situations depending upon climate and environmental conditions of the site, where the materials are to be used.
- The student will have ideas of various types of Stairs, panellings, partitions & their applications in construction. It provides elementary knowledge of materials – their specifications and characteristics to enhance the level of understanding of students.

**COURSE OUTCOMES:**

- Enables to draw and understand staircase design
- Enables to learn operations in construction of building components
- Enhances techniques and space management in design
- Learns about partitions as not only space dividers, but also important features of the space design.
- Identify conventions for different materials, symbols, sections and general fittings

**COURSE CONTENTS:**

<b>1 Stairs :</b>	<b>12</b>
Introductions to Different Types of Staircases	
a. Dog-Legged	
b. Sprial	
c. Railing and	
<b>2 Panelling:</b>	<b>06</b>
2.1 Detailed Drawing of Panelling in Plywood, Ply Board, & Wood Laminates.	
<b>3 Partition:</b>	<b>08</b>
3.1 Detailed Drawing of Simple Partition in Wood & Glass.	

**REFERENCES:**

- 1 Material of Construction, D.N. Ghosh
- 2 Building Material, N.Choudhary
- 3 Building Construction by WB Mackay; Khanna Publisher, New Delhi
- 4 Building Construction by SP Bindra and SP Arora; ; publisher Dhanpat Rai & Co. New Delhi
- 5 Building Construction by BC Punmia; Publisher Laxmi Publication, New Delhi
- 6 Building Construction by Sushil Kumar; Standard Publisher, New Delhi
- 7 Construction of Buildings (Vol I and II) by Barry
- 8 Building Construction by VB Sikka; Publisher Tata McGraw Hill Publisher, New Delhi
- 9 Building Construction by Rangwala; Publisher Charotar Publishing House Pvt. Ltd., New Delhi

\*\*\*\*\*

**INTERIOR DESIGN & FURNITURE DESIGN II LAB**

Course Code	ID 4011
Course Title	INTERIOR DESIGN & FURNITURE DESIGN II LAB
Number of Credits	3.5 (L-0, T-0, P-7)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- The subject aims to demonstrate competency in the design process . It aims to identify and evaluate the technical aspects of interior design .
- The students will be able to develop the sense of creativity in decorating and designing comfortable interior spaces. It is through the process of developing designs that the process of decoration evaluates.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Learn to apply procedures for designing commercial and hospitality spaces
- Enables to draft two dimensional drawings
- Learns to plan circulation paths
- Enables to recognize the functional aspects of furniture
- Learns to evaluate the methods of material manipulation
- Learns to create new products in interior design

**COURSE CONTENTS:**

- 1 Plan, elevations, electric plan, flooring & ceiling plan of the following on scale: 56**  
Commercial & hospitality spaces  
1.1 Retail spaces – shops of clothing, gift articles, shoes, medicines, general stores  
1.2 Café – coffee shops, fast food joints, tea junctions etc.
- 2 Practical Exercises on Furniture Design in the form of working drawing of the following: 35**  
2.1 Counter for retail spaces  
2.2 LED unit  
2.3 Window Display  
2.4 Free standing or table displays

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

**MAGAZINES**

- Inside Outside Magazine
- Indian design magazine
- Society exteriors
- Architecture + Design (A+D)

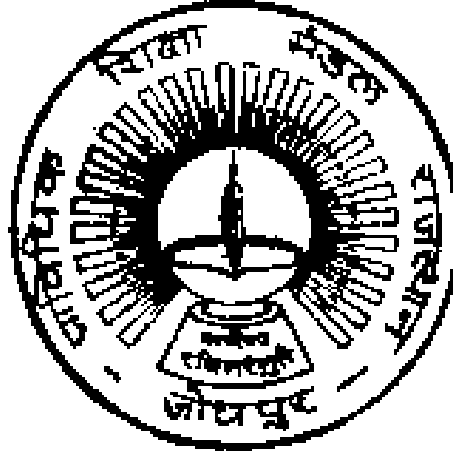
**REFERENCES:**

1. Time saver for store planning and design-Charles E. Brondy, *publishing*, Charles H. Kerr & Company began
2. The best interiors and life styles of India-by the Indian and Eastern Engineering Co Ltd.,
3. Interior Design by Ahmed Kasu.
4. Nufert Architect's data
5. Inter-wood (Published by Monica International)

\*\*\*\*\*

**GOVERNMENT OF RAJASTHAN**  
**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR**

**SEMESTER SCHEME-2020-21**



**V SEMESTER**  
**(SESSION 2022-2023 & ONWARDS)**

**PROFESSIONAL MANAGEMENT & ENTREPRENEURSHIP-I**

Course Code	ID 5001(Common to all Branches of Non Engineering)
Course Title	Professional Management & Entrepreneurship-I
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None

**Course objective:**

To achieve the targets and goals in an organization, it is essential to have the knowledge of various facets of businesses and management. On the other hand, economic development of a nation much depends upon entrepreneurship development. With large pool of technically educated youth and open market system, a big number of youth can turn to be business ventures, generating employment opportunities and leading to better utilization of resources.

This course not only gives an insight into the basic concepts, principles and processes of management and business organizations but also understanding of different aspects of entrepreneurship development to young entrants.

**Course Outcomes**

On completion of the course student will be able to:

1. Get familiarize with basics of business organization and management
2. Acquire the essential knowledge required for becoming an entrepreneur

**COURSE CONTENTS****1. Meaning and Scope of Business**

- 1.1 Definition
  - 1.1.1 Profession
  - 1.1.2 Trade
  - 1.1.3 Industry
- 1.2 Objectives of business and profession

**2. Types of Business Organization**

- 2.1 Brief description
- 2.2 Advantages and disadvantages of
  - 2.2.1 Individual/Sole
  - 2.2.2 Partnership
  - 2.2.3 Cooperative
  - 2.2.4 Private and Public limited organizations
- 2.3 Organizational Charts
- 2.4 Business Ethics
- 2.5 Characteristics of small businesses

**3. Management Techniques**

- 3.1 Leadership
- 3.2 Authority
- 3.3 Responsibility
- 3.4 Functions of Management

**4. Human Resource Management**

- 4.1 Functions & Importance
- 4.2 Human resource planning
- 4.3 Training
- 4.4 Mentoring
- 4.5 Motivating



4.6 Grievances and their handling

**5. Material Management**

5.1 Duties of purchase department

5.2 Purchase order & Contracts

5.3 Tendering Procedure

5.4 Tenders and their types

5.5 Tender related costs

5.6 Store Keeping

5.6.1 Objectives

5.6.2 Receipt and issue of material

5.6.3 Physical verification of store

5.6.4 Disposal methods

**6. Entrepreneurship**

6.1 Introduction, scope and need

6.2 Characteristics of Entrepreneurship

6.3 Classification of Industries

6.4 Types of Industries

6.5 Industrial Policy

**7. Entrepreneurship Support Systems**

7.1 Institutional support from state and central organizations viz NSIC, SIDO, KVIC, DIC, SIS SIDBI, SFC, RFC etc

7.2 Loan/credit facilities by banks and financial institutions

7.3 Facilities to Women entrepreneurs

7.4 Important legislations (Factory Act, Minimum Wage Act, Workmen Compensation Act etc)

**REFERENCES:**

1. Industrial Engineering and Management, O P Khanna
2. Handbook of Small Scale Industry by P M Bhandari
3. Entrepreneurial Development, S S Khanka, S Chand
4. Industrial Engineering and Management, Sharma and Banga
5. Entrepreneurial Development Dr S S Khanka, S Chand Publishing
6. Management and Entrepreneurship, V K Sharma and O P Harkut, Scientific Publishers
7. Entrepreneurship Development Handbook, O P Harkut and J P Vaishnav, Scientific Publishers
8. Entrepreneurship Development And Management, J S Narang, Krishan Lal, V Dalal, Dhanpat Rai

\*\*\*\*\*

**BUILDING SERVICES**

Course Code	ID 5002
Course Title	Building Services
Number of Credits	04 (L-4, T -0, P -0)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- Building services are as important as any other part of the building. Students should be well conversant with electrical and mechanical installations in the buildings.
- For this purpose, it is essential that the students are taught various aspects of building services like: sanitation, water supply, acoustics and air conditioning.
- While imparting instructions various fixtures and fittings, water supply and sanitary installations at work sites must be shown. No building can be put into effective utilisation without all these services. It is therefore necessary for students to understand the basic principles, installations, operations of building services.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Recognizes and defines the technical aspects of interior building services
- Enables to evaluate the acoustics of an interior space.
- Knowledge of elements of water supply
- Learns about Rain water harvesting
- Learns to apply various types of services as per needs of building.
- Enables to select the right type of air conditioning and the position of air conditioning

**COURSE CONTENTS:**

<b>1 Water Supply &amp; Drainage:</b>	<b>15</b>
Systems of Water Supply:	
1.1 Cold Water Supply in residential building	
1.2 Hot water supply for buildings including solar water heating.	
1.3 Concept of Rain water harvesting	
<b>2 Plumbing:</b>	<b>05</b>
2.1 Types of Pipes	
2.2 Sizes of Pipes	
2.3 Water supply fittings	
<b>3 Drainage:</b>	<b>10</b>
3.1 Principles of Drainage	
3.2 House drainage; traps – shapes, sizes, types, materials and function	
3.3 Functions and working of sinks, wash basins,, water closets, flushing cisterns, urinals, bathtubs , showers and taps – sizes and types	
<b>4 Acoustics:</b>	<b>10</b>
4.1 Measurement of sound	
4.2 Properties of Sound	
4.3 Sound Absorbing materials	
4.4 Acoustic Design of a hall	
4.5 Guidelines for good acoustic design	
<b>5 Ventilation:</b>	<b>10</b>
5.1 Requirements of a good ventilation	
5.2 Types of ventilation	
5.3 Rules for natural ventilation	
<b>6 Air-Conditioning:</b>	<b>15</b>
6.1 The need for air conditioning	
6.2 Atmospheric Conditions for human comfort	
6.3 Air-Conditioning under Indian Climatic conditions	
6.4 Types of Air-Conditioning methods	

**REFERENCES:**

1. Water Supply & Sanitary G.C. Singh Engineering Vol- I & II

2. Handbook of Designing and Installation of Services in Building Complex – High-rise Buildings by VK Jain, Publication. Khanna Publishers, New Delhi Khanna Publishers, New Delhi.
3. Water and Waste Water Technology by Mark J. Hammer and Mark J. Hammer(Jr.); Prentice Hall of India (P) Ltd., New Delhi – 110 001
4. A Text Book of Environmental Science by Subramanian; Narora Publicity (Pvt.) Ltd., New Delhi
5. A text book on Building Services R. UdaykumarEswar Press, Chennai

\*\*\*\*\*

SEMESTER SCHEME-2021-21

**COMPUTER AIDED DESIGN – III**

Course Code	ID 5003
Course Title	Computer Aided Design – III
Number of Credits	02 (L-2, T -0, P -0)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- CAD being the backbone of modern designing increases the productivity of the designer, improves the quality of design, improves communication and improves the efficiency of design.
- In the present times an Interior Designer should be capable of drafting drawings on the computer, due to increasing need for computerized drawings by most interior designers and architects for their ease of drafting, editing, managing and presentation.
- At the end of the course the students should be able to make 2-D architectural drawings for presentation and construction purposes.
- The student should get familiar with the latest CAD versions.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Draw 2D drawings on AutoCAD
- Application of Drafting tools for creating and rendering 2 D Drawings
- Learns to modify properties of entities in a drawing
- Learns to create user made objects
- Learns to work with layers
- Ability to produce output of drawings

**COURSE CONTENTS:****AUTOCAD**

<b>1 Properties</b>	<b>04</b>
1.1 Line type	
1.2 Line weight	
1.3 Match properties	
1.4 Object Color	
<b>2 Creating User made Objects</b>	<b>04</b>
2.1 Create Block	
2.2 Write Block	
<b>3 Annotate</b>	<b>02</b>
3.1 Text style	
3.2 Single line and multi line text	
3.3 Edit and scale text	
<b>4 Layers</b>	<b>04</b>
4.1 Layer Properties – Off/on, Isolate/Unisolate, Freeze, Lock,Mark current, Thaw,Match,Block	
4.2 Folk Art forms of India – Worli, Madhubani, Gond Art, Kalamkari	
<b>5 Utilities</b>	<b>10</b>
5.1 Measure	
5.2 Distance	
5.3 Radius	
5.4 Angle	
5.5 Area	
5.6 Volume	
<b>6 Output</b>	<b>02</b>
Plotting a drawing(.dwg) and .dwg to .pdf	

**REFERENCES:**

- |                     |                                     |
|---------------------|-------------------------------------|
| 1 Computer Graphics | Roy-A Plastck                       |
| 2 Computer Graphics | Foley, Dam, Feiner, Hughes, Pearson |

\*\*\*\*\*

**INTERIOR MATERIAL & CONSTRUCTION – V**

Course Code	ID 5004
Course Title	Interior Material & Construction – V
Number of Credits	3(L-3,T-0, P-0)
Prerequisites	NIL

**COURSE LEARNING OBJECTIVES:**

- This subject provides knowledge of material science and behaviour of various engineering materials used in building construction.
- It is essential that students should have knowledge of various sub components of buildings and their constructional details as well as preventive, remedial and corrective methods of common construction faults.
- It provides procedural knowledge of metals, wall papers as building finishes components. Prior to selecting materials it is essential to know its properties, suitability, strength and durability.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Enables to select and justify appropriate advanced modern building materials in construction techniques
- Ascertain the current market price of each and every construction material
- Provides elementary knowledge of metals and helps in identifying correct implementation
- Predicts the properties of wall paper and its application

**COURSE CONTENTS:**

<b>1 Metals and Building Finishes:</b>	<b>20</b>
1.1 Properties and uses of the following:	
1.1.1 Aluminium	
1.1.2 Copper	
1.1.3 Zinc	
1.1.4 Tin	
1.1.5 Brass	
1.1.6 Gun Metal	
1.1.7 Stainless Steel	
1.1.8 Asbestos	
1.1.9 Mica	
1.1.10 Rubber	
1.1.11 Bakelite	
<b>2 Wall Papers:</b>	<b>08</b>
2.1 Types, Properties and uses & procedure of wall papering & Fabrics.	
<b>3 Metal Doors and Windows:</b>	<b>24</b>
3.1 Sections, Mechanism and Working details of Metal Doors & Windows	

**NOTE:**

The students are also expected to refer to Architecture and Interior Journals like inside – Outside, Interiors today, Design and Interiors, Architect and builder, Builders Friend etc.

**REFERENCES:**

1. Building materials by S.K.Duggal , New Age international Publishers
2. Building materials and Constructions by Sushil Kumar Standard Publishers
3. Building Construction by Dr. B.C.PunmiaLaxmi Publications
4. Engineering Materials By S C Rangwala Charter Publishing House, Anand

\*\*\*\*\*

## INTERIOR DESIGN & FURNITURE DESIGN– III LAB

Course Code	ID 5005
Course Title	Interior Design & Furniture Design– III Lab
Number of Credits	3.5 (L-0, T -0, P -7)
Prerequisites	None

### COURSE LEARNING OBJECTIVES:

- It has been very aptly put, "Interiors is an Art, an urge to design interiors is as human. " This being the core of Interior Design will enable a student to investigate the basic principles that underlie the complexity of Interior Design.
- It emphasizes on the language of design and how to translate a concept to technical drawing .
- It helps to enhance the skill identifying materials, furniture construction and furniture technology, technical drawings and 3 D visualization and presentation which are related to furniture design.

### COURSE OUTCOMES:

At the end of the course, the student can able to:

- Learns to explore the many possibilities to explore a design using all instruments a designer can have – material, shape and form
- Enables to identify and select furniture, finishes and materials for appropriate use in hospitality situations
- Provides knowledge of furniture fixtures, and equipment specifications for the hospitality industry
- Learns to specify art and accessories in hospitality environment

### COURSE CONTENTS:

- |  |           |
|--|-----------|
| <b>1 Preparing Interior Layout Plans , elevations, ceiling plans and floor plans of the Following Parts of 3 to 5 Start Hotel:</b> | <b>77</b> |
| 1.1 Lobby  |           |
| 1.2 Restaurants  |           |
| 1.3 Suite Rooms  |           |
| <b>2 Furniture Design:</b>   | <b>14</b> |
| Practical exercise on furniture design in form of working drawing of the following:  |           |
| 2.1 Bed for suite Rooms  |           |
| 2.2 Restaurant Dining Table  |           |
| 2.3 Ornamental mirrors   |           |
| 2.4 Ornamental pedestals   |           |

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

### MAGAZINES

- a) Inside Outside Magazine
- b) Indian design magazine
- c) Society exteriors
- d) Architecture + Design (A+D)

### REFERENCES:

- 1 Time Saver standards for Interior Design and space planning.
- 2 Interior Design by Ahmed Kasu.
- 3 Nufert Architect's data
- 4 Interior Design made easy by Therapeutic

\*\*\*\*\*

**BASIC DESIGN– V LAB**

Course Code	ID 5006
Course Title	Basic Design – V Lab
Number of Credits	1.5 (L-0, T -0, P -3)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- This subject explores basic perceptual drawing techniques and tools as well as the development of the language of three dimensional drawing.
- It introduces critical skills for sighting and constructing three dimensional drawings.
- It will develop sense of three dimensional illusion through perspective drawings.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Learns to explore and compose drawings in picture plane
- Helps to understand the differences between representations and expression
- Learns to position vanishing points and horizon line correctly
- Learns to draw repeated elements receding into distance
- Learns to draw curves or circular forms in perspective
- Learns to divide surfaces into equal spaces in perspective

**COURSE CONTENTS:**

Three Dimensional Designs

<b>1 Two point Perspective of a Residence exterior</b>	<b>12</b>
<b>2 One Point Perspective</b>	<b>27</b>
2.1 Lobby	
2.2 Restaurant	
2.3 Suite Rooms	

Students may be encouraged to take up some assignment to draw and draft of three – dimensional geometrical objects. (Cube, Cones, Prisms, Pyramids, Spheres, Cylinders) with the application of open source software tools – TinkerCAD . Students should maintain portfolio and give seminar towards the end of the session.

**REFERENCES:**

- 1 Engineering Drawing by N.D. Bhatt; Publisher Charotar Publishing House Pvt.Ltd., New Delhi
- 2 Engineering Drawing by G.S. Virdhi; Khanna Publisher, New Delhi
- 3 Rendering with Pencil and Ink by Gill Robert W., Published by Thomas and Hudson, New Delhi

\*\*\*\*\*

**COMPUTER AIDED DESIGN – III LAB**

Course Code	ID 5007
Course Title	Computer Aided Design – III Lab
Number of Credits	1.0 (L-0 T -0, P - 2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- The leap into three dimensions requires many changes in thinking and drawing habits for those who are used to 2D drawing. This course introduces to the concepts and methods of 3D modeling in AutoCAD.
- The course gives a thorough grounding in 3D fundamentals and explores the main features of AutoCAD's advanced 3D environment.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Learn and get familiar with 3D objects;
- Create and modify with 3D elements.
- Introduction to 3D Rendering and Animation.

**COURSE CONTENTS:**

<b>1 3D drawing and modelling</b>	<b>02</b>
1.1 Introduction to the 3D Modeling	
1.2 Workspace Basic 3D Viewing Tools	
1.3 3D Navigation Tools	
<b>2. Simple solids</b>	<b>03</b>
2.1 Solid Primitive Types	
2.1 Working with Composite Solids	
<b>3 Creating solids &amp; surfaces from 2d objects</b>	<b>02</b>
3.1 Extruded Solids and Surfaces	
3.2 Swept Solids and Surfaces Revolved Solids and Surfaces	
3.3 Lofted Solids and Surfaces	
<b>4 Advanced Solid Editing</b>	<b>02</b>
4.1 Editing Components of Solids	
4.2 Editing Faces of Solids	
4.3 Fillets and Chamfers on Solids	
<b>5 Materials &amp; Lighting</b>	<b>02</b>
5.1 Standard Materials	
5.2 Material Shaders	
5.3 Assigning Maps to Materials Opacity	
5.4 Bump and Reflection Mapping	
5.5 Types of Standard Lights	
5.6 Exposure Control	
5.7 Rendering	
<b>6 Working Drawings from 3D Models</b>	<b>02</b>
6.1 Creating Multiple Viewports	
6.2 2D Views from 3D Solids	
6.3 Creating Technical Drawings	
6.4 3D Model Import	
6.5 Automatic Model Documentation	
6.6 3D Printing	

**REFERENCES:**

- 1 Computer Graphics by Roy-A Plastck
- 2 Computer Graphics by Foley, Dam, Feiner, Hughes, Pearson
- 3 Mastering Autodesk Revit by Eddy Krygiel, Lance Kirby, and Marcus Kim

\*\*\*\*\*



**ARCHITECTURAL DESIGN & DRAWING – I LAB**

Course Code	ID 5008
Course Title	Architectural Design & Drawing – I Lab
Number of Credits	1.5 (L-0,T -0, P -3)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- Students of learn to plan, design and execute building interiors.
- With the knowledge of this subject the students can help in handling architectural and interior projects from the concept stage to the project implementation stage.
- Also this exercise is necessary since the interiors are becoming more integral part of architecture and considerable stress is being laid in interior design.

**COURSE OUTCOMES:**

- Learns planning considerations for humans
- Learns to draw symbol of materials in working drawings
- Enhances ability to read and interpret drawings

**COURSE CONTENTS:**

<b>1 Designing Commercial Space:</b>	<b>27</b>
Interior Designer's Office: Design and Detailed Drawing	
1.1 Interior Layout Plan	
1.2 Ceiling Plans	
1.3 Electric Layout Plan	
1.4 Flooring Layout Plan	
1.5 Panelling	
<b>2 Furniture Design in form of working drawings:</b>	<b>12</b>
2.1 Drafting Table	
2.2 Office Table	

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

**MAGAZINES**

- Inside Outside Magazine
- Indian design magazine
- Society exteriors
- Architecture + Design (A+D)

**REFERENCES:**

- |   |                                  |
|---|----------------------------------|
| 1 Time Saver Standards<br>(Interior Design) | Joseph D Chiara<br>Julius Palero |
|---|----------------------------------|

\*\*\*\*\*

**NATURAL INTERIOR SCAPING – I LAB**

Course Code	ID 5009
Course Title	Natural Interior Scaping – I Lab
Number of Credits	1.0 (L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- The basic knowledge of elements related to landscaping and their principles are very essential for the students of Interior Design.
- Through this subject, the students shall be introduced to relationship of landscaping and climate, besides an understanding of outdoor functional spaces.
- This Subject is meant to provide guidance as to how the natural elements such as flowers plants, stone etc. can be used for developing interior spaces and bringing in nature into the built form or spaces.

**COURSE OUTCOMES:**

- Students learn about design and composition as applied to development of residential grounds
- Learn to introduce green design in spaces
- Identification and use of ornamental and perennial plants in landscapes
- Develops a understanding of constituents of landscape and the role of landscape designers in creating and designing new green buildings.

**COURSE CONTENTS:**

<b>1 Climatology:</b>	<b>6</b>
1.1 Tropical climate.	
1.2 Micro climate of interior of city level.	
1.3 Micro climate of Region	
<b>2 Interior Scapes:</b>	<b>10</b>
2.1 Flower - Visual perception in various indoor & outdoor spaces. Drawing and practical exercises on types of flowers used for flower arrangements (Birds of paradise, anthurium, Rose, Gerbera, Lily, Carnations, Lotus, Gladioli, Orchids, Tulips, Dahlias, Crysanthemums, Heliconia )	
2.2 Drawing and Practical exercise on types of flower arrangement :	
2.2.1 Eastern Style. (six arrangements )	
2.2.2 Western style. (six arrangements )	
2.3 Drawing and practical exercise on types of accessories used in the flower arrangement.	
<b>3 Indoor and outdoor plants :</b>	<b>10</b>
3.1 Characteristics	
3.2 Colour	
3.3 Texture	
3.4 Foliage	
3.5 Science of growing, Maintaining greenery	
3.6 Drawing and practical exercise on types of Indoor and Outdoor plants. (10 each)	

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

**REFERENCES:**

- 1 Landscape Architecture by John O. Simonds published by MC. Graw Hill, Book Company
- 2 Urban Landscape Design by Garnett Eckko Published by M.C. Graw Hill, Book Company
- 3 Landscape Design that save energy by Anne Simon Majfat & Marc Schiler
- 4 Flowering trees of India and beautiful gardens of India by M.S. Randhawa
- 5 The Landscape of Man – Geoffrey Jellicoe, Publisher Thames and Hudson London
- 6 Trees of Chandigarh – Chhattar Singh, Dhillon and Rajnish Wattas,

\*\*\*\*\*

**INTERIOR MATERIAL & CONSTRUCTION – V LAB**

Course Code	ID 5010
Course Title	Interior Material & Construction – V Lab
Number of Credits	1.0(L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- This subject provides knowledge of material science and behaviour of various engineering materials used in building construction. It provides procedural knowledge of metals, wall papers as building finishes components.
- Prior to selecting materials it is essential to know its properties, suitability, strength and durability.

**COURSE OUTCOMES:**

- Read and interpret building metal door window drawings
- Prepare drawings of metal door and windows in developing different sections of building
- Helps to understand the technical construction methods of curtain walls

**COURSE CONTENTS:**

- |  |           |
|--|-----------|
| <b>1 Metal Doors: Detailed Drawings of the Following:</b>  | <b>09</b> |
| 1.1 Sliding Doors  |           |
| 1.2 Swing Doors  |           |
| 1.3 Revolving Doors  |           |
| 1.4 Centre Pivoted Doors                                   |           |
| <b>2 Metal Windows: Detailed Drawing of the Following:</b> | <b>04</b> |
| 2.1 Horizontal Sliding Window                              |           |
| 2.2 Curtain Wall   |           |
| 2.3 Fixed Window   |           |

**REFERENCES:**

- 1 Building materials by S.K.Duggal , New Age international Publishers
- 2 Building materials and Constructions by Sushil Kumar Standard Publishers
- 3 Building Construction by Dr. B.C.PunmiaLaxmi Publications
- 4 Engineering Materials By S C Rangwala Charter Publishing House, Anand

\*\*\*\*\*

**PROJECT**

Course Code	ID 5011
Course Title	Project
Number of Credits	0.0 (L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

Project work aims at developing skills in the students whereby they apply the totality of knowledge and skills gained through the course in the solution of particular problem or undertaking a project. The students have various aptitudes and strengths. Project work, therefore, should match the strengths of students. For this purpose, students should be asked to identify the type of project work, they would like to execute. It is also essential that the faculty of the department may have a brainstorming session to identify suitable project assignments. The project assignment is an individual/group assignment. The student should identify a given project assignment in advance. The project work identified in collaboration with Architects and Interior Designers , may be preferred.

**Subject Learning Outcomes :**

Integrate and apply concepts from all previous course work.

Research the chosen interior design problem independently and through consultation with faculty and advisors from the professional community.

Employ phases of the design process as expected in the profession.

Formulate a creative solution for the problem which satisfies aesthetic and functional requirements while adhering to legal codes and observing consideration of public and individual welfare.

Present the project formally to an audience of faculty, professional practitioners, and student peers.

\*\*\*\*\*

SEMESTER SCHEME 2021-22

**SUMMER INTERNSHIP – II**

Course Code	<b>ID 5012</b>
Course Title	<b>SUMMER INTERNSHIP – II</b>
Number of Credits	<b>3.0 (L-0, T -0, P -0)</b>
Prerequisites	<b>None</b>

The Practical Training is an important academic activity. It aims to enable the students to gain the kind and range of practical experience which will prepare them for their responsibilities immediately after qualifying their Diploma programme. It creates a platform to frame student's creative work. It helps them to understand the role of in design and designer in changing society. The purpose of this study is to expose the students to practical field of the design & execution, to learn practical application of knowledge acquired to platform understand that he has prepared only a good base & that education is a continuing learning process through out the carrier on which is about to embark.

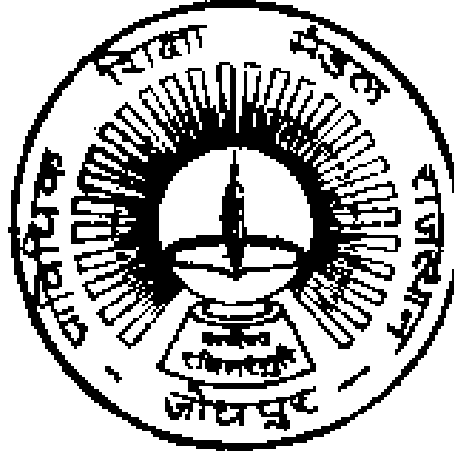
It will be carried out in 2 parts:

- a) Working in the Architect office/Civil Engineers/Interior Designer/Landscape Designer/ Interior Gallery and producing designs on which the student has itself worked .
- b) During the training period, the students must identify the CASE STUDY for her work and procure its necessary data.
- c) Summarize work experience via a written report and submission of portfolio of work.

SEMESTER SCHEME 2021-22

**GOVERNMENT OF RAJASTHAN**  
**BOARD OF TECHNICAL EDUCATION RAJASTHAN JODHPUR**

**SEMESTER SCHEME-2020-21**



2020-21

**VI SEMESTER**  
(SESSION 2022-2023 & ONWARDS)

SEMESTER SCH

**PROFESSIONAL MANAGEMENT & ENTREPRENEURSHIP-II**

Course Code	ID 6001 (Common to all branches of Non Engineering)
Course Title	Professional Management & Entrepreneurship-II
Number of Credits	3 (L-3, T-0, P-0)
Prerequisites	None

**Course objective:**

To achieve the targets and goals in an organization, it is essential to have the knowledge of various facets of businesses and management. On the other hand, economic development of a nation much depends upon entrepreneurship development. With large pool of technically educated youth and open market system, a big number of youth can turn to be business ventures, generating employment opportunities and leading to better utilization of resources.

This course not only gives an insight into the basic concepts, principles and processes of management and business organizations but also understanding of different aspects of entrepreneurship development to young entrants.

**Course Outcomes**

On completion of the course student will be able to:

1. get familiarize with basics of business organization and management
2. acquire the essential knowledge required for becoming an entrepreneur.

**COURSE CONTENTS****1. Financial Management**

- 1.1 Sources of Finance
- 1.2 Cash and Credit
- 1.3 Cheque and Draft
- 1.4 Brief idea of cost accounting

**2. Tax and Insurance**

- 2.1 Brief idea about direct and indirect taxes
- 2.2 Industrial insurance

**3. Quality Management**

- 3.1 Concept of quality
- 3.2 Quality Assurance
- 3.3 Online & offline quality control
- 3.4 Factors responsible for deviation
- 3.5 ISO 9000 model
- 3.6 Total quality management.

**4. Sales and Marketing Management**

- 4.1 Concept of Marketing
- 4.2 Marketing Mix (4P)
- 4.3 Advertising and Sales Promotion
- 4.3 Sales Vs Marketing
- 4.4 Functions of marketing department
- 4.5 After sales services

**5. Setting up an SSI**

- 5.1 Steps in setting up an SSI
- 5.2 Pre market survey

- 5.3 Product Identification
- 5.4 Site selection & land allotment
- 5.5 Procurement of raw materials
- 5.6 Establishment of Machinery

## 6. Project Report

- 6.1 Procedure of preparing a project report
- 6.2 Format of a project report
- 6.3 Analysis of sample project reports

Important: An entrepreneurship camp can be arranged by the institutions stretched over 3-4 days with the help of agencies such as RIICO, DST, RajCON, DOI, banks etc. However no question should be asked in examination from this event.

### REFERENCES:

1. Industrial Engineering and Management, O P Khanna
2. Handbook of Small Scale Industry by P M Bhandari
3. Entrepreneurial Development, S S Khanka, S Chand
4. Total Quality Management, M P Poonia and S C Sharma
5. Industrial Engineering and Management, Sharma and Banga
6. Entrepreneurial Development Dr S S Khanka, S Chand Publishing
7. Management and Entrepreneurship, V K Sharma and O P Harkut, Scientific Publishers
8. Entrepreneurship Development Handbook, O P Harkut and J P Vaishnav, Scientific Publishers
9. Entrepreneurship Development And Management, J S Narang, Krishan Lal, V Dalal, Dhanpat Rai

**Note: Students are advised to supplement their readings on latest development in entrepreneurship through internet and open courseware.**

\*\*\*\*\*

SEMESTER SCHEME-2021-22



**ESTIMATION AND PROFESSIONAL PRACTICE**

Course Code	ID 6002
Course Title	Estimation And Professional Practice
Number of Credits	05 (L-5, T -0, P -0)
Prerequisites	Inclination for self employment and learning professional behaviour

**COURSE LEARNING OBJECTIVES:**

- This subject is the backbone of Interior Decoration. Whatever work is under taken as original construction or as repairs or renovation, it needs finance and it is always necessary to know beforehand the Cost of the project so that proper provision of the Budget may be made.
- Along with the funds, the second requirement is that of quantities of various materials required which could be found out from various drawings of the project. Hence the provision of this subject is necessary.
- Introduction to professionalism, design practice, working of design organization are a part of course study.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Explain different units of measurement for different items Calculating quantities of materials and prepare the material chart
- Prepare detailed and abstract of estimates from drawings Use principles of valuation for valuation of a building
- Adorns the students with professional preparation and association

**COURSE CONTENTS:****1 Working out Quantities for a two Room residential Building in Particular, the in following items: 15**

- 1.1 Plastering / Decorative Plastering
- 1.2 Painting
- 1.3 Flooring
- 1.4 Curtains
- 1.5 Polishing
- 1.6 Panelling
- 1.7 Stone Cladding
- 1.8 Ceramic/ PVC tile cladding
- 1.9 Grid Finish
- 1.10 Painting Iron Work
- 1.11 Wood Work (Doors & Windows)
- 1.12 Glazing
- 1.13 Data collection and keeping information of market prices of above items.
- 1.14 Prepare bill of quantities of above items.

**2 Specifications: 15**

- 2.1 General Specifications
- 2.2 Detailed Specifications
  - 2.2.1 Plastering
  - 2.2.2 Mosaic and Terrazo floor
  - 2.2.3 White Washing
  - 2.2.4 Distempering
  - 2.2.5 Snowcem
  - 2.2.6 Painting on Iron work
  - 2.2.7 Varnishing
  - 2.2.8 French Polishing
  - 2.2.9 Wood Work (Doors & Window)
  - 2.2.10 Glazing

**3 Types of Estimate & Procedure of Works: 20**

- 3.1 Types of Estimate:
  - 3.1.1 Preliminary Estimate
  - 3.1.2 Approximate Estimate
  - 3.1.3 Abstract Estimate
  - 3.1.4 Plinth Area Estimate

- 3.1.5 Cube Rate Estimate
- 3.1.6 Detailed Estimate
- 3.1.7 Revised Estimate
- 3.1.8 Supplementary Estimate
- 3.1.9 Annual Repair or Maintenance Estimate
- 3.2 Procedure of Works:
  - 3.2.1 Measurement Book
  - 3.2.2 Units of Measurement
  - 3.2.3 Mode of Payment

**4 Professional Practice:**

15

- 4.1 Ways of Practice
- 4.2 Procedure of Execution
- 4.3 Arbitrations
- 4.4 Interior Designer's Role
- 4.5 Need for an Interior Designer
- 4.6 Fees of an Interior Designer
- 4.7 Indian Institute of Interior Designers (IIID)
  - 4.7.1 Rules of Regulations of IIID
  - 4.7.2 Code of Conduct of IIID
  - 4.7.3 Membership and their Responsibilities

**REFERENCES:**

- 1 "Estimating and Costing" by Rangwala, S.C ; Charotar Book Stall, Anand
- 2 "Estimating and Costing by Dutta, BN
- 3 "Estimating and Costing" by Mahajan Sanjay; Satya Parkashan, Delhi

\*\*\*\*\*

SEMESTER SCHEME-2021-21P

**COMPUTER AIDED DESIGN – IV**

Course Code	ID 6003
Course Title	Computer Aided Design – IV
Number of Credits	03 (L-3, T -0, P -0)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- The leap into three dimensions requires many changes in thinking and drawing habits for those who are used to 2D drawing.
- This course improves presentation and methods of advanced drafting in AutoCAD.
- The course gives a thorough grounding in 2D fundamentals and explores the main features of AutoCAD's advanced 2D environment

**COURSE OUTCOMES:**

- Learn and get familiar with 2D objects;
- Create and modify with 2D elements.
- Create and modify tabulations
- Create and insert images in current drawing

**COURSE CONTENTS:**

<b>1 Modifying objects</b>	<b>12</b>
1.1 Align	
1.2 Break	
1.3 Lengthen	
1.4 Edit polyline	
1.5 Edit hatch	
<b>2 Object snap</b>	<b>06</b>
2.1 End point	
2.2 Mid point	
2.3 Centre	
2.4 Tangent	
2.5 Nearest	
<b>3 Pasting objects</b>	<b>06</b>
3.1 Paste	
3.2 Paste special	
<b>4 Express tools</b>	<b>06</b>
4.1 Super Hatch	
<b>5 Creating and Inserting tables :</b>	<b>09</b>
5.1 Table styles	
5.2 Column and row settings	

**REFERENCES:**

- 1 Computer Graphics Roy-A Plastck
- 2 Computer Graphics Foley, Dam, Feiner, Hughes, Pearson
- 3 Mastering Autodesk Revit by Eddy Krygiel, Lance Kirby, and Marcus Kim

\*\*\*\*\*

**INTERIOR MATERIAL & CONSTRUCTION – VI**

Course Code	ID 6004
Course Title	INTERIOR MATERIAL & CONSTRUCTION – VI
Number of Credits	2 (L-2,T-0, P-0)
Prerequisites	NIL

**COURSE LEARNING OBJECTIVES:**

- This subject provides knowledge of material science and behaviour of various engineering materials used in building construction.
- It provides procedural knowledge of metals, wall papers as building finishes components.
- It imparts knowledge of properties, suitability, strength and durability prior to selecting materials

**COURSE OUTCOMES:**

- Enables to select and justify appropriate advanced modern building materials in construction techniques
- Ascertain the current market price of each and every construction material
- Provides elementary knowledge of Building protection and helps in identifying correct implementation
- Predicts the types of roofs and its construction methods
- Recognize different parts of roof trusses

**COURSE CONTENTS:**

<b>1 Building Protection:</b>	<b>8</b>
1.1 Damp Proofing	
1.2 Termite Protection	
1.3 Fire Protection	
<b>2 Roofs:</b>	<b>10</b>
2.1 Technical terms of roofs	
2.2 Explanation of Various types of roofs	
2.2.1 Flat roofs - RCC	
2.2.2 Pitched roofs – Lean to Roof, Couple Roof, Couple collar tie Roof, Scissors roof	
<b>3 False Ceiling:</b>	<b>8</b>
3.1 Types of false ceiling materials & their uses.	
3.2 Advantages and disadvantages of False Ceilings	

**REFERENCES:**

1. Building materials by S.K.Duggal , New Age international Publishers
2. Building materials and Constructions by Sushil Kumar Standard Publishers
3. Building Construction by Dr. B.C.PunmiaLaxmi Publications
4. Engineering Materials By S C Rangwala Charter Publishing House, Anand

\*\*\*\*\*

**INTERIOR DESIGN & FURNITURE DESIGN – IV LAB**

Course Code	ID 6005
Course Title	Interior Design & Furniture Design – IV Lab
Number of Credits	2.5 (L-0, T -0, P - 5)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- The subject equips students with the methods to use a variety of drawing media to effectively communicate design development and solutions.
- Students will be able to understand and discuss the interior environment in the context of the exterior.
- They will also learn to discuss and orally present how artifacts enhance and reflect concept.
- The subject also explores a variety of visual presentation techniques. Its study improves verbal presentation skills through daily informal presentations of renderings.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Students learn to employ space planning techniques and conventions
- Adorns to plan and design all interior spaces for ample utilization and accessibility
- Learns to write interior specifications and recognize needs for apartment design and it's components
- Learns to select and identify furniture fabric and equipment for interiors
- Prepare selections and specifications of interior materials, finishes, and furnishings.
- Ability to design furniture forms scientifically based on ergonomics materials design
- Visual perception of furniture as a single form and as system in a given interior space.

**COURSE CONTENTS:**

- |  |           |
|--|-----------|
| <b>1 Preparing Interior Layout Plans , elevations, ceiling plans and floor plans of the Following Parts of 3 to 5 Start Hotel:</b> | <b>15</b> |
| 1.1 Pub Cum Bar  |           |
| <b>2 Working Project:</b>  | <b>40</b> |
| 2.1 Introduction to working project in form of a prototype study of any existing apartment building.                               |           |
| 2.2 Designing interior of flats of the above Apartment Building :  |           |
| 2.2.1 Furniture layout plans   |           |
| 2.2.2 Flooring plan  |           |
| 2.2.3 Electric plan  |           |
| 2.2.4 Ceiling Plans  |           |
| <b>3 Furniture Design:</b>   | <b>10</b> |
| Practical exercise on furniture design in form of working drawing of the following:  |           |
| 3.1 Bar Counter  |           |
| 3.2 Bar Stool  |           |
| 3.3 Ornamental lamps   |           |

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

**MAGAZINES**

- Inside Outside Magazine
- Indian design magazine
- Society exteriors
- Architecture + Design (A+D)

**REFERENCES:**

- Interior Design Ahmed A. Kasu
- Time Saver Standards Joseph D. Chiara, Julius Palero,  
(Interior Design) Martin Zelink
- Time Saver standards for Interior Design and space planning.
- Interior Design by Ahmed Kasu.
- Nufert Architect's data
- Interior Design made easy by Therapeutic

\*\*\*\*\*

**BASIC DESIGN– VI LAB**

Course Code	ID 6006
Course Title	Basic Design – VI Lab
Number of Credits	1.0 (L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- This subject explores basic perceptual drawing techniques and tools as well as the development of the language of three dimensional drawing.
- It introduces critical skills for sighting and constructing three dimensional drawings. It will develop sense of three dimensional illusions through perspective drawings.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Learns to explore and compose drawings in picture plane
- Helps to understand the differences between representations and expression
- Learns to position vanishing points and horizon line correctly
- Learns to draw repeated elements receding into distance
- Learns to draw curves or circular forms in perspective
- Learns to divide surfaces into equal spaces in perspective

**COURSE CONTENTS:**

Three Dimensional Designs

<b>1 Methods of drawing perspectives</b>	<b>06</b>
1.1 Parallel one point perspectives showing three walls	
1.2 Angular two point perspectives showing two walls	
1.3 Angular two point perspectives showing three walls	
<b>2. One Point Perspective</b>	<b>20</b>
2.1 Bar	
2.2 Living cum Dining	
2.3 Children Bedroom	

**REFERENCES:**

- 1 Engineering Drawing by N.D. Bhatt, Publisher Charotar Publishing House Pvt.Ltd., New Delhi
- 2 Engineering Drawing by G.S. Virdhi; Khanna Publisher, New Delhi
- 3 Rendering with Pencil and Ink by Gill Robert W., Published by Thomas and Hudson, New Delhi

\*\*\*\*\*

**COMPUTER AIDED DESIGN – IV LAB**

Course Code	ID 6007
Course Title	Computer Aided Design – IV Lab
Number of Credits	0.5 (L-0, T-0, P-1)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- The leap into three dimensions requires many changes in thinking and drawing habits for those who are used to 2D drawing.
- This course introduces to the concepts and methods of 3D modelling in AutoCAD.
- The course gives a thorough grounding in 3D fundamentals and explores the main features of AutoCAD's advanced 3D environment.

**COURSE OUTCOMES:**

At the end of the course, the student can able to:

- Learn and get familiar with 3D objects;
- Create and modify with 3D elements.
- Introduction to 3D Rendering and Animation.

**COURSE CONTENTS:**

<b>1 Introducing 3Ds Max</b>	<b>05</b>
1.1 Importance of 3Ds Max for Interior Design Students	
1.2 Creating all type of Standard, Extended, Primitive objects	
1.3 Creating Doors, Windows and Stairs according to parameters	
1.4 Creating all types of shapes like Circle, Line and Ellipse etc.	
1.5 Convert all solid objects into Editable mesh	
1.6 Convert all shapes in Editable Spline	
1.7 Creating Compound Objects	
1.8 Creating Doors, Windows frame, Pannel, Glasses using Boolean	
1.9 Creating Doors, Windows frame, Pannel, Glasses using Editor Spline	
<b>2 Importing AutoCAD 3D Building Model File in 3Ds Max</b>	<b>05</b>
2.1 Applying Camera, Lights and Materials in 3D Model view CAD	
2.2 Rendering Model View using Default Scan line Renderer	
2.3 Rendering Building View using Mental Ray Renderer	
<b>2. Different types of Lens and Effects in Lights</b>	<b>03</b>
2.1 Creating Road Night views using Spot light and Lens effects with path and without path Animation of an object in Particular frames	
2.2 Road Animation creating with Dummy and Camera	
2.3 Creating a big Fountain of Circular shape by Particle System and Space Warp	
2.4 Creating Bounce Effect of Water	

**REFERENCES:**

- |  |                                     |
|--|-------------------------------------|
| 1 Computer Graphics  | Roy-A Plastck                       |
| 2 Computer Graphics  | Foley, Dam, Feiner, Hughes, Pearson |
| 3 Realistic Architectural Visualization with 3ds Max and mental ray by Roger Cusson, Jamie Cardoso |                                     |
| 4 3ds max 4 in Depth by Jon McFarland, Rob Polevoi   | Hughes, Pearson                     |
| 5 Computer Graphics  | Roger F.                            |

\*\*\*\*\*

**ARCHITECTURAL DESIGN & DRAWING – II LAB**

Course Code	ID 6008
Course Title	Architectural Design & Drawing – II Lab
Number of Credits	1.5 (L-0, T -0, P -3)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- Interior Designers find employment with private architects and also majority of them go for self-employment. Therefore, they are required to develop aptitude/skills to design residential, commercial and other public buildings.
- Teachers while imparting instructions/giving assignments to students teach various elements of design like form function, balance, light of shadow, shape, plane, volume, line, rhythm, proportions, textures and other such related elements.
- This subject provides the technical base for the execution of the designer's ideas.

**COURSE OUTCOMES:**

- Learns the study of spaces and layout of furniture for various activities
- Demonstrate space planning skills as related to office design.
- Plan integration lighting systems.
- Draw using quick sketching skills.
- Produce visual and verbal presentations.

**COURSE CONTENTS:**

- |  |           |
|--|-----------|
| <b>1 Designing Commercial Space:</b>                   | <b>30</b> |
| Bank: Design and Detailed Drawing of the following     |           |
| 1.1 Interior Layout Plan                               |           |
| 1.2 Ceiling Plans                                      |           |
| 1.3 Electric Layout Plan                               |           |
| 1.4 Flooring Layout Plan                               |           |
| 1.5 Panelling  |           |
| <b>2 Furniture Design in form of working drawings:</b> | <b>09</b> |
| 2.1 Cash counter cabin                                 |           |
| 2.2 Bank Counter                                       |           |

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

**MAGAZINES**

- Inside Outside Magazine
- Indian design magazine
- Society exteriors
- Architecture + Design (A+D)

**REFERENCES:**

- 1 Time Saver Standards by Joseph D. Chiara Julius Palero, Martin Zelink
- 2 Time Saver Standards Landscape Design by Charles W. Harris

\*\*\*\*\*



**NATURAL INTERIOR SCAPING – II LAB**

Course Code	ID 6009
Course Title	Natural Interior Scaping – II Lab
Number of Credits	1.0 (L-0, T -0, P -2)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- Ideally, a landscape designer is an artist. Creativity is the capacity to be a leader in the sense of your own education and intellectual growth.
- To take something as conceived by others more creative is the role of a landscape designer. This subject opens up an opportunity in form of becoming a landscape designer.

**COURSE OUTCOMES:**

- Learns to explore methods for creatively investigating landscape as a generative practice
- Becomes familiar with the spatial requirements of various common landscape functions
- Refines skill in drawing landscape plans
- Introduces colour as a tool for communication in landscape representations

**COURSE CONTENTS:**

<b>1 Natural Landscape of Elements:</b>	<b>6</b>
1.1 Plants.	
1.2 Water bodies.	
1.3 Trees.	
1.4 Pebbles	
1.5 Rocks.	
1.6 Bricks	
1.7 Wood	
1.8 Tiles	
1.9 Stones	
1.10Bamboo	
<b>2 Drawing and Practical exercise on Different treatments.</b>	<b>06</b>
2.1 Exterior wall treatment.	
2.1.1 Murals.	
2.1.2 Different types of garden decorations	
2.1.2.1 Gazebo	
2.1.2.2 Pergola	
2.1.2.3 Trellis	
2.2 Different Types of water bodies.	
<b>3 Drawing Exercise on the Landscape Design:</b>	<b>14</b>
3.1 Courtyard.	
3.2 Residential garden.	
3.3 Commercial space.	
3.4 Tools used in Gardening	
3.5 Basket Hangings	
3.6 Hooked vases	

Elementary introduction to CAD as a drafting and designing tool. Students should maintain portfolio and give seminar towards the end of the session.

**REFERENCES:**

1. Landscape Architecture by John O. Simonds published by MC. Graw Hill, Book Company
2. Foliage House Plants.
3. Interior Design, Ahmed A. Kasu
4. Time Saver Standards Landscape Design by Charles W. Harris

\*\*\*\*\*

**INTERIOR MATERIAL & CONSTRUCTION – VI LAB**

Course Code	ID 6010
Course Title	Interior Material & Construction – VI Lab
Number of Credits	0.5 (L-0, T -0, P -1)
Prerequisites	None

**COURSE LEARNING OBJECTIVES:**

- This subject provides knowledge of material science and behavior of various engineering materials used in building construction.
- It provides procedural knowledge of metals, wall papers as building finishes components.
- It imparts knowledge of properties, suitability, strength and durability prior to selecting materials

**COURSE OUTCOMES:**

- Enables to select and justify appropriate advanced modern building materials in construction techniques
- Ascertain the current market price of each and every construction material
- Provides elementary knowledge of Building protection and helps in identifying correct implementation
- Predicts the types of roofs and its construction methods
- Recognize different parts of roof trusses

**COURSE CONTENTS:**

<b>1 Building Protection:</b>	<b>4</b>
1.1 Damp Proofing	
1.2 Termite Protection	
1.3 Fire Protection	
<b>2 Roofs:</b>	<b>5</b>
2.1 Technical terms of roofs	
2.2 Explanation of Various types of roofs	
2.2.1 Flat roofs - RCC	
2.2.2 Pitched roofs – Lean to Roof, Couple Roof, Couple collar tie Roof, Scissors roof	
<b>3 False Ceiling:</b>	<b>4</b>
3.1 Types of false ceiling materials & their uses.	
3.2 Advantages and disadvantages of False Ceilings	

**REFERENCES:**

- 1 Building materials by S.K.Duggal , New Age international Publishers
- 2 Building materials and Constructions by Sushil Kumar Standard Publishers
- 3 Building Construction by Dr. B.C.Punmia Laxmi Publications
- 4 Engineering Materials By S C Rangwala Charter Publishing House, Anand

\*\*\*\*\*

**PROJECT**

Course Code	ID 6011
Course Title	Project
Number of Credits	4.0 (L-0, T -0, P -6)
Prerequisites	None

Project work aims at developing skills in the students whereby they apply the totality of knowledge and skills gained through the course in the solution of particular problem or undertaking a project. The students have various aptitudes and strengths. Project work, therefore, should match the strengths of students. For this purpose, students should be asked to identify the type of project work, they would like to execute. It is also essential that the faculty of the department may have a brainstorming session to identify suitable project assignments. The project assignment is an individual/group assignment. The student should identify a given project assignment in advance. The project work identified in collaboration with Architects and Interior Designers , may be preferred.

\*\*\*\*\*

SEMESTER SCHEME-2021-22